



Colac Otway
SHIRE

COUNCIL MEETING

AGENDA

Wednesday 27 April 2022

at 4:00 PM

COPACC

95 - 97 Gellibrand Street, Colac

Next Council Meeting: 25 May 2022



COLAC OTWAY SHIRE COUNCIL MEETING

Wednesday 27 April 2022

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COLAC OTWAY SHIRE COUNCIL MEETING

NOTICE is hereby given that the next **COUNCIL MEETING OF THE COLAC OTWAY SHIRE COUNCIL** will be held at COPACC on Wednesday 27 April 2022 at 4:00 PM.

AGENDA

1 DECLARATION OF OPENING OF MEETING

OPENING PRAYER

Almighty God, we seek your blessing and guidance in our deliberations on behalf of the people of the Colac Otway Shire. Enable this Council's decisions to be those that contribute to the true welfare and betterment of our community.

AMEN

2 PRESENT

3 APOLOGIES AND LEAVES OF ABSENCE

4 WELCOME AND ACKNOWLEDGEMENT OF COUNTRY

Colac Otway Shire acknowledges the original custodians and law makers of this land, their elders past, present and emerging and welcomes any descendants here today.

RECORDING AND PUBLICATION OF MEETINGS

Please note: All Council meetings will be live streamed and recorded when when the meeting is held either at COPACC or online. This includes the public participation sections of the meetings. When meetings are held in other locations, Council will endeavour to make an audio recording of the meeting for community access. Matters identified as confidential items in the Agenda will not be live streamed or recorded regardless of venue of mode.

By participating in open Council meetings, individuals consent to the use and disclosure of the information they share at the meeting (including any personal and/or sensitive information).

As soon as practicable following each open Council meeting, the live stream recording will be accessible on Council's website. Recordings are also taken to facilitate the preparation of the minutes of open Council and Committee meetings and to ensure their accuracy. Live stream and audio recordings will be retained by Council for a period of four years.

As stated in the Governance Rules, other than an official Council recording, no video or audio recording of proceedings of Council Meetings will be permitted without specific approval by resolution of the relevant Council Meeting.

This meeting will be livestreamed to the public via Council's YouTube channel (search Colac Otway Shire Council at www.youtube.com).

5 QUESTION TIME

A maximum of 30 minutes is allowed for question time. Any person wishing to participate in public question time by videoconference will need to register their intention to do so by contacting the shire prior to 5pm on Monday 25 April 2022. To ensure that each member of the gallery has the opportunity to ask questions, it may be necessary to allow a maximum of two questions from each person in the first instance. You must ask a question. Question time is not a forum for public debate or statements.

1. Questions received in writing prior to the meeting (subject to attendance and time). Written questions must be received by 5pm on Monday 25 April 2022.
2. Questions via videoconference by prior arrangement.
3. Questions from the floor.

6 TABLING OF RESPONSES TO QUESTIONS TAKEN ON NOTICE AT PREVIOUS MEETING

These responses will not be read out but will be included in the minutes of this meeting.

7 PETITIONS / JOINT LETTERS

Nil

8 DECLARATIONS OF INTEREST

A Councillor who has declared a conflict of interest, must leave the meeting and remain outside the room while the matter is being considered, or any vote is taken.

9 CONFIRMATION OF MINUTES

- Council meeting held on 23 March 2022.
- Special Council meeting held on 20 April 2022.

RECOMMENDATION

That Council confirm the minutes of the:

- 1. Council meeting held on 23 March 2022.***
- 2. Special Council meeting held on 20 April 2022.***

Item: 10.1

Cost Sharing for Ferraris Bridge Replacement

OFFICER	Tony McGann
GENERAL MANAGER	Tony McGann
DIVISION	Environment and Infrastructure
ATTACHMENTS	<ol style="list-style-type: none">10.10.1 D 22 32018 Boundary Road Maintenance Agreement - Redacted [10.1.1 - 4 pages]Report Council 1999 Rehabilitation Ferraris Bridge 50% share [10.1.2 - 3 pages]

1. PURPOSE

The purpose of this report is to provide information on insurance and legal risk requested by Council so as to enable them to consider whether Colac Otway Shire should contribute to the renewal of Ferraris Bridge on the boundary with Corangamite Shire.

2. EXECUTIVE SUMMARY

Ferraris Bridge is located on Burrupa Rd over the Gellibrand River.

- It strides the boundary between Corangamite Shire and Colac Otway Shire.
- The bridge is managed by Corangamite Shire.
- The bridge collapsed in July 2021.
- Corangamite Shire has asked Colac Otway to fund half of the cost of the \$792,750 plus GST renewal project, including a 5% contingency amount. They have indicated that funds transfer in 2022-2023 would be acceptable to them.
- A 1994 letter from Colac Otway to Corangamite, in relation to this bridge, indicates an intention by Colac Otway to share the cost of major construction or reconstruction works. The letter could reasonably be seen to apply in this situation.
- There is no budget for this project in the 2021-2022 year, as the event was unexpected.
- Council could determine to consider the funding of these works as part of the 2022-2023 budget.
- Council should consider legal risk, given the 1994 letter, as well as reputational risk associated with the decision to fund or not fund the renewal of this bridge.

- Corangamite Shire had no insurance cover for this bridge. That is normal practice and Colac Otway does not insure its bridges or roads either. Hence Corangamite has had no other funding that we know of for this bridge replacement.

3. RECOMMENDATION

That Council:

1. *Agrees to Corangamite Shire's request to fund half of the cost of the Ferraris Bridge replacement.*
2. *Considers the requirement for this funding, being an amount of \$396,375 in the preparation of the 2022-23 budget or through other funding opportunities.*
3. *Engages with Corangamite Shire to develop and agree a formal Memorandum of Understanding on the management and funding of border roads and bridges shared by the two Councils.*

4. KEY INFORMATION

Council considered this matter at the Council Meeting in February 2022. At that time, it deferred the matter pending further information on insurance and legal risk issues.

The following should be noted:

1. Corangamite Shire has reached an agreement with the owner of the truck for compensation for repairs to the vehicle.
2. Corangamite Shire have had no notification of any legal action being considered by any parties.
3. Corangamite Shire does not insure road bridges or roads and neither does Colac Otway Shire. This is the sector approach as renewal of these items due to an event is usually covered by federal disaster funding.

There were concerns that Corangamite could “double up” on funding the bridge replacement. That is, receive money from Colac Otway as well as from their insurance company. This will not be the case.

There were also concerns that Colac Otway could be drawn into a legal action by another party in relation to losses caused by the bridge collapse. We know that there are no actions currently happening. We also know that Corangamite is the body responsible for the management of the bridge. Officers' opinion is as follows:

1. The bridge is a shared asset.
2. As a result of (1) above, whether or not we choose to fund a proportion of the bridge replacement another party could in future choose to involve us in a legal action. This is a possible outcome.
 - There are two bridges on local roads on or close to the border with Corangamite Shire. These are Ferraris Bridge (Burrupa Road Bridge) and McMinns Bridge at Burrupa. Both bridges span the Gellibrand River.
 - Both Ferraris and McMinns Bridge are managed by Corangamite Shire.

- In July 2021 Ferraris Bridge collapsed under truck loading, as shown below. There were no injuries.
- Ferraris Bridge.
- Ferraris Bridge is located in Devondale. The north side of the bridge is in Colac Otway Shire and the south side of the bridge is in Corangamite Shire. The farm buildings are on the Corangamite side.
- It is only 20 years since the bridge was reconstructed. It appears that new steel beams and a concrete deck were placed on an old timber substructure. It seems that the timber substructure has failed.
- Corangamite Shire has already contracted for the replacement of the bridge at an approximate cost of \$792,750 plus GST. This includes a contingency amount of 5%. Corangamite Shire has approached Colac Otway Shire for a 50% contribution toward the cost of the renewal.

The attached documents will assist Council in determining whether it should contribute to the cost of renewal. These are:

- Attachment 1 Boundary Road Maintenance, exchange of letters between the Shires, 1994 and 1995; and
- Attachment 2 Corangamite Shire report for Ferrari Bridge renewal cost sharing, 1999.

Attachment 1 indicates that in our letter of 12 December 1994 we indicated to Corangamite that:

- a. Corangamite would be responsible for works on Ferraris Bridge; and,
- b. There would be agreement between both Councils for major construction or reconstruction works.

Attachment 2 indicates that when the bridge was last renewed, in 1999, Corangamite Council resolved to request that Colac Otway pay 50% of the cost of the construction. Neither Corangamite nor Colac Otway has documentation to show whether we agreed to that request.

Hence the available documentation indicates an agreement to assist with the funding of construction or reconstruction works. The percentage was not set but the Corangamite Council report from 1999 would indicate that a 50/50 split was the practical result.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

- a) collaboration with other Councils and Governments and statutory bodies is to be sought
- b) the ongoing financial viability of the Council is to be ensured
- c) the transparency of Council decisions, actions and information is to be ensured

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

The recommendation relating to this matter is aligned with Council's Asset Management Policy in that it favours renewal and allows a necessary service to continue.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020

Not applicable.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

If the project is included in the draft 2022-23 Council Budget it will be subject to community consultation as part of the budget development.

Public Transparency (s58 LGA 2020)

Public transparency is ensured by considering this matter in open Council.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 1 - Strong and Resilient Community

Objective 3: Key infrastructure investment supports our economy and liveability

Financial Management (s101 Local Government Act 2020)

This project is financially responsible given that the funding allocation would be in accordance with the draft Asset Plan and the Financial Plan, as well as the draft budget.

Service Performance (s106 Local Government Act 2020)

- a. services should be provided in an equitable manner and be responsive to the diverse needs of the municipal community.
- b. services should be accessible to the members of the municipal community for whom the services are intended.
- c. quality and costs standards for services set by the Council should provide good value to the municipal community.

Risk Assessment

Council has a reputational risk to consider if it refuses to share the funding of a shared boundary asset. The question would have to be asked; why would Corangamite have agreed to be fully financially responsible for an asset that serves transport on the road in each shire either side of the bridge?

Communication/Implementation

1. Corangamite Shire will be advised of Council's decision.
2. A media release will be prepared.
3. Officers will await the outcome of the budget process.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Option 1 – Adopt the recommendation

This option is recommended by officers as it is a fair and prudent way to manage the cost of this asset that is shared by the two Councils. It also honours earlier agreements between the two Councils and ensures that the agreement is modernised and strengthened.

Option 2 – Adopt the recommendation with amendments

It may be that Council wishes to modify or add to the recommendation.



Our Reference : B17.04

Your Reference :

19 January, 1995

Chief Executive Officer
Colac Otway Shire
P O Box 2832
COLAC 3250

ATTENTION

Dear Sir

RE : BOUNDARY ROAD MAINTENANCE
COLAC OTWAY SHIRE - CORANGAMITE SHIRE

I refer to your letter dated 12th December 1994 regarding maintenance of boundary local roads.

Your proposal for maintenance is agreed to by the Corangamite Shire. With regard to Barrupa Road, it is assumed that Corangamite shall be responsible for Ferraris Bridge and the road south of this point. Colac Otway will be responsible for Barrupa Road north of Ferrari's Bridge and Gellibrand River Road which runs north of Lavers Hill Cobden Road.

Could you please advise on costs to date on the roads in the areas that have been transferred to the Corangamite Shire. For your cost control purposes, I advise that Corangamite expended \$5,582 on the roads in the Carpendeit area from the 1st October 1994 to the 30th November 1994. These roads are now part of Colac Otway.

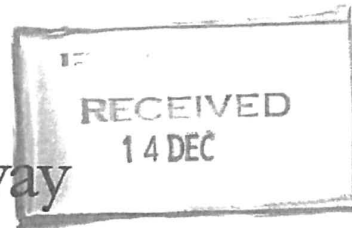
An exact account will be sent shortly.

For your future budgetary purposes, I have allowed a total expenditure of \$10,000 for maintenance expenditure on joint roads, Colac - Otways contribution would be 50% of this total allocation. Subject to review based on actual expenditures, it is considered that this is a reasonable amount to be allowed for.

Yours faithfully

ACTING DIRECTOR
PHYSICAL SERVICES

Is:wec
I:\ENGDEPT\COLAC12.015



All Correspondence to be addressed to:
P.O. Box 283, Colac Vic. 3250

CONTACT PERSON : [REDACTED]
REF :

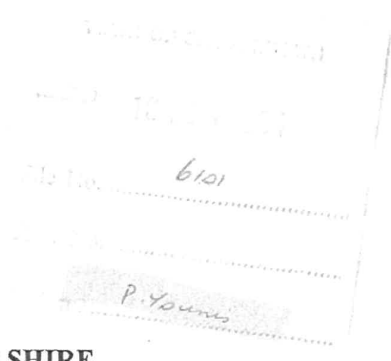
12 December, 1994

Acting Chief Executive Officer,
Corangamite Shire
P.O. Box 14,
CAMPERDOWN 3260

ATTENTION [REDACTED]

Dear Sir,

RE : **BOUNDARY ROAD MAINTENANCE**
COLAC OTWAY SHIRE - CORANGAMITE SHIRE



I refer to our recent discussions on the maintenance of boundary local roads and wish to confirm the following arrangements :-

1. Colac Otway Shire to be responsible for organising and carrying out of works on the following roads :-
 - Scoullers Road
2. Corangamite Shire to be responsible for the following roads :-
 - Coradjil Road
 - Crescent Road
 - Pipeline Road
 - Gellibrand River Road
 - Barruppa Road
3. Corangamite Shire shall be responsible for works on Ferrari's Bridge over the Gellibrand River on the Barruppa Road.

2/...

6 Murray Street,
Colac VIC 3250
Ph: (052) 31 5444
Fax: (052) 31 2921

2-6 Rae Street,
Colac VIC 3250
Ph: (052) 31 5133
Fax: (052) 32 1046

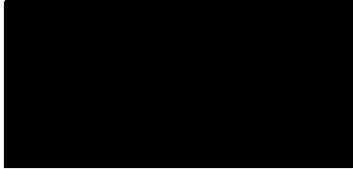
69-71 Nelson Street,
Apollo Bay VIC 3233
Ph: (052) 37 6504
Fax: (052) 37 6734

This proposal is also based on :

- a. maintenance standards being to the same standard as the roads are currently in unless both municipalities agree to an alternation of these;
- b. reasonable advance warning being given by the responsible municipality to the other regarding periodic maintenance;
- c. agreement between both municipalities occurring for major construction/reconstruction works; and
- d. an annual cash adjustment between the municipalities for the value of works performed.

If this arrangement is satisfactory to your Council would you please confirm your agreement to this proposal

Yours faithfully



Director of Works and Services

COPY

**1.1. BRIDGE OVER GELLIBRAND RIVER ON BURRUPA ROAD
(FERRARI'S BRIDGE)**

AUTHOR: Paul Samaratunga, Assets Planning Manager

CORRESPONDENT: Nil

PREVIOUS COUNCIL REF: Nil

FILE: 3/7/1

REPORT

A bridge inspection report was commissioned by Council to inspect, investigate and assess the condition including an estimate of the load carrying capacity of the bridge over Gellibrand River on Burrupa Road.

This bridge is on the boundary between Colac Otway and Corangamite Shire and caters for all types of vehicles and trucks. The connecting road is unsealed.

The bridge has a timber deck, with three (3) spans, of total length 32.25 m and width 6.2 m. The timber substructure is in good condition. The four (4) lines of steel 22" x 7" RSJ girders however are corroded with loss of steel and some exhibiting web perforation. Overall the girders are in poor structural condition and in need of replacement / clean and repaint.

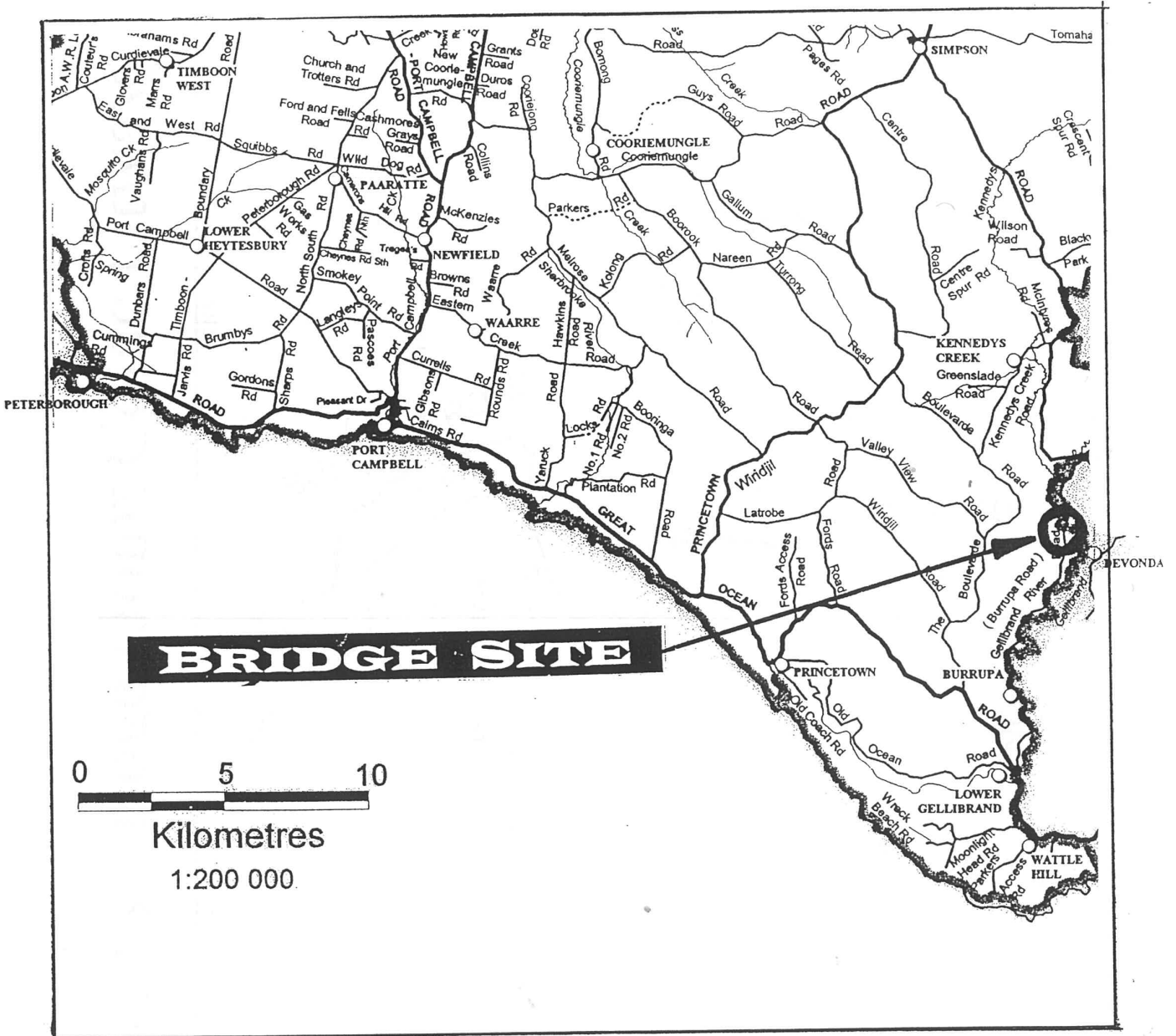
The structural report recommends that traffic speed be limited to 80 kph, in order to minimise impact loads on the girders, and that additional cross frames are fitted to distribute loads across all girders. Additionally the girders require replacement / painting.

RECOMMENDATION

THAT:

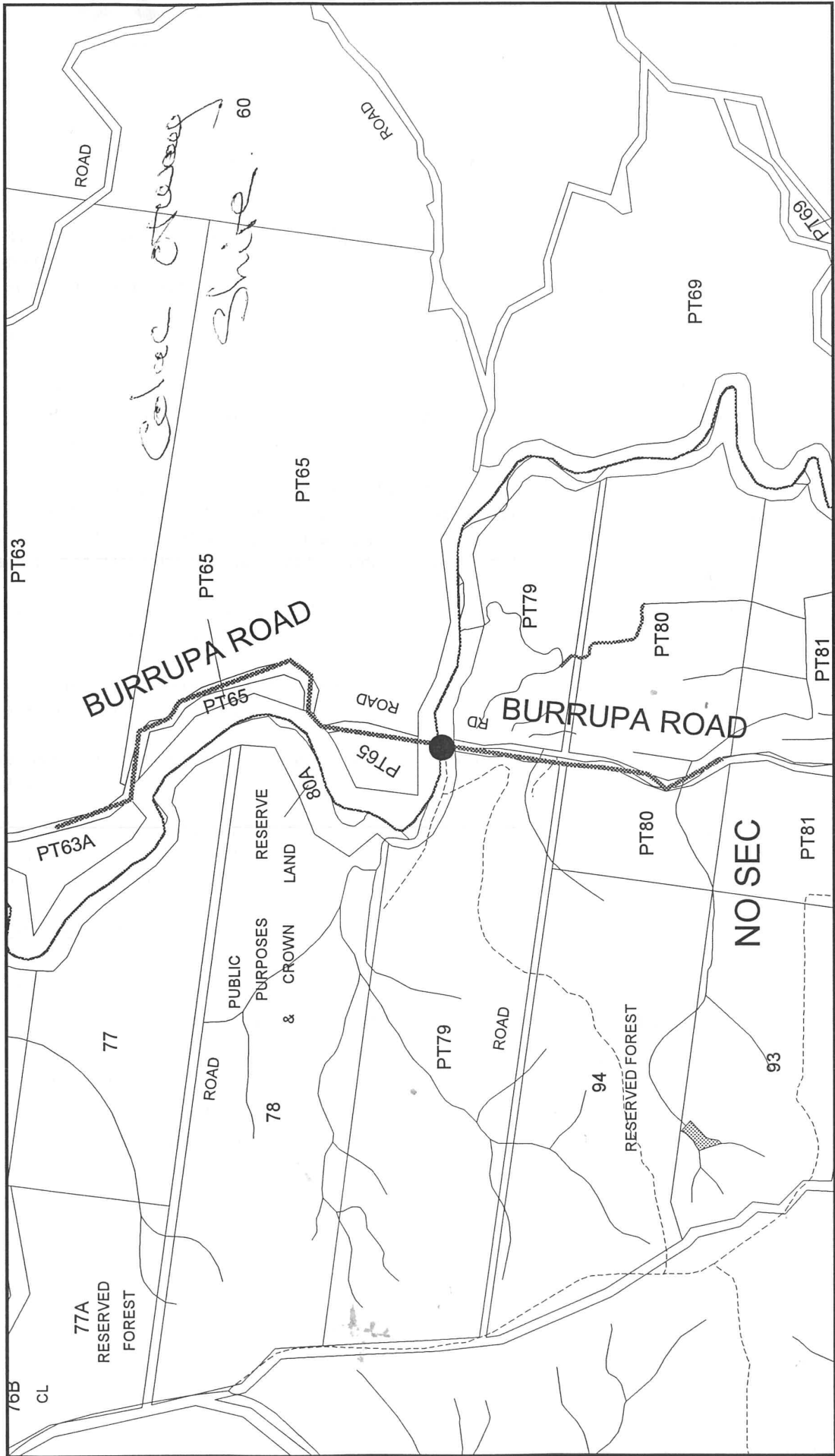
- 1. Council impose speed limit of 80 kph on the bridge.**
- 2. Council undertake the rehabilitation of the bridge in the 1999/2000 program.**
- 3. Council advise Colac - Otway Shire of the bridge rehabilitation works and request a 50% contribution in the next financial year.**

FERRARIS BRIDGE



LOCALITY PLAN

B038 Ferraris Bridge (Joint Colac Otway)



Scale 1:8,446

Printed: 14/5/1999

Item: 10.2

Lavers Hill Pool Funding Agreement

OFFICER	James Myatt
GENERAL MANAGER	Ian Seuren
DIVISION	Development and Community Services
ATTACHMENTS	Nil

1. PURPOSE

To consider a request from the Lavers Hill K-12 College for ongoing funding to enable community access to the Cliff Young Complex.

2. EXECUTIVE SUMMARY

Council has had a 30-year agreement with the Lavers Hill K-12 College for contributions towards the maintenance of the Lavers Hill Pool, which expired on 26 June 2021. Under the agreement Council contributed towards 40% of annual pool maintenance capped at \$10,000 plus CPI annually since an amendment to the agreement in November 2009.

Lavers Hill K-12 College have requested for Council to establish a new funding agreement for the whole Cliff Young Complex to ensure ongoing school and community use. The proposal includes the following requests of Council:

1. Contribute 40% of maintenance and capital costs for the entire Cliff Young Complex, which includes the building, pool, stadium and gym.
2. Contribute 50% of associated (operational) costs, excluding utilities.

3. RECOMMENDATION

That Council:

1. ***Confirms Council's commitment to public safety at aquatic facilities in line with the Royal Lifesaving Australia Guidelines for Safe Pool Operations, including the provision of***

continuous supervision by lifeguards at all publicly accessible pools in Colac Otway Shire that Council operates or provides funding to.

- 2. *Notes the agreement between Council and Lavers Hill K-12 College which expired on 26 June 2021 is currently in holding-over period.***
- 3. *Approves the provision of a 12-month funding agreement with the Lavers Hill K-12 College to enable public access to the Lavers Hill Swimming Pool with the following key terms:***
 - a. An annual funding limit of \$12,500 for pool maintenance and operations.***
 - b. Council will cover the cost of an annual Lifesaving Victoria Guidelines for Safe Pool Operations audit.***
 - c. The Lavers Hill K-12 College is to provide Council with an action plan for increasing compliance with the Royal Lifesaving Australia Guidelines for Safe Pool Operations within three months of the start of the agreement.***
 - d. The Lavers Hill K-12 College is to provide annual entry number and membership data to Council.***
 - e. Council will not have a representative on the Lavers Hill Indoor Swimming Pool Committee of Management and instead be available to provide advice on pool operations when requested.***
 - f. The agreement is entered into no later than 3 months after the date of this resolution.***
- 4. *At the end of the 12-month agreement, authorises the Chief Executive Officer to provide an additional 3-year funding agreement to Lavers Hill K-12 College to enable public access to the Lavers Hill Swimming Pool of up to \$12,500 indexed to CPI annually for pool maintenance and operations subject to the Lavers Hill K-12 College meeting the following conditions by the expiration of the initial 12-month agreement:***
 - a. The public can only access the Lavers Hill Swimming Pool at times where lifeguard supervision is provided in line with the Royal Lifesaving Australia Guidelines for Safe Pool Operations.***
 - b. User fees for access to Lavers Hill Swimming Pool are no less than 50% of fees at Bluewater Leisure Centre or Apollo Bay Aquatic Centre, whichever is less.***
 - c. Compliance with other essential safety measures in the Royal Lifesaving Australia Guidelines for Safe Pool Operations to the satisfaction of the Chief Executive Officer.***
- 5. *Notes that if the conditions in point 4 of this resolution are not met, Council will provide no funding towards Lavers Hill Pool after the initial 12-months agreement expires.***

4. KEY INFORMATION

Council's funding agreement with the Lavers Hill K-12 College (the College) ended on 26 June 2021, leading to the College requesting a new funding agreement with Council. Officers consider a long-term commitment not to be appropriate at this time as the College and Council both have uncertainties to work through as discussed later in this report. Nonetheless it is important to create stability in the short to medium term and officers propose a one-year agreement, with an extension of a further three

years if key conditions are met. This report will continue to discuss the brief history of the pool and the key topics relevant to the proposed officer recommendation.

History

The Lavers Hill Indoor Swimming Pool was opened in 1991 by the Department of Education for the purpose of conducting school based aquatic education for students. Council (formally the Otway Shire) and the College (formally the Lavers Hill Consolidated School) entered into an agreement which commenced 26 June 1991. Under this Agreement, Council contributed a sum of \$40,000 for the initial construction of the facility and 20% of maintenance costs for the life of the agreement, on the provision that local residents would be able to use the pool for recreational purposes.

At its Ordinary Council Meeting in November 2009, Council resolved to amend the terms of the original agreement by increasing the contribution percentage to pool maintenance to 40% whilst implementing an annual cap of \$10,000 plus CPI. The term of the agreement between Council and the College was for thirty (30) years, with the Agreement expiring on 26 June 2021, leading to the College requesting a new funding agreement with Council.

Lavers Hill K-12 College Proposal

The College approached Council to request a funding commitment towards the Cliff Young Complex which includes the Lavers Hill Pool. The proposal includes the following:

1. Contribute 40% of maintenance and capital costs for the entire Cliff Young Complex, which includes the building, pool, stadium and gym, with a minimum of \$10,000 a year.
2. Contribute 50% of associated (operational) costs, excluding utilities.

Proposal Considerations

1. *Royal Lifesaving Australia Guidelines for Safe Pool Operations (GSPO)*

The GSPO sets the standard for pool operations in Australia. Council conducts an annual audit of Bluewater Leisure Centre and Apollo Bay Pool against the guidelines to ensure the facilities that Council operates or provides funding towards are safe for the public to use. A key change to the GSPO in recent years is to require publicly accessible pools to always have lifeguard supervision when the public are using the facility. The Lavers Hill Pool historically have low compliance with the GSPO including providing no lifeguard supervision whilst the public have access. The College has made positive steps over the last 12 months to bring the facility more in-line with the GSPO. It is recommended to continue providing funding to the College for 12 months allowing for a transitional period where the College can consider lifeguard implementation and other safety changes in order to retain Council funding.

2. *Financial Risk*

When Council amended the historical agreement in 2009 a funding cap was introduced. The College's proposal would be a financial risk to Council due to including no limit to the total funding each year. Council has no understanding of the potential financial requirements particularly around maintenance, renewal and upgrade of the facility. Therefore, to mitigate this risk, it is recommended to implement a funding cap in any new agreement.

3. *User fees and charges*

The current fees charged for public membership to Lavers Hill Pool are significantly lower when compared to other facilities in the area. Officers recommend for the College to conduct fee benchmarking compared to similar facilities and increase their fees and charges in line with industry benchmarking to no less than half of the membership fees at Bluewater Leisure Centre or Apollo Bay

Pool, whichever is less. Increasing the fees will allow the school to implement public safety requirements against the GSPO and can contribute towards maintenance and operational costs.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

b) Priority is to be given to achieving the best outcomes for the municipal community, including future generations.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

Royal Lifesaving Australia Guidelines for Safe Pool Operations. The aforementioned guidelines provide standards for pool operation in Australia and are cited in court hearings.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

Not applicable.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

Lavers Hill K-12 College was provided the opportunity to present their proposal at a closed Councillor Briefing. The facility is used by members of the Lavers Hill community and is seen to provide an important facility for health and wellbeing.

Public Transparency (s58 LGA 2020)

Not applicable.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 3 – Healthy and Inclusive Community

Objective 3: We are a safe, equitable and inclusive community

Financial Management (s101 Local Government Act 2020)

The proposal from Lavers Hill K-12 College presents a financial risk to Council as the school have been unable to provide total annual maintenance, capital and operational costs ongoing for which they request a percentage contribution to. The proposed officer recommendation sets an annual funding limit to mitigate this risk, whilst still providing a contribution for maintenance and operational costs.

The amount recommended is in line with the current budget allocation and would result in a very minor increase in the recurrent operational budgets. This slight increase would not have a material impact on Council's Long Term Financial Plan.

Service Performance (s106 Local Government Act 2020)

Whilst the facility is not operated as a Council service, entering into the proposed funding agreement will enable the facility to remain accessible to the community.

Risk Assessment

Council's insurers have provided advice in relation to a future funding agreement with the Lavers Hill K-12 College for public access to the swimming pool. Council has a risk of liability related primarily to

Council's ability to have any control in the operations and management of the pool. The 'control' could be in the two following forms:

1. Funding and the ability to place conditions on a funding agreement i.e. requiring compliance with Royal Lifesaving Australia Guidelines for Safe Pool Operations. This risk is elevated if Council were to provide funding without any conditions with the knowledge of non-compliance by the facility to any relevant law or guidelines. The proposed officer recommendation mitigates this risk by putting conditions on the funding related to the Royal Lifesaving Australia Guidelines for Safe Pool Operations.
2. The ability of Council representatives to make decisions/change actions on the advisory committee. This risk is low if Council representatives are acting in good faith and as per any terms and conditions on their appointment. The officer recommendation proposed that no Council representative sits on the committee to eliminate the risk, but ensures that officers are available to provide advice on specific topics when requested by the Lavers Hill K-12 College.

Communication/Implementation

If the proposed officer recommendation is adopted, the Lavers Hill K-12 College will be informed and a draft funding agreement will be provided for review.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Option 1 – Adopt the proposed resolution

This option is recommended by officers as it provides clarity on future funding contributions to Lavers Hill Pool by Council.

Option 2 – Resolve not to provide funding to Lavers Hill K-12 College for public access to Lavers Hill Pool

This option is not recommended by officers as it does not provide the College assistance during a transition period where they can increase compliance with the Royal Lifesaving Australia Guidelines for Safe Pool Operations.

Option 3 – Do not adopt a resolution.

This option is not recommended by officers as it leaves Council and the Lavers Hill K-12 College in a holding-over period on the historical agreement with no clarity moving forward.

Item: 10.3

Barwon South West Climate Alliance - 2022-23 Membership

OFFICER	Dora Novak
GENERAL MANAGER	Tony McGann
DIVISION	Environment and Infrastructure
ATTACHMENTS	<ol style="list-style-type: none"> 1. BSWCA Membership Invitation Letter - COS - 2022-23 [10.3.1 - 1 page] 2. BSWCA - Assessment of the Beneficial Enterprise PDF [10.3.2 - 1 page]

1. PURPOSE

To provide an update to Council about the establishment of the Barwon South West Climate Alliance and to seek Council's endorsement to become a paid member of the Barwon South West Climate Alliance for the 2022-23 Financial Year.

2. EXECUTIVE SUMMARY

Across Victoria, 75 of 79 local governments are members of a climate alliance. Regional climate partnerships work on behalf of their member councils and government agencies to deliver high-profile climate change initiatives that deliver shared benefits across their region. Notably, they are able to access and leverage large pools of funding that help their region to reduce emissions, increase efficiency and deliver savings to members and their communities. There are eight other climate alliances in Victoria, collectively called the Victorian Greenhouse Alliances.

The Barwon South West Alliance was formed in response to the Climate Resilient Communities Project, which concluded in 2018. Ten Barwon South West (BSW) local government and agency partners' project representatives expressed interest in continuing to work together under the banner of the Victorian Greenhouse Alliances. The Department of Environment, Land, Water and Planning (DELWP) provided \$120,000 in funding to support the establishment of an alliance in the region.

At the 25 August 2021 Council meeting, the officer report recommended that Colac Otway Shire become a founding member of the Alliance. The resolution carried at that meeting was that Council:

- 1. Notes that the stated aims of establishing a Climate Alliance in our region are to provide a unified voice on climate change for our region, increase effective climate adaptation across the region, reduce the risks and impacts of climate change, share knowledge and experience**

across Councils, sectors and the region and to co-ordinate a range of mutually beneficial climate adaptation and mitigation projects across the region;

- 2. Generally support the aims outlined in point 1;**
- 3. Notes Colac-Otway Shire is the first rural municipality in Victoria to achieve 'Carbon Neutrality' across its operations, among other achievements;**
- 4. Requests officers to investigate an appropriate arrangement to pursue regional climate change priorities through or in conjunction with the G21 Regional Alliance or any other regional group we are currently a member of;**
- 5. Resolves that Colac Otway Shire does not seek to become a founding member of the Barwon South West Regional Alliance; and**
- 6. Resolves that any commitment of arrangements, other than that outlined in point 4, requires an explicit resolution of Council.**

Therefore, Council determined not to become a founding member. The Barwon South West Climate Alliance was formally established on 21 October 2021, and subsequent to that Council received a formal invitation to join the Alliance for the 2022-23 Financial Year (Attachment 1).

A budget request has been submitted for the membership fee for 2022-23. The membership fee of \$15,000 is not contained within the draft Budget. As per the direction in the Council resolution above, officers are now bringing the matter to Council to consider paid membership for the upcoming financial year.

3. RECOMMENDATION

That Council:

- 1. Resolves to become a paid member of the Barwon South West Climate Alliance for 2022/23; and**
- 2. Allocates funds in Council's draft 2022/23 Budget for the related membership fee.**

4. KEY INFORMATION

The Barwon South West Climate alliance was formally established on 21 October 2021 which marked the completion of the Alliance Establishment Project. The Alliance has indicated that invitations for the 2022-2023 full year membership will be distributed imminently.

Currently, the following local governments form the Alliance:

- Golden Plains SC
- Surf Coast SC
- Queenscliff SC
- Geelong CC
- Warrnambool CC
- Moyne SC (indicated or committed intention to join from July 2022)
- Southern Grampians SC (indicated or committed intention to join from July 2022)

Other groups that are paid members of the Alliance are:

- Barwon Water
- Wannon Water
- Corangamite CMA

- Glenelg Hopkins CMA
- Deakin University

Glenelg and Corangamite Shire Councils (the other two BSW councils who have not committed to 2022-23 Alliance membership to date) are also in the process of considering 2022-23 BSWCA membership. Glenelg were founding members and decisions about the Alliance are considered operational and the decision to join for 2022-23 will be made by their CEO. Glenelg has the funds to pay the membership this financial year for next year's membership, they are awaiting the membership invitation to progress it. Corangamite has a business case for the membership fee included in their draft 2022-23 budget.

While the Department of Environment, Land, Water and Planning (DELWP) has provided funding to employ an Establishment Officer for the BSWCA, the group will ultimately be self-funded through membership fees and opportunities for grant funding. The membership fee for councils is \$15,000 annually.

Although there is this up-front cost, it is anticipated that membership will enable cost savings to Council, through increased efficiencies and joint projects. A full-time Alliance Coordinator/Executive Officer will be available to assist with funding applications, project planning, management and delivery. Joint projects can deliver savings related to electricity and gas consumption costs and emission offsetting costs.

There are many examples of significant savings and benefits to climate/greenhouse alliance members in other parts of Victoria. A recent independent Impact Evaluation of two existing alliances, Central Victorian Greenhouse Alliance and Eastern Alliance for Greenhouse Action, showed that the ratio between benefits and membership fees was 21:1 and 7:1 respectively.

Community expectations

Community support for environmental initiatives has been highly evident in recent years, including during the Colac Otway Community Vision 2050 community engagement process, demonstrating that the local community remains strongly supportive of tackling climate change and addressing a wide range of environmental concerns.

The top priority identified by the community for council was "our environment and concerns for living sustainably", and 47% of the community believed Council could be "doing better to create a positive future" by "protect[ing] the environment, reduc[ing] energy and support[ing] sustainability." Joining the BSWCA signals to the community that Council is meeting these expectations.

By becoming a member of the BSW Climate Alliance Council will have access to resources, knowledge and shared service provision that would otherwise not be available to an individual council. It also improves service performance and delivery by increased purchasing power, economies of scale and collaborative project management and delivery.

Leadership and collaboration

The BSWCA would allow for Council to engage in collaboration and leadership with surrounding local governments, industry and community groups to collectively manage adaptation and mitigation projects. Other collaboration and leadership opportunities include:

- Opportunities for collaborative procurement (i.e. street lighting, EV chargers), energy monitoring systems, policy development, etc.
- Networking, knowledge sharing and training opportunities.
- Advocacy for climate leadership at regional, state and national level.
- Opportunity to lead large-scale action on climate change, as has been demonstrated by other Victorian Climate/Greenhouse Alliances. (i.e. Lighting the Regions; VECO; Electricity Distribution Price Review Project; Charging the Regions).

Environmental benefit

Above all engagement in the alliance allows for opportunities to reduce emissions and transition to net zero at a lower cost. Maintaining a carbon neutral claim is a financial challenge but the burden could be reduced via exploring regional carbon offset projects through this alliance.

Regional understandings of climate risk and access to data and shared communications can also help better predict and manage environmental risks for the community.

Alliance Priority Projects identified to date

Current priority projects of the Alliance are:

- Health and Climate Change Forum
- Victorian Energy Collaboration (VECO)
- Barwon South West Carbon Offset Program
- Energy Monitoring & Training
- Getting off Gas – All Electric Councils
- Extension of the South West Climate Change Portal

Project selection and prioritisation is driven by member organisations. Some of the above list have already been funded and will commence this year.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

- a. Recommendations have been made in accordance with the Local Government Act 2020 and the Climate Change Act (outlined below in Policies and Relevant Law)
- b. Recommendations are believed to achieve the best outcome for the community. Projects that enhance mitigation and adaptation are inherently reducing risk for future generations
- c. BSWCA membership would facilitate access to resources and grants to support environmental sustainability for community groups. Other Alliances have demonstrated support through projects with small businesses, traditional owner groups and local community groups.
- d. Community consultation has identified significant concerns over sustainability, informing the outlined recommendations
- e. The recommendations would allow Council to take part in larger scale projects with a university and other research/management bodies; this will enable innovation and continuous improvement
- f. The recommendations pursue collaboration across many Councils in the Barwon South West Region, the State Government and Catchment Management Authorities
- g. The recommendation is expected to return a net financial gain due to greater access to funding and resources
- h. Relevant state plans and policies were taken into account in researching recommendations, outlined in the below section
- i. BSWCA membership would be public knowledge and publicized through relevant avenues.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

The *Local Government Act 2020* became law in Victoria on 24 March 2020, strengthening the mandate for considerations of climate change risk in Council decision-making processes. Several of the overarching governance principles create obligations for Councils in the context of climate change, including:

- Under 9(2)(b) Councils are required to give priority to achieving the best outcomes for the municipal community, including future generations.

- Under 9(2)(c) Councils are required to promote the economic, social and environmental sustainability of the municipal district, including mitigation and planning for climate change risks.
- Under 9(2)(h) regional, state, and national plans and policies are to be taken into account during Council's strategic planning.

"There is now a clear expectation that decision-making is supported by robust and transparent practices, and that the long-term adverse consequences of climate change for future generations are incorporated into council planning, decisions and actions." (Source: Local Government Climate Change Adaptation Roles and Responsibilities under Victorian legislation - Guidance for local government decision-makers, DELWP 2020).

The legislative context for addressing climate change at a regional and Local Government level is now strong, requiring extra resilience, new measures and collaborative work to ensure no sector, region, community, locale, industry or individual is isolated during this important time of emissions reduction and climate adaptation.

The Climate Change Bill was passed by the Victorian Parliament to create a new Climate Change Act in 2017, driving action on climate change across government and economy. This provides Victoria with a legislative foundation to manage climate change risks, maximise the opportunities and drive Victoria's transition to net zero emissions. The Victorian Government has clear emissions reduction targets and guiding principles recently updated in the Climate Change Bill 2020.

The Climate Change Act set the long-term target of net zero greenhouse gas emissions by 2050. To ensure Victoria remains on track, 5 yearly interim targets have been set. These will commence in the 2021-2025 period and are the responsibility of each Council to set, adhere to and report on.

The Climate Change Act also provides a policy framework aimed at increasing economic and community resilience by driving innovation and investment towards sustainability. Some important highlights of this legislation include:

- Victoria is transitioning to a zero-carbon emissions future.
- Climate change is now embedded into decision making and guiding principles of governments and authorities.
- 2021 is the first year of emissions reduction targets that will continue every 5 years.
- Each sector will be impacted and needs to prepare with systems-based adaptation and action plans.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020

Commitment to the BSW Climate Alliance and the projects it delivers would demonstrate and affirm Council's long-standing commitment to environmental sustainability, themes that have come through strongly in the recent Colac Vision 2050 community engagement process.

Joining the BSWCA will demonstrate Council's commitment to leadership and to mitigate and plan for climate change risks, with consideration for the economic, social and environmental sustainability of the municipality and region.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

Over the years, extensive community consultation has revealed strong interest in environmental issues. Considerable engagement occurred during the development of the Environment Strategy in 2010, which led to the setting of the Carbon Neutral Target. In February 2020, a petition containing 3,249 signatures was submitted, calling on Council to acknowledge a Climate Emergency.

Community support for environmental issues has once again been highly evident during the recent Colac Otway Community Vision 2050 and Council Plan 2021-2025 community engagement process,

demonstrating that the local community remains strongly supportive of tackling climate change and addressing a wide range of environmental concerns. The Community Vision 2050 survey revealed that the top priority for Colac Otway communities for Council to address is 'our environment and concerns for living sustainably'.

The survey also posed the question: 'By 2050, to protect our environment and address future climate challenges, what would you like to see?' The three most common responses were - planning for resilience, advocate for renewables, and reduce waste to landfill.

Further, the survey sought feedback relating to the Victorian Public Health and Wellbeing Plan, specifically in relation to the ten priorities outlined for our community's health and wellbeing. The community was asked to select three areas they would most like to see Council focus on. The three most common responses were: Mental wellbeing, preventing violence, and tackling climate change and its impact on health. Actions relating to these community priorities have been embedded in Council's Health and Wellbeing Plan and the current Council Plan.

Public Transparency (s58 LGA 2020)

Upon joining as paid members, Council's role in the BSWCA and involvement in regional projects will be communicated to our community, including sharing knowledge and opportunities to help them respond to our changing climate, through a media release, social media and promotion on Council's website.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 2 - Valuing the Natural and Built Environment

Objective 1: We mitigate impacts to people and property arising from climate change

Objective 2: We operate sustainably with a reduced carbon footprint

Objective 3: Protect and enhance the natural environment

Theme 4 – Strong Leadership and Management

Objective 1: We commit to a program of best practice and continuous improvement

Joining the BSWCA aligns with actions relating to climate change included in the Council Plan 2021-25 and Council's Health & Wellbeing Plan, Council's Environment Strategy and Council's Sustainability Policy and Framework. It also aligns with Council's climate change obligations outlined in the LGA 2020.

Financial Management (s101 Local Government Act 2020)

Membership to the BSWCA will incur an annual fee of \$15,000. Additional annual in-kind costs in the order of \$5,000 - \$5,500 relating to alliance meetings attendance, annual forum attendance (if one is organised) and project related work by officers are expected. These costs will be covered within existing officer EFTs and minimised where possible by utilising flexible on-line delivery/attendance options.

These costs are potentially mitigated via the resources provided by the Alliance, allowing increased efficiency and a reduced workload through joint projects and access to funding to deliver Alliance projects (i.e. BSW Climate Change Health Forum – already funded).

Service Performance (s106 Local Government Act 2020)

Community consultation for the new Council Plan 2021-25 and Community Vision 2050 highlighted community expectations of strong and ongoing climate change and sustainability action, facilitation and advocacy. By becoming a member of the BSW Climate Alliance Council will have access to

resources, knowledge and shared service provision that would otherwise not be available to an individual council. It also improves service performance and delivery by increased purchasing power, economies of scale and collaborative project management and delivery.

Risk Assessment

The recommended course of action (option 1 or option 2) carries a financial risk due to the \$15,000 commitment. However, it is expected that projects, resources and grants facilitated by the Alliance will result in a net gain.

For option 3, Council risks being the only local government in Victoria that is not part of a climate alliance. This poses risks in terms of the Local Government Act and Climate Change Act, as well as risks of community dissatisfaction.

Communication/Implementation

The recommended proposal for joining the BSWCA, along with meeting our 2020 Carbon Neutral Target, offers many benefits and provides a great narrative for communication with Shire residents and across the region. If Option 1 were to be adopted, then an extensive community communications program would be undertaken, ensuring that the community is aware of Council's membership of the Alliance and is able to benefit from access to the resources and programs facilitated by the Alliance.

If Option 2 or 3 are chosen, then Council will communicate to the community the decision not to join the Alliance at this time.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Option 1 – Resolve to become a paid member of the Barwon South West Climate Alliance for 2022-23

This option is recommended by officers as joining the BSWCA would not only signal commitment to climate action as per community expectations, but also allow access to greater funding and resources for emissions reduction projects, ensuring significant cost savings.

Option 2 – Resolve to not become a paid member of the BSWCA for 2-022-23

This option is not recommended by officers as it would not demonstrate genuine commitment to climate action as per community expectations and limit access to greater funding and resources for emissions reduction and climate change projects and significant cost savings.



12 April 2022

Colac Otway Shire
2-6 Rae Street, Colac

Dear Anne,

I am pleased to extend this invitation to Colac Otway Shire to join the Barwon South West Climate Alliance as a member.

The Barwon South West Climate Alliance (BSWCA) is a formal partnership between Local Governments, Water Authorities, Catchment Management Authorities and Deakin University across the Barwon South West region of Victoria.

As the last region in Victoria to establish such a partnership, our Climate Alliance will support the Barwon South West to respond to climate change by enabling better collaboration across our valuable networks and providing a platform for advocacy, funding, and leadership.

The Climate Alliance will undertake activities that benefit members and the region. A formal Committee has been established who have endorsed its driving purpose, to:

- collaborate to achieve a net zero emissions region
- work together on projects, advocacy and knowledge sharing to mitigate and adapt to the impacts of climate change
- help build climate informed, active communities, and
- enable a thriving, and liveable climate resilient region.

As a membership-based partnership, members will pay annual fees that form the annual income of the alliance. This will support an Executive Officer to coordinate the network, manage projects, and apply for funding for joint projects.

Enclosed is your organisation's formal invitation to join the Barwon South West Climate Alliance. Membership involves commitment to work towards fulfilling the alliance's purpose, a subscription fee and nomination of your preferred representatives to participate in two governance bodies.

We look forward to hearing from you,

Barwon South West Climate Alliance
President

Assessment of the beneficial enterprise

Section 111 consideration	Assessment
Assessment of the total investment involved and the total risk exposure and ensure that its total risk exposure does not exceed its total investment	Council's total investment over the 12 months term is estimated to cost approx. \$15k. In the event that the incorporated entity is wound up, and Council is a member at that time or during the 12 months prior, then as a member Council would be required to contribute an amount up to \$20.00. The company also indemnifies a person who is the Director of the company, subject to standard conditions.
Ensure that the corporation is a limited corporation	The Corporation is a limited corporation.
Have regard to the risks involved	<p>Council's financial risks are limited as outlined above. Council may be invited to participate in projects at additional cost. Such invitations will be supported by a documented business case or similar.</p> <p>Council's reputational risk as a member is considered to be low as long-established climate/greenhouse alliances in other regions of Victoria are established entities with a strong reputation for respectful and constructive conduct.</p> <p>Other risks (including environmental and safety risks) are considered to be low the type of work undertaken by the entity are low risk activities such as attending meetings.</p>
Establish risk management arrangements	Financial risks are limited through the company constitution. The Alliance reports regularly to the Executive Committee thus providing transparency of risks and issues to the Representative Executive Council staff who can (i) contribute to decisions to mitigate the risks and (ii) raise issues with Council for further decision.
Implement regular performance monitoring and reporting arrangements in relation to the beneficial enterprise	The Council representative should be requested to provide a verbal update to Councillors at briefing sessions following Executive Committee meetings.
Ensure that any changes to the operation or purpose of the beneficial enterprise are reported to the Council	The CEO shall report changes to the operation or purpose of the entity to a Council meeting.
Identify and manage any risks associated with any changes to the operation or purpose of the beneficial enterprise	No risks are identified at this time.

Item: 10.4

Councillor Attendance at the Australian Local Government Association's National General Assembly and Regional Forum in Canberra and change of Council meeting date in June 2022

OFFICER	Marlo Emmitt
CHIEF EXECUTIVE OFFICER	Anne Howard
DIVISION	Executive
ATTACHMENTS	Nil

1. PURPOSE

The purpose of this report is to provide for Colac Otway Shire Council participation in the Australian Local Government Association's National General Assembly (ALGA NGA) and Regional Forum in Canberra during the period 19 to 22 June 2022 and to reschedule the June Council meeting to Wednesday 29 June 2022.

2. EXECUTIVE SUMMARY

The ALGA NGA and provides a forum for local government to discuss and advance issues of national significance to local government. The forum is held annually.

In accordance with:

- Council's Expenses Policy (adopted on 22 July 2020), any expenditure greater than \$600 (including registration, travel and accommodation) for a Councillor to attend a conference, seminar, training session, trade delegation, friendship visit etc, must be approved by Council.
- Council's Governance Rules, Council may change the date, time and place of any Council meeting which has been fixed by it and must provide reasonable notice of the change to the public.

3. RECOMMENDATION

That Council:

- 1. Approves the following Councillors attending the Australian Local Government Association's National General Assembly and Sunday Regional Forum in Canberra during the period 19 to 22 June 2022:**
 - 1.1. Mayor, Councillor Kate Hanson**
 - 1.2. Deputy Mayor, Councillor Graham Costin**
 - 1.3. Councillor Chris Potter.**
- 2. Resolves to change the date of the June Council meeting from Wednesday 22 June to Wednesday 29 June 2022 and notes that the commencement time of 4pm remains unchanged.**

4. KEY INFORMATION

Convened annually by the Australian Local Government Association (ALGA), the National General Assembly (NGA) of Local Government is the peak annual event for Local Government, bringing together over 800 conference participant representatives of Australia's 537 councils.

There are a number of benefits to participating in NGA, some of which include:

- Over 10 hours of professional development.
- Over 15 hours available to network with other Local Government leaders.
- Over 140 motions debated and used to engage with 24 Ministers and Federal portfolios.
- Opportunity to visit Colac Otway's Federal Member to discuss relevant issues relevant to the municipality and region.

The 2022 NGA theme is *Partners in Progress* and reflects the important role we all play in building a stronger, more inclusive and more sustainable Australia. It provides an opportunity to hear from political leaders, experts, commentators and colleagues in local government to:

- Learn how councils are responding to new challenges and opportunities to create jobs and drive economic growth.
- Learn more about how ALGA's policy and advocacy programs are supporting our recovery efforts in our communities.
- Explore new ideas through keynote addresses, panels, concurrent sessions and networking.
- Hear about emerging trends and issues across our nation.

The following three Councillors will be attending the 2022 ALGA NGA and Sunday Regional Forum:

- Mayor, Councillor Kate Hanson
- Deputy Mayor, Councillor Graham Costin
- Councillor Chris Potter.

Accompanying the Councillors will be Colac Otway Shire's Chief Executive Officer, Anne Howard.

The total cost associated with participation by Councillors is estimated at \$9,100 and includes airfare, accommodation for up to four nights and registration costs.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

Attendance at the 2022 ALGA NGA and Regional Forum is consistent with the following overarching governance principles:

- Pursuing innovation and continuous improvement.
- Seeking collaboration with other Councils and Governments and statutory bodies.
- Regional, state and national plans and policies are taken into account in strategic planning and decision making.
- The transparency of Council decisions, actions and information is to be ensured.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

Bringing this report to Council is consistent with Council's Expenses Policy (to approve any expenditure greater than \$600) and Governance Rules (to change the date and time of any Council meeting which has been fixed).

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

Not applicable.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

Not applicable.

Public Transparency (s58 LGA 2020)

Bringing this matter to the Council meeting for resolution in open session ensures decision making is transparent and the public are aware of which Councillors are attending and why.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

- Theme 1 – Strong and Resilient Community
- Theme 2 – Valuing the Natural and Built Environment
- Theme 3 – Healthy and Inclusive Community.

Financial Management (s101 Local Government Act 2020)

Councillor attendance at the 2022 ALGA NGA and Regional Forum is in accordance with Council's Expenses Policy. The total cost associated with participation by Councillors is estimated at \$9,100 and includes airfare, accommodation for up to four nights and registration costs

Service Performance (s106 Local Government Act 2020)

Not applicable.

Risk Assessment

Not applicable.

Communication/Implementation

The rescheduled Council meeting date will be advertised throughout the municipality via Council's usual communication channels. The meeting commencement time (of 4pm) remains unchanged.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Option 1 – Approve Councillor Attendance at the ALGA NGA

This option is recommended by officers as representation and participation in the ALGA NGA provides a forum for local government to discuss and advance issues of national significance to local government and Colac Otway Shire.

Option 2 – Do not approve Councillor Attendance at the ALGA NGA

This option is not recommended by officers as Council would miss the opportunity for representation at a forum for local government to discuss and advance issues of national significance to local government and Colac Otway Shire.

Item: 10.5

2022-25 Rating Strategy - Consideration of Submissions & Adoption of Rating Strategy

OFFICER	Paul Carmichael
GENERAL MANAGER	Errol Lawrence
DIVISION	Corporate Services
ATTACHMENTS	<ol style="list-style-type: none">1. Rating Strategy 2022 - 2025 - for adoption [10.5.1 - 29 pages]2. 2022 - 2025 Rating Strategy - Summary of Submissions - Attachment [10.5.2 - 6 pages]

1. PURPOSE

The purpose of this report is to resolve upon submissions received in response to the public exhibition of the draft 2022-25 Rating Strategy and to decide to adopt the draft strategy as the Rating Strategy for 2022-25.

2. EXECUTIVE SUMMARY

The draft 2022-25 Rating Strategy was placed on exhibition from 25 February 2022 to 25 March 2022. Nine submissions were received from eight submitters. These were received by Councillors at a Submissions Committee meeting held on 13 April 2022.

3. RECOMMENDATION

That Council:

- 1. Receives and notes the submissions received.***
- 2. Not proceed with the suggestions contained in the submissions on the basis they generally do not facilitate the fair and equitable apportionment of the rates burden across the entire shire.***
- 3. Adopts the draft 2022-25 Rating Strategy.***

4. KEY INFORMATION

Council at its meeting on 23 February 2022 adopted a draft 2022-25 Rating Strategy, which was subsequently placed on exhibition for public comment for a period of four weeks. The exhibition period finished on 25 March 2022.

As a result, eight submissions were received from seven separate submitters. These were considered at a Submissions Committee meeting held on 13 April 2022. A ninth submission was received late but was admitted. Only submitter 1 requested to appear in support of his submissions, being submissions 1 and 1A (Attachment 2).

Eight of the nine submitters are from the Apollo Bay/Skenes Creek area. The main themes raised in the submissions relate to:

- Concern at the effect on rates of escalating property values,
- Concern the effect short term holiday rentals (Air BnBs etc) are having on towns such as Apollo Bay, particularly in relation to rental and property values,
- Suggested Holiday Rental rating category should be rated at same rate as Commercial properties, and
- Possible need for a separate rating category for Apollo Bay.

A summary of the submissions and officer's response comments is attached.

Overall, the submissions have focused on Apollo Bay areas and have not considered the full impact of the broader shire. Council is required to consider how it can fairly and equitably apportion the rates burden across the entire shire. Officers are of the view implementing the suggestions in the submissions would make it difficult for Council to comply with its legislative responsibilities. Implementing the suggestions would also effectively require Council to disregard the economic data it received from Morrison Low, which identified areas in the shire of comparative advantage/disadvantage.

Generally, the suggestions would shift the rates burden further to the Colac/Elliminyt and /or Holiday Rental rating categories. It shows the Colac area was identified as the most disadvantaged area in the shire, whilst the Holiday rental rating category was acutely affected by the COVID pandemic as per analysis done by Morrison Low. It would therefore seem incongruous to require them to carry more the rates burden at this stage.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

The consideration of submissions received is an essential part of the Council complying with governance principle (i) prescribed in the abovementioned section of the *Local Government Act 2020*. The principle is "the transparency of Council decisions, actions and information is to be ensured"

Considering submissions allows the views of the community to be received, heard and considered before Council makes a final decision.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

The draft Rating Strategy document was placed on exhibition for public comment in accordance with Council's Community Engagement Policy. The policy allows the public to make submissions and appear before Council in support of their submission if they so request.

The submissions received were considered against the principles espoused in the State Government's Differential Rating Guidelines 2013. Overall, the Guidelines require Council to consider how the use of differential rating contributes to the equitable and efficient carrying out of its functions compared to the use of uniform rates. To do this, the following broad guidelines are provided:

#	Topic	Guideline
1	Rating categories	Should apply to broadly identifiable land use types or localities.
2		Should not apply to small numbers of assessments of a specific type.
3		Rating category terminology is to be unambiguous & correspond with clearly identified land uses, land types, geographic location etc.
4	Differential rate in \$	Should not be used to prevent, mitigate, discourage legitimate land (or favour) specific land uses.
5		Should not be used to provide a specific benefit or service to a select groups of properties
6		Must consider reducing rates burden for farms & retirement villages if differential rating used.
7		Applying differentials to valuation bands for specific property types/uses is discouraged.
8		Should consider impact of higher rate on land and broader community implications through consideration of equity.
9	Public consultation	Council must consult with community in accordance with legislative requirements.

Whether implementing the submissions received would see Council comply with the above Differential Rating Guidelines is attached.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

Not applicable.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

The consideration of submissions is the implementation of the broad aims of Council's Community Engagement Policy.

Public Transparency (s58 LGA 2020)

It is considered the process undertaken thus far has complied with Public Transparency principles.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Consideration of submissions aligns with the 2021-25 Council Plan in that it contributes to the achievement of item 4.2.5 of Theme 4 of the plan, being that our financial and risk management practices are responsible and sustainable. This is done by allowing the proposed strategy to be held up for public scrutiny.

Financial Management (s101 *Local Government Act 2020*)

Not applicable.

Service Performance (s106 *Local Government Act 2020*)

Not applicable.

Risk Assessment

Not applicable.

Communication/Implementation

Submitters will be advised of the outcome of their submissions.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Council is required to consider the submissions before making a decision on them. Officer comments were provided to offer some context to assist Councillors in their consideration.

Overall it is considered the suggestions provided in the submissions should not be proceeded with as they do not facilitate a fair and equitable apportionment of the rates burden across the shire.

As such it is considered the submissions should be received and noted and Council proceeds to adopt the draft 2022-25 Rating Strategy. This document will form part of the 2021-25 Revenue and Rating Plan.



Colac Otway Shire
Rating Strategy 2022-2025

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Synopsis

Council is required to prepare a Revenue & Rating Plan. Included in the plan is a rating strategy that sets out the rating structure and how the rates burden will be shared across the entire community. The current rating strategy expired on 30 June 2021.

This strategy will apply for the years for the financial years from 2022-23 to 2024-25.

The 2021-25 Revenue and Rating Plan provided for the existing differential rating structure to be retained for 2021-22, with an undertaking that it be reviewed during 2021-22 for the remaining years of the plan.

This approach was taken as the State government and the Victorian Ombudsman were conducting reviews at the time that were thought likely to have an impact on how rates were to be levied. In addition the State government was in the process of reviewing the Local Government Act 1989 and it was anticipated provisions related to rating may also be affected.

The process of reviewing the differential rating structure commenced in early 2021. A feature of the process was to seek Councillor involvement in identifying key issues which were then considered at a series of Briefing sessions throughout 2021.

This process also allowed Councillors to nominate various scenarios to be modelled in order to gauge how various options may shift the rates burden. In all, 15 scenarios were modelled. This was done by applying the particular scenario to the adopted 2021-22 rates data and comparing the outcome.

Council was also keen to ensure that the community's capacity to pay was taken into consideration. It therefore obtained economic and demographic data from Morrison Low, (specialist consultants) to identify regions within the shire experiencing relative advantage/disadvantage. The findings of Morrison Low were consistent with similar data obtained in previous rating strategies.

Since the review commenced, it has become apparent there may be significant valuation increases for various property types across the shire. This is consistent with trends being seen nationally. As different property types will experience different levels of the valuation change, there will be a degree of natural shifting of the rates burden between rating categories. Differential rating provides a mechanism for Council to try and mitigate some of the shift.

Ultimately Council believes:

- a differential rating structure should be retained
- the current rating categories provide an appropriate generic description of the property types within the shire
- the current differentials between the categories allows for the fair and equitable sharing of the rates burden across the community.

1. Introduction

Council is required to periodically prepare a Rating Strategy. The purpose of the Rating Strategy is to set the rating structure and how the rates burden will be apportioned across the community. The current rating strategy expired on 30 June 2021.

As Council's 2021-25 Revenue and Rating Plan was being prepared, the State government was:

- conducting a review of the rating system in Victoria, and
- promulgating a new Local Government Act to replace the Local Government Act 1989.

In addition, the Victorian Ombudsman was also conducting an inquiry into responses by Councils to ratepayers in financial hardship.

As there was uncertainty about the outcomes of the above listed initiatives and the effect they would have on a rating strategy that was to apply up to 2025, Council resolved to retain the existing rating structure and differential regime for 2021-22 to allow time for the above State government initiatives to be finalised. It also resolved to review the rating strategy for the 2022-23 to 2024-25 financial years.

Ultimately the review of the rating system in Victoria and the Ombudsman's hardship response review were completed and responded to by the State government (see 2.4.1 and 2.4.2 below).

The review of the Local Government Act resulted in a new Local Government Act being proclaimed (ie; the Local Government Act 2020) to replace the 1989 Act with the *exception* of the rating provisions provided in the 1989. Thus the requirements of the Local Government Act 1989 remain relevant today.

Finally, early 2020 saw the emergence of the COVID19 pandemic, which has had significant effects on large sections of the community, particularly in connection with the capacity of people to pay their rates.

(1.1) What are "rates" and why must they be paid?

Rates are a "tax" levied upon property owners in a municipal district and are used to pay for a range of services provided by Councils. They are based on the Capital Improved Valuation of the property. The services provided range from services direct to the public, through to the provision and maintenance of infrastructure and administration of State government legislation. Overall, there are more than 60 discrete services provided by Council.

Rates are Council's major source of revenue and are therefore essential to the provision of services to the community.

They are not a "fee for service" or determined by how much or many services a ratepayer uses.

(1.2) How is your rates bill calculated?

A typical rates bill comprises of the following components:

General rate	Calculated by multiplying the property's Capital Improved valuation (CIV) by the rate in the dollar applicable to the rating category. The rate in the dollar is set annually by Council	See 3 below
Municipal Charge	A fixed charge set annually by Council	See 3.2 below
Waste management Charge	A fixed charge set annually by Council	See 3.3 below

The components are added together to give the total amount of Council rates payable.

In addition, the annual notice levies the State Government's Fire Services Property Levy (FSPL). Council is required to levy and collect the FSPL for the State government.

The FSPL comprises of the following components:

Fixed charge	A fixed charge set annually by the State government
Variable levy	Calculated by multiplying the property's Capital Improved valuation (CIV) by a rate in the dollar applicable to property type category. The rate in the dollar is set annually by the state government.

Further information regarding the Fire Services Property Levy is available from www.sro.vic.gov.au

2. Legislative Authority

Whilst the new Local Government Act 2020 came into operation, the rating provisions of the Local Government Act 1989 were not repealed.

The *Local Government Act 1989 (LGA 1989)* stipulates that the primary objective of a Council is to endeavour to achieve the best outcomes for the local community while considering the long-term and cumulative effects of decisions. In seeking to achieve its primary objective, a Council must have regard to a number of objectives, including:

- promoting the social, economic and environmental viability and sustainability of the municipal district;
- ensuring that resources are used efficiently and effectively and services are provided in accordance with best value principles to best meet the needs of the local community;
- improving the overall quality of life of people in the local community;
- promoting appropriate business and employment opportunities to ensure that services and facilities provided by the Council are accessible and equitable;
- ensuring the equitable imposition of rates and charges; and
- ensuring transparency and accountability in Council decision-making.

Section 154 of the LGA 1989 provides for all land (with some specified exceptions) to be rateable.

Section 156 of the LGA 1989 provides for the property owner to be liable to pay rates and charges levied for the property.

(2.1) Equity

Section 3C (2) (f) of the *Local Government Act 1989* requires Council to ensure rates are levied fairly and equitably.

The Local Government Act does not define what is “equitable”, however as the rates are a tax based on valuation of the property it is generally accepted that equity does not relate to the amount of rates to be paid. It is noted the State government’s rating guidelines (see 2.3 below) acknowledges that higher valued properties should pay more rates than lower valued properties.

Overall, in considering what rating is “equitable” Council must consider all facets of the rating structure, property valuation, budgetary requirements and differentials between rating categories in order to meet the needs of the community.

(2.2) Basis of Rating

Section 158A requires Council to separately levy a rate or charge on each portion of land for which it has a separate valuation.

Section 157 provides for Council to use the Site Value, Nett Annual Value or Capital Improved Value as the means of valuing properties for rating purposes.

As such, the link between the valuation of a property and the amount of rates levied is legally established. Rates paid are therefore not a reflection of services provided or used.

(2.3) State Government Guidelines

In addition to the legislative authority, the State Government provided a Revenue and Rating Strategy Guide in 2014. The guide suggests a key step in developing a rating strategy is the consideration of the following principles:

#	Principle	Explanation
1	Wealth tax	Rates are a tax based upon the value of the property being rated and has no correlation to the ratepayer's access to or consumption of services.
2	Equity	That consideration be given to " <i>horizontal equity</i> " (ie: that ratepayers with similar valued properties should pay similar amounts) and " <i>vertical equity</i> " (i.e. that ratepayers with higher valued properties should pay more than those with lesser valued properties).
3	Efficiency	That consideration be given to the extent to which production and consumption decisions by people are affected by rates.
4	Simplicity	The system should be easily understood by ratepayers and be practical to administer.
5	Benefit	That consideration be given to the nexus between consumption/benefit and the rates burden.
6	Capacity to pay	What factors are relevant to particular property classes in order to make informed observations about their capacity to pay rates.
7	Diversity	Which groups in the municipality may warrant special consideration in regards to their capacity to pay.

(2.4) State Government reviews

During 2020 and 2021 the State government conducted two major reviews of rating practices in local government. In addition, it introduced a new Local Government Act 2020 to replace most sections of the Local Government Act 1989. The rating provisions of the 1989 Act were held over pending the outcome of these two reviews. In setting its 2021-25 Revenue and Rating Plan, Council anticipated these reviews may have an impact on the rating strategy part of the Plan and consequently undertook to review the rating strategy for the years from 2022-23.

These reviews were:

- Victorian Local Government Rating Systems Review.
- Ombudsman's Review of Councils responses to ratepayers in financial hardship.

2.4.1 - Victorian Local Government Rating Systems Review

In December 2020 the State government released its final report and response to recommendations of a review of local government rating systems in Victoria. The review made 56 recommendation to the State government, covering a broad range of reforms from major legislative change to small administrative improvements, with both short- and long-term implications.

Overall, the Government is committed to a local government rating system that:

- provides local government with the autonomy to raise sufficient tax revenue to meet the needs and capacity of their community.
- is based on a proportion of the value of the property, i.e. higher valued properties usually contribute more in rates than lower valued properties in the same municipality.
- is simple to understand and allows for meaningful community engagement to make informed and transparent decisions about rate distribution and rating levels.
- provides transparent and flexible ways for councils to treat ratepayers facing financial hardship fairly.
- is set out in primary legislation and is in line with the principles-based approach of the *Local Government Act 2020*.

The Victorian Government also believes local governments must take responsibility for their own rating decisions and levels, reflecting their obligations as a distinct and essential tier of government.

Ultimately the government supported (either in full or in principle) 35 of the 56 recommendations. Most of the adopted recommendations require the State government to undertake further investigations or introduce new legislation /regulations.

The most pertinent recommendations directly affecting Councils are:

Recognition of rates as a “tax”	Recommendation 1
Retain Capital Improved Value as the basis of differential rating	Recommendation 8
Retain the rule that the highest differential rate in dollar cannot exceed 4 times the lowest.	Recommendation 9
Basing differential rating decisions on data analysis of the effect of those decisions and informing and consulting with the community.	Recommendation 11
Retain the rule that the maximum amount that may be raised in general rates by way of a fixed charge remain at 20 per cent.	Recommendation 16
Prepare a four-year rating strategy which aligns with their four-year resource plans and that annual budgets align with their four-year resource plans and their four-year rating strategies.	Recommendation 47

The State government’s full response to the review is available on:

https://engage.vic.gov.au/download_file/40010/2559

2.4.2 - Investigation into how local councils respond to ratepayers in financial hardship

In May 2021 the Victorian Ombudsman issued a report of its investigation into how Council's respond to ratepayers that are in financial hardship. The investigation resulted from concerns from ratepayers, financial counsellors and community lawyers in recent years about the way councils treat people who cannot afford their council rates. With the COVID-19 pandemic threatening to increase financial hardship in the community, the Ombudsman decided it was timely to investigate the issue. The investigation focused on council hardship relief for home owners (ratepayers) who cannot pay rates on their primary residence.

The Ombudsman found that:

- there is a variety of approaches as to how Councils address rates hardship cases,
- all Council's offered relief during the COVID pandemic but these schemes have/are ending,
- public information regarding hardship assistance is sometimes hard to find and not clear
- there is a reliance on putting people on payment plans and not utilising the power to waive or defer rates
- interest charged if often high (currently 10 %per annum)
- debt is often exacerbated by legal costs resulting from taking debtors to Court
- more discretion is required where ratepayers are struggling with issues such as mental illness or domestic violence.

Overall, the Ombudsman was of the view hardship practices throughout local government compare poorly with sectors such as energy and water and that Councils have fallen behind best practice.

The full report is available on:

<https://www.ombudsman.vic.gov.au/our-impact/investigation-reports/investigation-into-how-local-councils-respond-to-ratepayers-in-financial-hardship/#full-report>

A summary of Council's hardship practices is provided in section 9 below.

3. Current Rating Situation

A key aspect of the rating strategy is to review the existing rating structure.

Like most municipalities in Victoria, Colac Otway shire has a differential rating structure, which applies a different rate in the dollar to different types (categories) of properties. The rating category is a generic indication of how the property is being used (e.g. for a residential, commercial, holiday accommodation or farm use).

Also like most Victorian Councils, the Capital Improved Valuation of a property is used as the basis of rating.

Most Council's in Victoria have similar differential rating categories to Colac Otway Shire. The exception is the Holiday Rental category, which very few have. This category is considered appropriate as the use of absentee owned holiday houses for short term holiday accommodation for a tariff is a significant land use in the shire, particularly along the Great Ocean Rd/coastal region.

Overall, all properties in the Shire generally fit into one of the above rating categories. Some properties will have characteristics of more than one rating category (eg: a shop with residence attached). In such cases, the property is allocated to the "highest and best use" rating category. This approach is consistent with the principle on which properties are valued and it is cheaper for the property to be rated as a single assessment rather than as multiple assessments (eg: one assessment in the "Commercial" rating category for the shop and one assessment in the "Residential" rating category for the residence).

(3.1) General rates

The current (2021-22) rating structure, rates in the dollar and differentials are shown below.

Revenue derived from these rating categories comprises the "general rates" component of an overall rates bill.

Rating Category	Rate in \$	Differential (from base rate)
<i>Residential - Colac/Elliminyt</i> (Residential properties in the Colac, Colac East & West & Elliminyt township.)	0.003580	100% (base rate)
<i>Residential - Balance Shire</i> (Residential properties located in the municipality excluding Colac & Elliminyt)	0.003043	85%
<i>Holiday Rental</i> (Houses/cabins that are made available for short term holiday accommodation for a fee/tariff)	0.003580	100%
<i>Rural – Farm</i>	0.002685	75%
<i>Commercial / Industrial – Colac/Elliminyt/Colac West</i> (Commercial properties in the Colac, Elliminyt & Colac West Township)	0.005907	165%
<i>Commercial / Industrial - Balance Shire</i> (Commercial properties not located in the townships of Colac, Apollo Bay, Elliminyt or Princes Highway Colac West)	0.005012	140%

In addition to the general rates derived from the above rating categories, Council also levies the following charges:

(3.2) Municipal Charge

This is a flat charge levied on all properties pursuant to section 159 of the Local Government Act (as amended).

The Municipal Charge raises revenue to pay for a proportion of the administrative costs of Council. It ensures low valued properties (that pay a low amount of general rates) contribute a meaningful amount towards the running costs of the Shire.

The total amount of revenue currently able to be raised from the Municipal Charge is 20% of the sum total of revenue raised from the charge and general rates in that financial year. In 2021-22 the revenue from the Municipal Charge at the Shire amounted to approximately 9% of the total revenue from the charge and general rates.

The only exemption from the Municipal Charge is for Single Farm Enterprises, which have two or more assessments in the same ownership that are used for farming purposes.

In these cases, at least one Municipal Charge is required to be paid.

The Municipal Charge for 2021-22 was \$195.00.

As part of its 2022-23 budget deliberations Council will review the amount of the Municipal Charge, however the percentage of total revenue derived from the Municipal Charge will remain unchanged.

(3.3) Waste Management Charge

This is a flat charge levied on all properties on the waste collection routes or those that have requested the use the service pursuant to section 162 of the Local Government Act 1989.

The charge is levied to defray the costs of Council providing a kerbside domestic waste collection service. As such it is a user pays charge levied on properties that derive benefit from the service. The service is provided on a weekly basis for most properties, with a fortnightly service in Wye River.

The Waste Management Charge for 2021-22 was \$308.00 per annum for the weekly service and \$235.00 per annum for the fortnightly service.

As part of its 2022-23 budget deliberations Council will review the amount of the Waste Management Charge.

Generally, the Waste Management Charge seeks to recover the cost of providing the service.

4 Valuations

(4.1) Valuation used for rating purposes

A key determinant of the amount of general rates a property will pay is the valuation of the property. The valuation used for rating purposes is the Capital Improved Valuation (CIV). The CIV is an estimate of the market value of the property (being land and any capital improvements such as buildings, fences, etc.) as at the valuation date.

Valuations are provided by the Valuer General and are conducted annually.

The valuation date is a set date (being 1st January each year) at which all properties in the Shire are valued. This ensures all properties are valued relative to each other at the same point in the market cycle.

The valuation does not however become operative until the next 1st July.

Thus, the valuation to be used for the 2022-23 financial year have a valuation date of 1st January 2022 but does not become operative however until the 1st July 2022 (being the start of the 2022-23 financial year).

It should be noted an increase in the total valuation of properties in the shire does not automatically result in Council generating more revenue from rates. This is because each year the amount of revenue to be collected is different. As the amount of rates revenue is the product of multiplying the total valuations by a rate in the dollar, increased valuations generally leads to a reduced rate in the dollar where overall rates revenue increases are minimal.

(4.2) Notice of valuation used for rating purposes

Property owners are advised of their valuations on their annual rates notice, which is issued in August each year. The notice advises of three valuations. These are:

Capital Improved Valuation (CIV)	Being the value of the land <i>and</i> any capital improvements
Site Value	Being the value of the land only.
Nett Annual Value	Being an estimate of the rental a property could generate annually (usually set at 5% of CIV)

(4.3) Valuation objections

The annual Notice also provides a two month period in which objections to the valuation may be lodged.

The right of objection to a valuation is provided by sections 16 and 17 of the Valuation of Land Act 1960 (VLA).

Section 17 of the VLA specifies the valid grounds for objection, being that:

- (a) the value assigned is too high or too low;
- (b) the interests held by various persons in the land have not been correctly apportioned;
- (c) the apportionment of the valuation is not correct;

- (d) lands that should have been included in one valuation have been valued separately;
- (e) lands that should have been valued separately have been included in one valuation;
- (f) the person named in the [notice of valuation](#), assessment notice or other document is not liable to be so named;
- (g) the [area](#), dimensions or description of the land including the [AVPCC](#) allocated to the land are not correctly stated in the [notice of valuation](#), assessment notice or other document.

All valid objections are reviewed by the Valuer General's appointed valuer.

(4.4) Supplementary valuations

During the year, the value of a property may change due to a material change to the property. The most common example of this is when a house is built on a previously vacant lot. In such cases, Council is required by section 13L of the Valuation of Land Act 1960 to have the valuation of the property reviewed.

This is referred to as a Supplementary Valuation. This is done to maintain equity between ratepayers.

The amended valuation applies from the point in time that the material change came into effect. As a result, the property will be valued at the previous valuation for part of the financial year and the new valuation for the balance of the financial year. The rates levied for that financial year are then recalculated accordingly.

Advice of the new valuations and amended amount of rates is provided to the ratepayer by way of a Supplementary Valuation and Rates Notice. The right of objection referred to in 4.3 above also applies to supplementary valuations.

5 Rate Capping

Since 2016-17, Victorian Councils have been subjected to a municipal rate cap imposed by the State Government. The rate cap limits the percentage increase in a council's average general rate and municipal charge. It does not apply to waste charges or the State government's Fire Services Property Levy.

In past years the rate cap has been as follows:

Year	Rate cap
2016-17	2%
2017-18	1.75%
2018-19	2.25%
2019-20	2.5%
2020-21	2%

The rate cap does *not* mean all properties rates will increase by the percentage of the rate cap. This is because the amount of rates payable is influenced by the percentage change in the property valuation and the rate in the dollar applied. This is illustrated as follows:

	Rate cap	Capital valuation (CIV)	Improved	% Change	CIV	Rate in dollar	Amount of rates	% change
Year 1		\$500,000				0.003580	\$1,790.00	
Year 2	2%	\$550,000		10%		0.003450	\$1,897.50	6%

Council can apply a rate increase up to the cap. Ministerial approval must be obtained for Council to apply a rate increase in excess of the cap.

6 Payment Options

Council provides the following three payment options:

Option	When due
Quarterly Instalment	1 st Instalment due: 30 September 2 nd Instalment due: 30 November 3 rd Instalment due: 28 February 4 th Instalment due: 31 May
Payment by Arrangement	Frequency of part payments by arrangement with full amount due by 31 May.
Lump Sum payment	Full payment by 15 February

7 Payment Methods

Rates and charges are able to be paid by the following methods:

- online (via BPay, Post Billpay and Formsport or via Council's website)
- by direct debit
- by cheque
- by credit card over the phone
- in person by cash or credit card at Council's customer service centres at Colac and Apollo Bay and at any post office.

8 Penalty Interest

Penalty interest is charged on rates not paid by due dates in accordance with section 172 of the Local Government Act 1989. The penalty rate of interest is prescribed by the State Government.

Exceptions to this are:

- Late payments of instalments 2 and 3 for accounts where the quarterly instalment option has been activated by the ratepayer. Our practice has been to allow missed payments of these two instalments to *not* be charged interest as they will appear as being due on the next Instalment notice issued.
- Rates being paid by arrangement where a part payment is missed.

In both these cases, rates are required to be paid in full by 31 May. Interest is charged on any balance outstanding after this date in accordance with the requirements of section 172 of the Act.

The penalty interest regime used by Council minimises interest to the ratepayer as much as possible and is considered appropriate.

9 *Hardship Assistance*

Council has a “Rates Assistance to Rates Debtors in Hardship” policy which seeks to provide assistance to rates debtors who can show they are suffering legitimate financial hardship.

Council believes it can carry debt longer than non government organisations and is prepared to allow rates debtors to pay their rates debt over time. The policy therefore provides for:

- ✓ all accrued interest to be waived, and
- ✓ no further interest to be levied for a specific period of time.

The intention is that rate payments made will be reducing principal instead of being applied to paying interest. There is therefore an expectation the ratepayer will enter into a meaningful payment arrangement.

Council does not generally waive rates as they are a charge against the property and will ultimately be paid when the property changes ownership. Whilst hardship assistance provided includes a moratorium on penalty interest to prevent the debt from escalating, it is felt “interest free” cannot continue indefinitely. It is hoped the debtor therefore takes the opportunity to make more financially beneficial arrangements (such as extending a mortgage at cheaper rates of interest than penalty interest) to pay arrears and clear the debt.

It is felt this expectation accords with the general views of the community that ratepayers should be responsible for their debts.

Having said that, Council recognises there can be many factors leading to financial hardship and is therefore a participant in the Geelong region Financial Inclusion Action Plan (FIAP). Council recognises that rates debtors in hardship are likely to have financial debts with other organisations as well. In that regard, Council has formed a collaboration with Barwon Water and Colac Area Health to streamline the application process so that an application to either of these organisations will be accepted as an application to us. Further, Council is happy with the consent of the ratepayer, to refer them to other relevant FIAP organisations to help alleviate broader financial hardship.

10 *Action Taken Leading to this Strategy*

To enable informed decisions to be made, Councillors:

- identified a number of basic issues relevant to rating
- Identified a number of scenarios they wanted modelled
- Considered demographic data to identify if there were areas of the shire that had less capacity to pay

The scenarios were then modelled against the data used to set the rates for the 2021-22 financial year. This allowed Councillors to see what the difference *would have been* in 2021-22 compared to what the situation actually was.

Doing this allowed Councillors to see how the distribution of the rates burden would be affected by the various scenarios.

(10.1) Issues considered

At the start of the process Councillors identified the following as issues to be considered. There were subsequently considered at Councillor Briefing sessions conducted throughout 2021.

#	Issue	Details	Outcome
1	Fairness & equity?	<ul style="list-style-type: none"> • What is the definition of this in a rating context? • How do we define “fair & equitable”? 	Councillors at Briefing session on 18 August 2021 reaffirmed that fairness and equity in levying general rates is achieved by using a common rate in the dollar against the valuation of all properties in any particular rating category.
2	Capacity to pay.	<ul style="list-style-type: none"> • Should this be considered? • If so, how is it determined/measured? • What are the implications of this? • Economic performance of rating categories over past few years? • Economic forecast for rating categories going forward? 	<p>Councillors at Briefing session on 18 August 2021 reaffirmed:</p> <p>(a) it is not feasible to base rating decisions on the personal capacity to pay as Council has no access to data necessary to make these judgements, and</p> <p>(b) it will seek to obtain and use relevant economic data to make decisions about the capacity to pay of all rating categories.</p>
3	User pays.	<ul style="list-style-type: none"> • Should this be considered? • If so, what are the implications of this? 	<p>Councillors at Briefing session on 18 August 2021 reaffirmed:</p> <p>(a) that user pays charges should be used where appropriate, and</p> <p>(b) the extent to which user pays charges are used to raise revenue be considered as part of the budget process.</p>
4	Rating structure.	<ul style="list-style-type: none"> • Do the current categories adequately reflect the diversity of property types in the shire? • Is a differential rating structure appropriate? • What are the alternatives? • What are the implications of change? 	Councillors at Briefing session on 18 August 2021 reaffirmed it retains the use of a differential rating structure.

		<ul style="list-style-type: none"> If it is appropriate, are the differentials fair and equitable? 	
5	Emerging issue – Rise of Air BnB.	<ul style="list-style-type: none"> What effect does this have? Should Council get involved? What are possible solutions? What are implications of possible solutions? 	Councillors at Briefing session on 8 September 2021 reaffirmed using the rates system to discourage use of properties for short term holiday accommodation is not a feasible option as the amount of income able to be generated from short term holiday rental exceeds the amount of rates that could be charged.
6	Affordable housing.	<ul style="list-style-type: none"> Does Council have a role to play? Can/should Council's rating structure be used to affect an outcome? 	<p>Councillors at Briefing session on 8 September 2021 reaffirmed:</p> <p>(a) the issue of affordable housing is a complex issue requiring involvement of many stakeholders;</p> <p>(b) that its role at present is one of planning and advocacy; and</p> <p>(c) that it continues to identify properties where residential accommodation is provided as a charitable purpose with a view to making them "not rateable".</p>
7	Holiday rental – rating.	<ul style="list-style-type: none"> Holiday rental properties should pay more, or the same as the Commercial rate in the dollar. 	<p>Councillors at Briefing session on 8 September 2021 requested</p> <p>(a) a model be provided for this scenario; and</p> <p>(b) the model be considered at scheduled workshops in October 2021.</p>
8	Rates discount/lower rate in \$ for long term (ie: 12 months or greater) rental properties.	<ul style="list-style-type: none"> Offer a discounted rate to motivate/reward for providing more secure long term housing. 	Councillors at Briefing session on 8 September 2021 acknowledged there would be practical problems in implementing and administering such as proposal.
9	Higher differential rate for vacant residential land.	<ul style="list-style-type: none"> Aim to encourage use or sale of vacant land for housing. 	Councillors at Briefing session on 8 September 2021 acknowledges there are significant broader issues to be considered before drawing a

			conclusion that applying a higher differential rate to vacant residential land would be an effective tool in encouraging landowners to develop their land for residential purposes.
10	Farm zoned properties less than 5ha that can't get residential permit	Create a new rating category for these? What are implications of doing this?	Councillors at Briefing session on 15 September 2021 reaffirmed that it continues to categorize undeveloped small acreage properties (i.e., 5 ha or less) located in the "Farm" town planning zone as "Farm" properties for rating purposes.
11	Trust For Nature covenanted properties.	Should these receive a rates rebate or be included in specific / different rating category?	Councillors at Briefing session on 15 September 2021 acknowledged that properties that have Trust for Nature covenants registered on their Certificate of Title should be eligible for a rates rebate of \$10 per hectare of covenanted land up to a maximum of \$1,000.
12	Visitor-pay parking along the coast. Free permits for residents, ratepayers & their families.	Visitor-pay parking along the coast. Free permits for residents, ratepayers & their families. Gain additional revenue Costs could be limited by contracting to a company who can do all the logistics and issue of permits.	Councillors at Briefing session on 15 September 2021 acknowledged the introduction of car parking fees and a resident/ratepayers permit scheme is outside the scope of the Rating Strategy.
13	"Commercial – Colac/Elliminyt" rating category should pay the same rate in the dollar as "Commercial-Balance of Shire" rating category.	Aim to stimulate the Colac /Elliminyt business sector	Councillors at Briefing session on 20 October 2021 requested as model of this scenario be prepared. The model for this is shown as Scenario 4 below.
14	Farm rate differential to be reduced to 73% (or lower)	What are implications of doing this?	Councillors at Briefing session on 20 October 2021 requested as model of this scenario be prepared. The model for this is shown as Scenarios 5, 6 & 7 below.
15	Reduce Municipal Charge to 5% or zero What are implications?	What are implications?	Councillors at Briefing session on 20 October 2021 requested as model of this scenario be prepared. The model for this is shown as Scenario 8, 9 & 10 below.

16	Other Charges – Municipal Charge/Waste mgt Charge.	Other Charges – Municipal Charge/Waste mgt Charge. Are they appropriate? What is an appropriate level? What are implications of changing the amounts of these charges?	Councillors at Briefing session on 2 February 2022 agrees the percentage of revenue raised from the Municipal Charge (being 9%) should not change.
17	Create Long term rental category Higher rate in dollar for Hol Rental		Councillors acknowledged this was not feasible.
18	Universal rate in dollar – staged introduction over 3 years		Councillors at Briefing session on 17 November 2021, acknowledged this was not desirable The model for this is shown as Scenario 2 below.
19	Rating differentials.	What will differentials be? Are the differentials fair and equitable?	Briefing sessions on 17 November 2021 & 2 February 2022 considered scenarios presented and agreed to retain existing differentials.

(10.2) Identified scenarios

Ultimately Councillors requested the following 13 scenarios be modelled to examine their effect in distributing the rates burden. As mentioned, above the scenarios were modelled in comparison to the adopted 2021-22 rating regime. It was not possible to model scenarios for 2022-23 and the valuations to be used for the 2022-23 financial year will not be available until March-April 2022 and the amount of revenue to be raised for 2022-23 from rates is unknown at this stage/

A summary of the scenarios and the assumptions underpinning the scenario is as follows:

#	Scenario & Aim	Model assumptions
1	Uniform rate in dollar <i>Aim: Examine effect of uniform rate in dollar</i>	Apply uniform rates in \$ across all categories
2	Uniform rate in dollar – staged introduction over 3 years <i>Aim: Investigate staged introduction of uniform rate in \$</i>	Phase in uniform (single) rate for all rating categories above or below 100% of the base over three years
3	<i>Sub scenario</i> Uniform rate in dollar – staged introduction over 3 years with aligned Commercial categories in year 1.	Phase in uniform (single) rate for all rating categories above or below 100% of the base over three years with both Commercial categories aligned in Year 1)

#	Scenario & Aim	Model assumptions
4	<p>“Commercial –Colac/Elliminyt” rating category to pay the same rate in the dollar as “Commercial- Balance of Shire” rating category.</p> <p><i>Aim: To stimulate the Colac /Elliminyt business sector.</i></p>	<ul style="list-style-type: none"> • “Commercial – Colac/Elliminyt” rate in \$ to = “Commercial-Bal of Shire” • Revenue reduction to be collected from all other categories.
5	<p>Farm rate differential to be reduced to 73%. (Identified in previous rating strategies)</p>	<ul style="list-style-type: none"> • “Farm” rate in \$ to be 73% of “Residential-Colac/Elliminyt” rate in \$. • Revenue reduction to be collected from all other rating categories.
6	<p><i>Sub scenario</i></p> <p>Farm rate differential to be reduced to 70%.</p>	<ul style="list-style-type: none"> • “Farm” rate in \$ to be 70% of “Residential-Colac/Elliminyt” rate in \$. • Revenue reduction to be collected from all other rating categories.
7	<p><i>Sub scenario</i></p> <p>Farm rate differential to be reduced to 67%.</p>	<ul style="list-style-type: none"> • “Farm” rate in \$ to be 67% of “Residential- Colac/Elliminyt” rate in \$. • Revenue reduction to be collected from all other rating categories.
8	<p><i>Sub scenario</i></p> <p>No Municipal Charge.</p>	<p>Delete Municipal Charge.</p> <p>Revenue reduction to be collected from all other categories equally. (This will affect the rates in the \$)</p>
9	<p>Reduce Municipal Charge to 5% (being \$98.40).</p>	<ul style="list-style-type: none"> • Amount to be raised from Municipal Charge to be 5% of the total amount to be raised from Municipal Charge & general rates (being \$98.40). • Revenue reduction to be collected from all other categories equally. (This will affect the rates in the \$)
10	<p>Reduce Municipal Charge to \$100.</p>	<ul style="list-style-type: none"> • Municipal Charge to be reduced from \$195 to \$100. (which equates to 5.1% of rates & charges revenue). • Revenue reduction to be collected from all other categories equally. (This will affect the rates in the \$)
11	<p>Holiday rental – Same as Commercial – Bal of Shire (140% differential).</p> <p><i>Aim: Holiday rental properties should pay more, or the same as the Commercial rate in the dollar.</i></p>	<ul style="list-style-type: none"> • “Holiday Rental” rate in \$ to = “Commercial – Bal of Shire” • Additional revenue to be deducted from “Residential – Bal of Shire”
12	<p><i>Sub scenario</i></p>	<ul style="list-style-type: none"> • “Holiday Rental” rate in \$ to = “Commercial – Colac/Elliminyt”.

#	Scenario & Aim	Model assumptions
	Holiday Rental – Same as “Commercial – Bal of Shire” (165% differential)	Additional revenue to be deducted from “Residential – Bal of Shire”.
13	Lower rate in \$ for long term (ie: 12 months or greater) rental properties. <i>Aim: Offer a discounted rate to motivate/reward for providing more secure housing.</i>	<ul style="list-style-type: none"> • Create “virtual” new rating category with 50 properties @ total CIV \$31,280,000 (being average Holiday Rental CIV\$625,600 x 50) • Use Farm rate (lowest rate) in \$ • Revenue reduction to be collected from “Holiday Rental” category
14	Farm differential to be 74% of base rate & Municipal Charge to be 5% (\$98.40)	<ul style="list-style-type: none"> • No change to other rating category differentials • Re coup foregone Municipal Charge revenue from all categories
15	Farm differential to be 73% of base rate & delete Municipal Charge	<ul style="list-style-type: none"> • No change to other rating category differentials • Re coup foregone Municipal Charge revenue from all categories

A summary of the outcomes of each scenario and a detailed analysis is attached (see attachments 1 and 2 respectively).

(10.3) Demographic Snapshot / capacity to pay

A theme often raised by the community is that municipal rates should be based upon a person’s “capacity to pay”. This is also a “principle” the “Revenue and Rating Strategy Guidelines 2014” suggests should be considered by Council when developing a rating strategy. It also emerged as a theme from the State Government’s rating systems review in 2020.

Whilst this is a desirable aspiration, people’s financial circumstances inevitably vary and are known only to the person concerned. Thus implementing this aim presents significant practical difficulties.

As it is presumed “capacity to pay” is evidenced by income, the question then is whether “gross income” or “nett income” should be the determinant of rates payable. This then has implications in regards to equity of rating as some sections of the have the capacity to minimise their income for taxation purposes whilst other sectors (e.g. PAYE taxpayers) cannot minimise their taxable income to the same extent.

As Council does not have access to income data, it is not feasible to use income (gross or nett) as a basis for municipal rating.

Overall, municipal rates comprise approximately 3.5% of all tax income in Australia, with a rates bill generally amounting to approximately 3% of a ratepayer’s gross income. Notwithstanding this, Council is keen to avoid creating a rating situation that shifts the rates burden to parts of the community that already have limited capacity to pay.

Council therefore engaged Morrison Low consultants to compile socio-economic demographic data relevant to the Shire. Morrison Low are specialist demographers/economic consultants who have vast experience in compiling, analysing and interpreting demographic data for the government and local government sector.

The aim was to identify areas of the shire that had comparatively higher levels of social disadvantage and vulnerability and therefore possibly less capacity to pay.

Morrison Low analysed REMPLAN data for the shire.

Their report was based on the 2016 census data as the 2020 census data was not yet available. Despite this it is felt, with the exception of the effects of COVID19, the demographic characteristics of the shire will not have changed dramatically since 2016. Their report looked at capacity to pay by identifying:

- areas of social disadvantage
 - vulnerable groups /areas with the community
- trends within the major industry types with the shire, and
- the effect of COVID19 on the local economy.

To do this, Morrison Low divided the shire into 7 distinct geographic areas, being:

- Colac central
- Colac West
- Colac East
- Elliminyt
- Great Ocean Road / Otways region
- Rural North (ie: mostly north of the Princes Highway but extending south of highway east of Colac to include Birregurra)
- Rural South (ie: mostly south of the Princes Highway and extending to the northern edge of the Otway Ranges).

Overall Colac Otway Shire is one of the most disadvantaged shires in Victoria. It has a higher level of low-income earners than the regional and state level, yet its unemployment rate (4%) is lower than the state level (6%). Interestingly, it has a slightly lower level of housing stress than the regional and state levels. The sectors creating the most employment are:

- manufacturing
- agriculture/forestry/fishing
- health care and social assistance.

Employment numbers and economic output for all occupation types has stagnated since March 2020 as a result of the COVID19 pandemic.

The key characteristics of each region identified by Morrison Low were:

Area	Characteristics
Colac central	Most disadvantaged area in the shire with: <ul style="list-style-type: none"> ➤ Larger proportion of older and/or retired residents ➤ More low-income residents & less high-income residents ➤ Higher unemployment rate (due to age profile) ➤ Higher percentage of residents who need core assistance

	➤ Higher percentage of housing stress.
Colac West & East	Similar to Colac central - though with slightly higher housing stress percentage in Colac East.
Elliminyt	<ul style="list-style-type: none"> ➤ Average level of disadvantage (ie: equal with State level) ➤ Younger population ➤ Higher proportion of high-income earners ➤ Higher proportion of home ownership & newer houses ➤ Lowest unemployment rate ➤ Lowest demand for core services ➤ Lowest level of housing stress
Great Ocean Rd/Otways	<ul style="list-style-type: none"> ➤ Slightly higher level of disadvantage than the State level ➤ Comparatively high proportion of high-income earners ➤ Higher proportion of retirees ➤ Low unemployment rates but higher percentage of workers in part time work ➤ Higher level of housing stress ➤ Low level of demand for core assistance
Rural North	<ul style="list-style-type: none"> ➤ Slightly higher level of disadvantage than the State level ➤ Highest proportion of high-income earners (area contains some large farms) Low unemployment rate ➤ Comparatively high level of home ownership ➤ Moderate level of housing stress (2nd lowest in shire & well below state & national level) ➤ Low level of demand for core assistance
Rural South	<ul style="list-style-type: none"> ➤ Average level of disadvantage ➤ Comparatively high proportion of high-income earners (area contains some most of the dairy farms in the shire) ➤ Low unemployment rate ➤ Comparatively high level of home ownership ➤ Moderate level of housing stress (3rd lowest in shire & well below state & national level) ➤ Low level of demand for core assistance

The data showed that parts of Colac township have a significantly higher level of social disadvantage and vulnerability than other areas of the shire. Conversely the Elliminyt area which is experiencing new development was an area of comparative advantage.

In the rural sector, the northern part of the shire was slightly more disadvantaged than the south but both areas were at about the average level of disadvantage.

The Great Ocean Rd/Otway region was experiencing a slightly higher than average level of social disadvantage but was more vulnerable in that it is experiencing a higher level of housing stress and has over half of its working population in part time employment.

These results were consistent with demographic data obtained in previous rating strategy reviews.

A summary of the data for each region is attached as attachment 4.

A copy of the Morrison Low report is attached as attachment 5.

(10.4) Community Consultation

Community consultation was not undertaken for the preparation of this strategy. Officers relied on the input of Councillors as elected representatives of the community to identify issues to be considered. Once the draft strategy is adopted by Council, it will be placed on public exhibition for six weeks in accordance with Council's Community Engagement Policy.

11 Proposed rating structure

After due consideration Councillors at the Briefing session on 2nd February 2022 agreed to retaining the current rating structure and differentials as:

- ❖ the current rating differentials do not pre-emptively shift the rates burden between rating categories (noting in particular that the Colac township has areas that have a significantly higher level of disadvantage than other parts of the shire),
- ❖ it is anticipated there will be significant valuation increases across the shire which is likely to provide a shift in the rates burden between categories,
- ❖ the current differentials provide a mechanism for rates increases resulting from valuation increases to be mitigated (i.e. evened out) to some extent, although it is acknowledged the extent of valuation increases may require amendment of the differentials between rating categories,
- ❖ the current rating categories provide an accurate generic description of land use types for all properties in the Shire (e.g. all properties were either residential, commercial/industrial, holiday rental or farm properties).

Thus it is proposed the following rating structure and differentials be adopted for the term of the Rating Strategy.

Rating Category	Differential (from base rate)
<i>Residential – Colac/ Elliminyt</i> (Residential properties in the Colac, Colac East & West & Elliminyt).	100% (base rate)
<i>Residential - Balance of Shire</i> (Residential properties located in the municipality excluding those in the "Residential -Colac / Elliminyt" rating category)	85%

Rating Category	Differential (from base rate)
<i>Holiday Rental</i> (Houses/cabins that are made available for short term holiday accommodation for a fee/tariff)	100%
<i>Rural – Farm</i> (Properties used for farm purposes as defined by the Valuation of Land Act 1960).	75%
<i>Commercial / Industrial – Colac/Elliminyt</i> (Commercial properties in the Colac, Colac East & West and Elliminyt)	165%
<i>Commercial / Industrial - Balance Shire</i> (Commercial / industrial properties in the municipality excluding those in the “Commercial / Industrial –Colac/Elliminyt” rating category.	140%

Other Charges

In addition to general rates being levied on the basis of the above structure, it is proposed Council retain the Municipal Charge (see 3.1 above) and Waste Management Charge (see 3.2 above).

12 Compliance with State Government's Guidelines

As mentioned above, in 2014 the State Government provided guidelines for the preparation of a rating strategy. In preparing this strategy, an attempt has been made to comply with the principles outlined in the guidelines as follows:

#	Principle	Explanation
1	<i>Wealth tax</i>	Rates are a tax based upon the value of the property being rated and have no correlation to the ratepayers' access to or consumption of services. Compliance: <i>The strategy has been prepared on this basis.</i>
2	<i>Equity</i>	That consideration be given to " <i>horizontal equity</i> " (i.e. that ratepayers with similar valued properties should pay similar amounts) and " <i>vertical equity</i> " (i.e. that ratepayers with higher valued properties should pay more than those with lesser valued properties). Compliance: <i>"Horizontal equity" is achieved as properties in the same category and valuation pay the same amount of rates. The strategy provides "vertical equity" as higher values properties pay more rates than lower valued properties.</i>
3	<i>Efficiency</i>	That consideration be given to the extent to which production and consumption decisions by people are affected by rates. Compliance: <i>How these decisions are affected by the amount of rates payable is unknown and varies from person to person. The strategy attempts to equitably apportion the rates burden across the shire and actively sought to avoid shifting that rates burden to other rating categories by changing the differentials.</i>
4	<i>Simplicity</i>	The system should be easily understood by ratepayers and be practical to administer. Compliance: <i>The rating structure (being based on generic land use descriptions) is believed to be simple for the community to understand.</i>
5	<i>Benefit</i>	That consideration be given to the nexus between consumption/benefit and the rates burden. Compliance: <i>This principle seems contradictory to principle 1 above. However, the use of differential rates attempts to recognise that some areas (e.g. Colac/Elliminyt) have greater access to services than other areas and therefore pay rates at a higher rate in the dollar.</i>

#	Principle	Explanation
6	<i>Capacity to pay</i>	<p>What factors are relevant to particular property classes in order to make informed observations about their capacity to pay rates.</p> <p>Compliance: Council obtained economic data to identify areas of experiencing comparative social disadvantage and vulnerability. Ultimately a balance between this principle and principles 2, 3 and 5 has to be found.</p>
7	<i>Diversity</i>	<p>Which groups in the municipality may warrant special consideration in regards to their capacity to pay.</p> <p>Compliance: See comment for principle 6.</p>

13 *Meeting community expectations*

It is acknowledged that many in the community will judge the Rating Strategy by whether they pay less rates or more. This is understandable, although simplistic. It is also understood the effects of COVID 19 have placed communities under unprecedented financial and emotional stress.

To that end, Council will continue to assist ratepayers by accepting flexible payment arrangements and where necessary providing assistance under its hardship policy (see 9 above). In addition, it also offers a range of part payment options (see 6 above).

Council views referral of accounts to debt collectors to be a last resort but also seeks to encourage early intervention for ratepayers with arrears to initiate action before the debt becomes unmanageable.

Ultimately municipal rates are a charge against the property and remain against the property (accruing penalty interest on arrears) until such time as they are paid. There is no advantage to the ratepayer by ignoring the debt.

Ratepayers are therefore encouraged to discuss their situation with Rates department staff as soon as possible.

References

Ministerial Differential Rating Guidelines - 2013

Revenue & Rating Strategy Guidelines"- DELWP 2014

Local Government Rating System Review – December 2020

Investigation into how Councils respond to ratepayers in financial hardship – Victorian Ombudsman - May 2021

Capacity To Pay – Morrison Low – October 2021

2022-25 RATING STRATEGY**Summary of Submissions received with officer comments and compliance with Differential Rating Guidelines.**

From	Key submission points	Officer comment	Compliance with Differential Rating Guidelines
Sub 1	Issue raised appears to be questioning the legality of charging rates for land which property owners purportedly cannot use for their own purposes because they are required to use part of their property to store Council owned assets (ie: rubbish bins).	<p>Rates are levied on properties in accordance with relevant legislation.</p> <p>The issue raised has no bearing on how the rate burden is apportioned across the shire and is therefore outside the scope of the Rating Strategy</p>	<p>The issue raised has no bearing on how the rate burden is apportioned across the shire and is therefore outside the scope of the Rating Strategy.</p> <p>Compliance with Guidelines is not applicable in this case.</p>
Sub 1A	Was the “refusal to pass on already promised and passed reduction in farm rates” taken into consideration in the 2022-25 Rating Strategy as this could have an inflationary impact on food prices as farmers have higher costs, which then have to be passed on the consumers.	<p>As part of the preparation of the 2022-25 Rating Strategy, economic analysis looking at areas of comparative advantage /disadvantage was obtained. The intent of this was to try and ensure that disadvantaged areas within the shire were not further adversely affected by the Rating Strategy. The areas containing farms were among the least disadvantaged areas in the shire whilst at the same time the past few years have been very good years for the farming sector.</p> <p>The reduction of the Farm rate differential in previous rating strategies to 73% of the base rate was not implemented due to reasons applicable at the time.</p> <p>It is pointed out reducing the differential would not have automatically meant that farms would pay less rates, but rather the overall “Farm” rating category would pay a lesser proportion of the total rates revenue to be raised.</p> <p>It is also considered that as inflationary pressure on food prices is influenced by a range of macro-economic factors, the effect of a local rating decision on a comparatively small group of producers would have a negligible effect on food prices.</p>	<p>As the submissions is to do with the possible macroeconomic effect on food prices as a result of Council not reducing the farm rates differential, compliance with Guidelines is not relevant in this case.</p> <p>It is pointed out however that the “Farm” rating category pays the lowest differential, so Council complies with Guideline 6.</p>

From	Key submission points	Officer comment	Compliance with Differential Rating Guidelines
Sub 2	<p>There appears no awareness of the power of ratings categories to contribute to shaping and solving community issues.</p> <p>Imbalance between holiday lettings and the ability of young people especially workers in health, education incl early childhood, hospitality and construction to find affordable accommodation.</p> <p>Submitter recommends:</p> <p>Those whose primary place of residence is Apollo Bay to have no change in rates.</p> <p>Those who indulge in short term rentals should pay same as commercial ie:140% of base rate.</p> <p>Those rentals that are long term > 12months AND reasonable ie < 150 per bedroom max \$450 / week should pay 100% of current rates.</p> <p>A maximum of 40% of residences in Apollo Bay available for short term with remainder available for residence or long term rental.</p>	<p>The effects of short stay holiday accommodation on worker attraction and accommodation in tourist areas is a worldwide problem that requires a more complex response than punitive taxation.</p> <p>Using differential rating to engineer a specific situation is a direct contravention of the Victorian government’s Differential Rating Guidelines as it discriminates against a specific group of property owners. It would also be difficult for Council to meet its legal obligation to fairly and equitably apportion the rates burden by taking such discriminatory action.</p> <p>Proposal ignores the broader context (eg: does this also apply to all primary places of residence in the shire? – if not, how is this fair to them?). This would contravene the Differential Rating Guidelines.</p> <p>Holiday rental properties currently pay rates at 100% of base rate compared to 85% for residential properties in Apollo Bay (and Balance of Shire). Whether they should pay more is debateable but it is pointed out these properties were acutely affected by COVID lockdowns and were generally not able to receive government Covid support.</p> <p>Council has no access to rental data and getting accurate data from owners would be problematic.</p> <p>It is outside the scope of the Rating Strategy to determine how many and which holiday houses should be permitted to operate as such. The rating structure reflects how a property is used – it does not dictate how it’s used.</p>	<p>Using the differential rating regime as suggested would likely contravene Guidelines 4, 5, 6 and 8 referred to above.</p>

From	Key submission points	Officer comment	Compliance with Differential Rating Guidelines
	<p>Vacant land in centre Apollo Bay be rated as commercial (140%) unless tiny house/ RV is placed for seasonal workers, when they can pay 100% of rates.</p> <p>Prepare a masterplan for Apollo Bay, including building overlay for indigenous plantings, max height 7.2 metres and compulsory passive construction, renewables, including shadowing based on June 21, limiting building to max 50% higher than adjoining properties.</p> <p>The additional revenue based on the above schedule should be prioritised to support early education and affordable housing for workers.</p>	<p>Land cannot be rated as a Commercial property <i>unless</i> it is allowed to be used for a commercial purpose under the Town Planning Scheme. If it was then used for a residential purpose, it would be rated as a Residential property.</p> <p>These proposals are outside the scope of the Rating Strategy.</p> <p>How Council spends its funds is determined each year in its budget process.</p>	
Sub 3	<p>Create a new rating category for Apollo Bay property owners that only own one property with a 75% rate differential.</p>	<p>Proposal ignores the broader context in that:</p> <ul style="list-style-type: none"> • It does not apply to property owners in other parts of the shire that also only own one property • It ignores relativity with Farm rating category that has differential of 75%, who have high valuations and feel they receive less services than towns. • Ignores relativity with residential properties elsewhere in Shire that have lower valuation yet would pay at a higher rate in the dollar <p>How is this fair to other categories given they will inevitably pay the shortfall in revenue caused?</p> <p>Difficult to justify the highest valued residential properties in the shire paying a significantly lesser differential than other residential properties simply to mitigate the amount paid. This</p>	<p>Implementing suggestions in the submission would comply with guideline 1 referred to above but would likely not comply with Guideline 8.</p>

From	Key submission points	Officer comment	Compliance with Differential Rating Guidelines
		contravenes a fundamental principle of rating (ie: higher valued properties pay more rates).	
Sub 4	<p>Supports submission 3 (ie: separate rating category for Apollo Bay with 75% differential)</p> <p>Property values along coast increased by “(say) 3 times more than elsewhere” leading to “... an additional and artificial increase over and above any incremental % (rates) increase”.</p> <p>Suggests spending on coast be more proportionate to rates raised.</p>	<p>See comments for #3 above.</p> <p>Inaccurate statement re valuation increases (but was a general comment). Seems to assume there is a % rates increase that is then added to by a valuation based increase. This is incorrect.</p> <p>Where Council spends its funds is determined each year in its budget process. Generally, funds are expended where this is most need.</p>	<p>See comments for #3 above.</p> <p>Compliance with Guidelines is not applicable in this case.</p> <p>Compliance with Guidelines is not applicable in this case. This is a budget issue.</p>
Sub 5	<p>Valuation shifts outside Colac up to 40% compared to Colac (13%) will lead to rates increases outside Colac up to 27% more than Colac.</p> <p>Why aren't Air BnB properties included in Holiday Rental?</p> <p>Employment along coast is “part time” – affecting ability to pay. Should therefore reduce differential for “Balance of Shire” & “Farms”</p> <p>Increase “Holiday Rental” differential as this has reduced long term rental market.</p>	<p>A 40% valuation increase doesn't mean a 40% rates increase. The amount of additional revenue Council can raise is limited by the State government's rates cap.</p> <p>Air BnB properties are included in the Holiday rental rating category & pay rates at 100% of the based rate in the dollar compared to 85% for residential properties along the coast.</p> <p>COVID has made ability to pay an issue for many throughout the whole shire. Reducing the differential for a particular category simply shifts the burden to others in the shire.</p> <p>See comment above. Whether they should pay more is debateable but it is pointed out these properties were acutely affected by COVID lockdowns and were generally not able to receive government Covid support.</p>	<p>The basic premise of the submission (ie: a 40% valuation increase results in 40% rates increase) is incorrect. The amount of additional revenue Council can raise is limited by the State government's rates cap.</p> <p>The basic premise of the submission (ie: that Air BnB properties are not in the “Holiday Rental” rating category) is incorrect. How these are rated complies with Guidelines 1 & 8 referred to above.</p> <p>Shifting the rates burden to parts of the shire identified as being more disadvantaged than the areas nominated may not comply with Guideline 8.</p> <p>Implementing this suggestion would not comply with Guideline 4 as it seeks to engineer a specific result by punitive taxation.</p>

From	Key submission points	Officer comment	Compliance with Differential Rating Guidelines
Sub 6	Significant (unequal) increases in property values across the Shire precipitate need to review differentials to mitigate rate increases.	The amount of additional revenue Council can raise is limited by the State government's rates cap, <i>regardless</i> of any valuation changes.	Purpose of Rating Strategy and annual budget is to apportion rate as fairly and equitably as possible taking in to consideration valuation shifts and the State government's rate cap limit. This seeks to comply with Guidelines' overall objective.
Sub 7	<p>Councillors need to see valuation trend for different parts of the shire to make informed rating strategy decision.</p> <p>Average rates burden borne by coastal towns (compared to Colac) is unfair</p> <p>Disproportionate amount spent in Colac compared to coast</p> <p>Air BnBs should be rated at same rate as the Commercial properties they compete with.</p> <p>Encourage long term residential rental by providing 40% rate discount for properties leased for 12 months.</p> <p>"Now that the farming sector is prospering relative to other business Sectors, will the rate reduction for Ag land brought back to its former 75% level?"</p>	<p>Councillors have been provided with summary of 2022 valuation changes in various areas. Matter of opinion if year on year trend aids decision making.</p> <p>Mean & median rates will be higher in higher valued areas, which accords with basic principle of rating (ie: higher valued properties pay more rates).</p> <p>How rates are spent is determined in annual budget process rather than Rating Strategy.</p> <p>Whether they should pay more is debateable but it is pointed out these properties were acutely affected by COVID lockdowns and were generally not able to receive government Covid support.</p> <p>Effectiveness of this questionable. Short term rental provides owners with greater returns & ability to use house for personal use. Also raises equity issues & shifts burden to other ratepayers.</p> <p>Farm rate differential remained at 75%.</p>	<p>Compliance with Guidelines is not relevant in this case. Percentage valuation increase does not mean commensurate increase in rates.</p> <p>Shifting the rates burden to parts of the shire identified as being more disadvantaged than the areas nominated may not comply with Guideline 8.</p> <p>How rates are spent is determined in annual budget process rather than Rating Strategy.</p> <p>This suggestion could comply with the Guidelines.</p> <p>Implementing this suggestion would not comply with Guideline 4, and was noted in Rating Strategy discussions as being unfeasible.</p> <p>Farm rate differential remained at 75%. This complies with Guideline 6.</p>
Sub 8	Lack of public consultation in preparing draft.	Public consultation in previous rating strategies provided little feedback. It was decided this year to develop themes with Councillors (as representatives of the community) to develop a proposal for the community to consider.	Council has complied with Guideline 9.

From	Key submission points	Officer comment	Compliance with Differential Rating Guidelines
	<p>Retaining current categories and differentials ignores COVID initiated population movement across the State and its effects on employment, property values etc</p> <p>“Part of the coastal strip and other parts of Apollo Bay have experienced higher than average property value increases. This will impact on their rates”.</p> <p>Property value not an indicator of capacity to pay – particularly for pensioners, retirees, part time employed etc</p> <p>Consider commercial aspect of Air BnBs.</p>	<p>Despite demographic changes, the current rating categories are considered to provide generic description of major land uses in the shire. Setting the differentials is the essence of the rating strategy.</p> <p>The amount of additional revenue Council can raise is limited by the State government’s rates cap, <i>regardless of any valuation changes.</i></p> <p>True – but generally rates account for about 3% of a person’s gross income.</p> <p>Whether they should pay more is debateable but it is pointed out these properties were acutely affected by COVID lockdowns and were generally not able to receive government Covid support.</p>	<p>The current rating categories comply with Guidelines 1 & 3.</p> <p>The amount of additional revenue Council can raise is limited by the State government’s rates cap, <i>regardless of any valuation changes.</i></p> <p>True – but generally rates account for about 3% of a person’s gross income.</p> <p>This suggestion could comply with the Guidelines.</p>
Sub 9	<p>Request total rates income from areas outside Colac/Elliminyt be restricted to 2.5% increase due to valuation increases. Worried re effect on low income earners & pensioners.</p>	<p>Implementing suggestion would increase rates burden on Colac/Elliminyt ratepayers, many of whom are pensioners and low income earners.</p> <p>Colac was identified as the most disadvantaged area in the shire (as per Morrison Low data). Difficult to argue it is fair & equitable to increase burden on the most disadvantaged areas of the shire to mitigate valuation driven increases in other areas.</p>	<p>Implementing the suggestion would probably not comply with Guidelines 5 & 8 and it would favour one part of the shire at the expense of another and necessarily disregard the effect of a higher rate in the dollar on that part of the community.</p>

Item: 10.6

Draft Asset Plan - Endorse for Exhibition

OFFICER	Tony McGann
GENERAL MANAGER	Tony McGann
DIVISION	Environment and Infrastructure
ATTACHMENTS	1. PDF - Draft - Asset Plan V - 1.1 - 2022-31 - Rev.9.04.22 [10.6.1 - 31 pages]

1. PURPOSE

To provide Council with the draft Asset Plan to allow community consultation on it.

2. EXECUTIVE SUMMARY

- Council is required to adopt an Asset Plan by the end of June 2022.
- The Asset Plan draws information from detailed Asset Management Plans for the major asset categories of Roads, Bridges, Buildings, Drainage, paths and Open Space/recreation.
- Council has developed a draft Asset Plan and it is recommended that this now be released for community consultation.
- Council will consider feedback from the community in adopting its Asset Plan at a future Council meeting.
- The Asset Plan is closely linked with Council's Financial Plan and budget.
- The asset plan shows that assets are generally sustainable for the next ten years although the renewal backlog is expected to increase over the next 20 years.
- It is recommended that investment in capital renewal rise from the current level to 110% of depreciation over the next ten years. This will require an annual increase in the order of 3.9%

3. RECOMMENDATION

That Council:

- 1. Endorses the draft Asset Plan for the purposes of Section 92 of the Local Government Act 2020.*
- 2. Gives public notice via Council's website, local newspapers and social media that Council has prepared the draft Asset Plan.*
- 3. Determines that the public consultation period will be no less than five weeks from the initial public notice, to ensure sufficient time to adopt the Asset Plan by 30 June 2022.*
- 4. Schedules a Submissions Committee meeting to be held on Wednesday 15 June 2022, commencing at 4pm at the Colac Performing Arts and Cultural Centre, to provide the opportunity for any person wishing to speak to their written submission to be heard, or a nominated representative to speak to their submission on behalf of the person.*
- 5. Authorises the Chief Executive Officer to undertake administrative procedures necessary to enable Council to carry out its obligations under Section 92 of the Local Government Act 2020.*
- 6. Considers for adoption the Asset Plan at a Council meeting scheduled to be held on Wednesday 29 June 2022, commencing at 4pm at Colac Otway Performing Arts and Cultural Centre after consideration of any written and verbal submissions received by Council at its Submissions Committee meeting on Wednesday 15 June 2022.*

4. KEY INFORMATION

The development of an Asset Plan is a new requirement of the *Local Government Act 2020* with the Act outlining the following:

92 Asset Plan

- 1) Subject to subsection (6), a Council must develop, adopt and keep in force an Asset Plan in accordance with its deliberative engagement practices.
- 2) The scope of an Asset Plan is a period of at least the next 10 financial years.
- 3) An Asset Plan must include the following—
 - a) information about maintenance, renewal, acquisition, expansion, upgrade, disposal and decommissioning in relation to each class of infrastructure asset under the control of the Council;
 - b) any other matters prescribed by the regulations.
- 4) Subject to subsection (6), a Council must develop or review the Asset Plan in accordance with its deliberative engagement practices and adopt the Asset Plan by 31 October in the year following a general election, other than the first general election to be conducted under section 257(1)(a).
- 5) The Asset Plan adopted under subsection (4) has effect from 1 July in the year following a general election.
- 6) A Council must develop and adopt an Asset Plan under this section in accordance with its community engagement policy by 30 June 2022 following the first general election to be conducted under section 257(1)(a).
- 7) The Asset Plan adopted under subsection (6) has effect from 1 July 2022.

The Asset Plan is integral with the Integrated Strategic Planning and Reporting Framework and sits alongside the Financial Plan as Council's two key long term (10+ years) resource allocation and management planning documents.

Formulating a Draft Asset Plan

In regard to legislated requirements, the attached Draft Asset Plan:

- Has a scope of ten financial years which meets the requirement 'of at least the next ten financial years.' The long-life asset renewal modelling shown within the Plan allows for a 20- year planning horizon to provide a longer-range view of asset renewal demand
- Contains relevant '(a) information about maintenance, renewal, acquisition, expansion, upgrade, disposal and decommissioning in relation to each class of infrastructure asset under the control of the Council;'
- Has been drafted in view of the requirement that 'A Council must develop and adopt an Asset Plan under this section in accordance with its community engagement policy by 30 June 2022 following the first general election to be conducted under section 257(1)(a)
- Has been based on the participatory and deliberative engagement process undertaken by Council in 2021 and the subsequent outcomes of this process, including the Community Vision, Council Plan, and Financial Plan.

Basis of Draft Asset Plan

The draft Asset Plan has been formulated on the following basis:

1. Consideration of all Council assets including long life assets such as Buildings, Roads, Bridges, Pathways, Stormwater, and Open Space and Recreation assets; short life assets such as Plant and Fleet; and intangible assets such as software.
2. The development of a capital works funding model based on asset depreciation that allows for both renewal and upgrade/ new capital works.
3. A projected capital works program value (average) that equates to the overall capital works funding projected in the Financial Plan – refer to the Plan's Appendix A: Projected Capital Works Expenditure Comparison-Financial Plan and Asset Plan.
4. Funding across the long-life asset categories (buildings, roads, bridges, pathways, stormwater, open space and recreation) in accord with asset management planning and modelling.
5. Defined upgrade/ new requirements on the basis that asset groups like buildings and open space and recreation assets are upgraded/ replaced with assets that meet modern standards and amenity requirements, with Council requiring at least part funding in this area for success at winning relevant grant funding opportunities.
6. Noting the potential increase of required maintenance and operations funding from that in the 2021-22 budget.

Context of Draft Asset Plan

The draft Asset Plan has been formulated in relation to the Financial Plan projections adopted by Council in October 2021. In the context of the Financial Plan, the draft Asset Plan has developed a capital works funding model to provide a broad framework for the allocation of funds based on asset depreciation. This funding model caters for both renewal and upgrade/ new capital works and differs

from the Financial Plan which allows for renewal capital works only. However, the projected overall capital works expenditure per annum remains the same for both plans.

The draft Asset Plan aims to best distribute available funding in the most effective way to maintain and enhance current service levels delivered to the community by assets. In some asset categories (like Pathways) the renewal requirement identified is considerably less than the depreciation due to asset condition and condition profile. In all asset categories there is balance required between:

- Excessive condition service levels/ intervention levels that may lead to over-expenditure; and lower service levels/ intervention levels that allows for efficient expenditure for asset renewal before end of life.
- Renewal expenditure and upgrade/ new expenditure; recognising that efficiencies are normally provided by a mixture of both to the extent that allows the winning of targeted grant funding for Council's strategic priorities and part-only Council funding.

The draft Asset Plan has developed a capital works funding model to provide a broad framework for the allocation of funds based on asset depreciation. This funding model caters for both renewal and upgrade/ new capital works and differs from the Financial Plan which allows for renewal capital works only. However, the projected overall capital works expenditure per annum remains the same for both plans.

The Draft Asset Plan's funding model requires review in the context of the adopted Financial Plan in order that revision be made to the Draft Asset Plan and/ or the adopted Financial Plan so that both plans are in agreement.

The attached draft asset Plan shows that:

- The Asset Plan is closely linked with Council's Financial Plan and budget.
- Assets are generally sustainable for the next ten years although the renewal backlog is expected to increase over the next 20 years.
- It is recommended that investment in capital renewal rise from the current level to 110% of depreciation over the next ten years. This will require an annual increase in the order of 3.9%

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

This report ensures that:

- a) Council decisions are to be made and actions taken in accordance with the relevant law.
- b) priority is to be given to achieving the best outcomes for the municipal community, including future generations.
- c) the municipal community is to be engaged in strategic planning and strategic decision making.
- d) the ongoing financial viability of the Council is to be ensured.
- e) the transparency of Council decisions, actions and information is to be ensured.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

The preparation and adoption of the Asset Plan will ensure that Council complies with the *Local Government Act 2020*.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

The Asset Plan is focussed on the sustainability of Council assets and through those the sustainability of our service to the community.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

The draft Asset Plan is to be released for community consultation and the feedback received as part of that process will be considered by Council before it adopts the final Asset Plan.

Public Transparency (s58 LGA 2020)

Public transparency is ensured by considering this report in open Council and releasing the draft asset Plan for community consultation.

Alignment to Plans and Strategies

The draft Asset Plan is strongly aligned to the Financial Plan and is an action contained in the Council Plan.

Financial Management (s101 Local Government Act 2020)

The draft Asset Plan aligns with the draft 2022-23 budget and the Financial Plan. It represents sound financial management because it considers the available funding, recommends an increase in renewal funding and models the future service potential of the assets under the proposed funding scenario.

Service Performance (s106 Local Government Act 2020)

The draft Asset Plan is related to service performance because all services use assets as part of the delivery chain. Our assets must be sustainable for our services to be.

Risk Assessment

The risks associated with the management of our assets are considered in the draft Asset Plan.

Communication/Implementation

The draft Asset Plan will be sent to key stakeholders and placed on Council's website. Media releases will be prepared to raise awareness of the draft Asset Plan and publicise the community consultation process.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

OptionsOption 1 – endorse the draft Asset Plan for community consultation

This option is recommended by officers because the draft represents the work done by officers and Councillors to develop a plan which considers the best way to ensure that we provide a sustainable portfolio of assets for the long term in order to be able to provide services to the community.

Option 2 – endorse the draft Asset Plan with amendments

It may be that Councillors wish to make changes to the draft asset Plan before it is released for community consultation.



Draft Asset Plan 2022-23 to 2031-32



**Draft V1.2
April 2022**

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Document Control:

Rev No	Date	Revision Details	Author
Draft V1.0	Feb 2022	Draft for Council review	Colac Otway Shire
Draft V1.1	Mar 2022	Revised Draft for Council review	Colac Otway Shire
Draft V1.2	Apr 2022	Updated Draft for Council review	Colac Otway Shire



1.0 SUMMARY

This Asset Plan is aimed at providing a document that helps everyone understand the quantum of assets that Council owns, and the challenges in maintaining an asset base that services the community into the future in support of the 2050 Community Vision and Council Plan. This is a balancing act at the best of times, the funding bucket is only so big, there are lots of challenges, and we can't do everything. Council and the community will need to collaborate to address this dilemma and the Asset Plan will be a valuable tool for the work ahead.

The risks and cost of not having adequate resources and management practices is enormous. Assets that are poorly inspected, maintained or renewed can result in injury to life, breaching of legislative requirements, higher future costs, inter-generational inequity, loss of reputation, and assets that can't deliver on required services. There are environmental implications such as water quality management, the social implications of a built environment that is not such a great place to 'learn, live, work and play', and financial implications that may be difficult to recover from. This makes it imperative to have a Plan.

This Asset Plan rests on the processes outlined within Council's Asset Management Policy, Asset Management Strategy, and Asset Management Plans. These documents and the processes they describe form a road map for continual improvement in the way Council manages its assets and the services delivered from them. In this balancing act there are ever changing challenges, community conversations and negotiations to be had, choices to be made, and plans to be updated and revised.

This is Council's inaugural Asset Plan and is being financially integrated with Council's inaugural Financial Plan (adopted September 2021) as part of the Integrated Strategic Planning and Reporting process. It represents what the community and Council are in agreement on, that is, it outlines expenditure in line with maintaining current (2021-22) service levels from its asset base, with expenditure in ways that supports the 2050 Community Vision and Council Plan.

In an ever changing environment, there is an increasing chance of flood, storm, and fire events that will compromise the integrity of the asset base. These events will happen, and Council's role in emergency management and the recovery afterwards is vital. It is worthy to note that Federal Government funding provides for restoration of disaster affected infrastructure assets under Disaster Recovery Funding Arrangements as administered by the State Government.

This Asset Plan's total lifecycle cost forecasts are balanced with the Financial Plan's total budget forecasts. This is a good start, but.....

What impact does it have on our assets and the services delivered from them in the coming years?

What about increasing demand on our services from population growth, demographic change, community expectations, and the impacts of climate change?

What about major shortcomings in our existing assets?

What do we do?

Table 1.0 following outlines the challenges, the plan to meet those challenges, the inevitable trade-offs, and the importance of community input and negotiation in determining 'what we do' and 'what we don't'. Action is required both now and in an on-going way to meet the challenges ahead.

Table 1.0 The Challenges and what we Do

What Challenge?	What's the Plan?	What Trade-Offs?	Further community input and/or negotiation required?
Delivering services from our existing assets into the future.	<ol style="list-style-type: none"> 1. Review and continuously improve asset data and modelled renewal demand in each asset category. 2. On-going integration of the Asset Plan and Financial Plan to reflect renewal requirements. 3. On-going service planning to define service levels and community priorities. 	<ul style="list-style-type: none"> • Some service levels may need to be lowered or services dropped to enable adequate funding of community prioritised services. • On-going asset backlog. • Potential decommissioning of some assets from service. • Potential 'user pays' services. 	Yes – on-going community input is required to define priority services and required service levels. This will inform and allow improved Service Planning. This in turn will lead to the community conversation around "Here's the funding we have, what do we do and what don't we do?"
Increasing services demand in the face of limited funding.	<ol style="list-style-type: none"> 1. On-going service planning to define service levels and community priorities. 2. Continually review and update asset management planning data and modelling with integration of the Asset and Financial Plans. 3. On-going service planning to define service levels and community priorities. 4. Strategic and prioritised grant funding applications targeted at community needs. 5. Include climate change resilient asset costs and costs of assets requiring higher design standards within asset planning new and renewal costs. 6. Manage asset expansion sustainably in line with Asset Plan and asset management planning. 7. Consider non-asset service solutions where workable. 	<ul style="list-style-type: none"> • Community expectations won't necessarily be met. • Some service levels may need to be lowered or services dropped to enable adequate funding of community prioritised services. • On-going asset backlog.. • Potential decommissioning of some assets from service. • Potential 'user pays' services. 	Yes – on-going community input is required to define priority services and required service levels. This will inform and allow improved Service Planning. This in turn will lead to the community conversation around "Here's the funding we have, what do we do and what don't we do?"
Existing Assets with significant service shortcomings.	<ol style="list-style-type: none"> 1. On-going service planning to define service levels and community priorities. 2. Long term strategic planning to define quantum of shortcomings, service levels, and long term programs to rectify. 3. Strategic and prioritised grant funding applications targeted at asset upgrade where this is a community priority. 	<ul style="list-style-type: none"> • Current service levels provided from these assets remain unchanged over time. • Other trade-off as for the challenges above. 	Yes – on-going community input is required to define priority services and required service levels. This will inform and allow improved Service Planning. This in turn will lead to the community conversation around "Here's the funding we have, what do we do and what don't we do?"
Continuous improvement of asset management practice.	<ol style="list-style-type: none"> 1. Establish and monitor and asset management improvement plan as part of the Asset Management Strategy. 2. On-going reporting of asset management status using an asset management steering group. 	<ul style="list-style-type: none"> • Additional staff resources may be required which will come at a cost. 	No – these processes will be established in accord with the Asset Management Strategy.

2.0 WHY AN ASSET PLAN?

2.1 Background

Colac Otway is a large rural and coastal Shire with a 2021 population of 21,662 situated within commuting distance from the major regional cities of Geelong, Warrnambool and Ballarat.

Colac Otway's landscape is made up of a unique and precious natural environment, from a rural idyll with fertile farmland and volcanic lakes and craters inland, to beautiful rainforest, National Park, waterfalls, beaches and rugged coastlines.

Much of the rural area is used for agriculture, with farming, cropping and dairying being the main agricultural pursuits. Agricultural activity is concentrated in the northern part of the Shire, although timber and fishing are prevalent in the south.

Tourism is an important industry, especially in the southern section along the Great Ocean Road.

The Shire has two main townships, with many small historic towns throughout. The largest town Colac, which serves as an administrative, retail and commercial centre, is well serviced by high quality education, health, recreation, arts and social facilities. Apollo Bay is the major tourism centre and is located along the spectacular Great Ocean Road; this coastal community experiences an annual swell of thousands of holidaymakers over the summer months, with the lure of beautiful beaches, fresh local seafood and breathtaking scenery. Colac Otway's townships include, Alvie, Beeac, Birregurra, Carlisle River, Cororooke, Cressy, Forrest, Gellibrand, Swan Marsh, Beech Forrest, Lavers Hill, Kennett River, Separation Creek and Wye River.

Colac Otway Shire Council is the custodian of an extensive range of community assets that deliver a wide range of vital services to the community. In order to deliver these services over the long term in a challenging environment, the Council must ensure that the assets supporting these services are managed in a sustainable way. This Asset Plan sits alongside Council's Financial Plan as the guiding ten year plus resource and allocation tools within the Local Government Integrated Strategic Planning and Reporting Framework (ISPRF), and together these documents guide and inform Council's decisions in a ten-year context.

2.2 Purpose of the Plan

This Asset Plan is intended as a strategic community facing document that informs the community on how Council controlled infrastructure and other assets are to be managed to achieve the Council Plan objectives and Community Vision statement. The purpose of the Asset plan is to:

- improve the transparency around asset value and performance
- better inform the community on the type of assets under council management and their financial impost
- embed responsible asset management practices into the ISPRF
- contribute to council's long term objectives, strategic intent, and finances
- improve the efficiency and effectiveness of asset management practices through a more engaged community and informed council
- better align decisions around assets to community needs, service levels and standards, and financial sustainability
- articulate and communicate the challenges on service levels, costs, risks, and the considerations for the decisions made.

2.3 Strategic Context

2.3.1 Compliance with the *Local Government Act 2020*

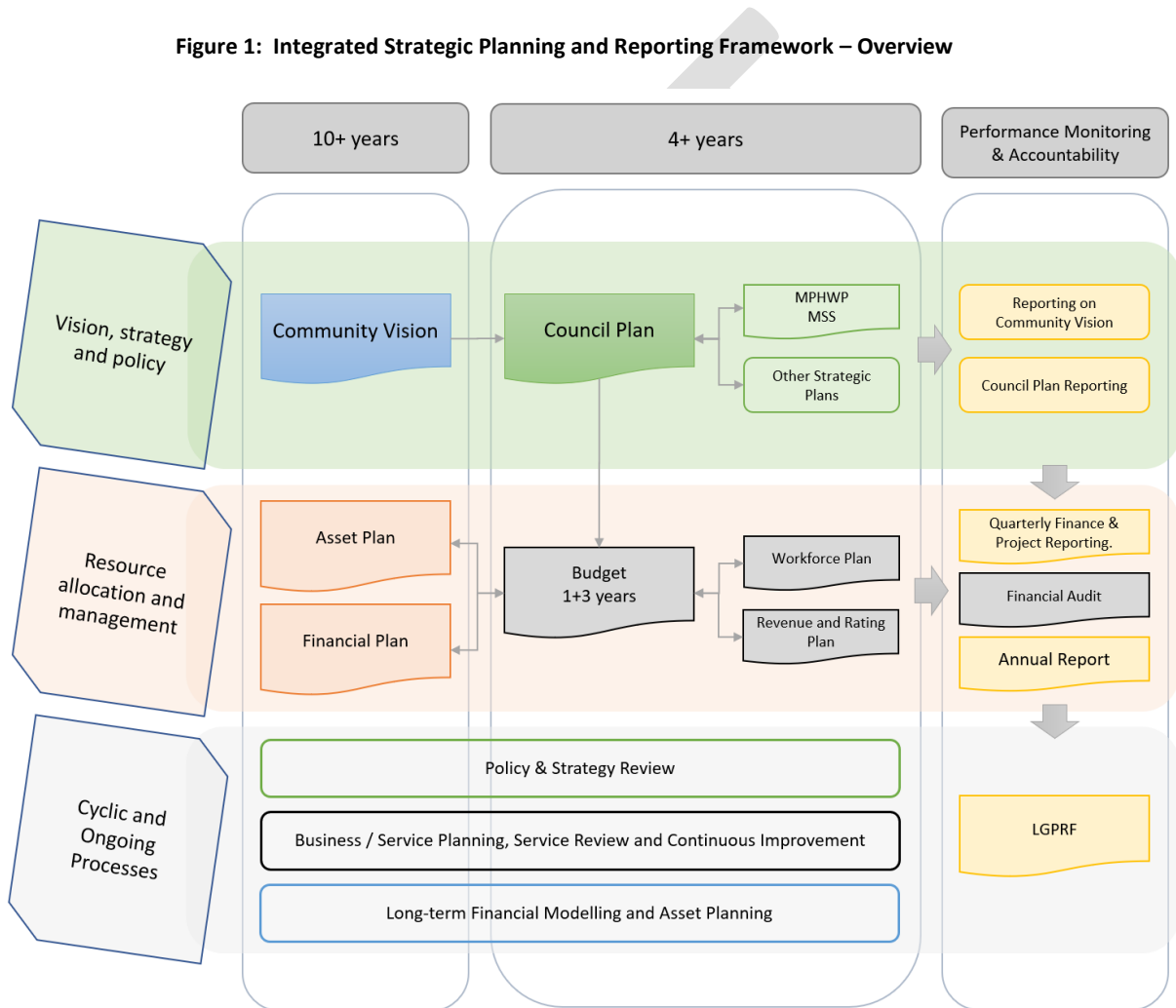
Section 92 of the Local Government 2020 (the Act) highlights the requirement for good asset management practices across the local government sector in Victoria. Under the Act, councils must adopt an initial Asset Plan by 30 June 2022 and by 31 October following each Council election thereafter.

The Local Government Act 2020 (Planning and Reporting) Regulations requires councils to record their compliance with section 92 of the Act by completing the Governance and Management Checklist annually; and to ensure that the Asset Plan aligns with the Council Plan, Council Budget, Annual Report, Community Vision and Financial Plan. These factors are in keeping with the ISPRF and are aimed at reassuring the community that their assets are being responsibly managed.

2.3.2 Integrated Strategic Planning and Reporting Framework

This Asset Plan is a vital component of the ISPRF and as such aligns with and complements other council planning and reporting documents, including the Council Plan, Council Budget, Annual Report, Financial Plan, and the 2050 Community Vision. An overview of Council’s ISPRF showing elements and planning timeframes is shown in Figure 1.

Figure 1: Integrated Strategic Planning and Reporting Framework – Overview



3. How does it Fit Together?

3.1 Community Engagement

The Local Government planning and accountability framework guides the Council in identifying community needs and aspirations, and determining how it will deliver on them.

Throughout February and March 2021 Council invited the community to share their thoughts via an online community survey, key stakeholder interviews, and drop-in sessions throughout the Shire. More than 600 people responded to what they valued most and what priorities they would like included in a future vision. The key themes emerging from this survey were:

- Our environment, and concerns about living sustainably.
- Planning for our future (which included a focus on housing availability and affordability, and supporting our local economy).
- Looking after our local community including supporting people's health and wellbeing.
- Planning for sustainable population growth.
- Maintaining Council and community infrastructure.

In May 2021, Council undertook a deliberative engagement process with a Community Panel of 24 randomly-selected people. The Community Panel's role was to review the information that was gathered via the broad Community Vision consultations and develop recommendations to inform the 2021-25 Council Plan and Community Vision. The Community Panel was provided the following remit:

"Council Plans and Community Visions set direction for Council. The reality is that we can't do everything. We want to ensure our strategic planning reflects what is most important to the future of our community. What should Council focus on in the next four years and out to 2050?"

The Community Panel were also given three specific questions to focus on, including:

Assets and services.

Q: What are the most important assets and services that Council provides?

Q: If changes have to be made to service levels, how can they be prioritised? And

Q: Are there ways Council can lower the cost of managing assets and services?

The Panel provided the following Assets and Services recommendations:

1. *Maximise community use of assets and services and if underutilised consider consolidation.*
2. *Consider assets and services decisions in line with the strategic growth plan.*
3. *Consolidate and focus the COS assets and services responsibilities by assessing:*
 - a. *What value does the asset provide to health, education, economy, connectedness?*
 - b. *Who uses it, how often and cost to maintain?*
 - c. *Identify opportunities for co-location and consolidation.*
 - d. *Identify competitive advantage and model investment, identify missed opportunities e.g. what do we want our region to be known for?*
 - e. *Develop a caretaker model to support the community management and delivery of assets and services (e.g. hall, park, tennis court, play areas, maker space).*
4. *Invest in a specialist data analyst/s to:*
 - a. *Support funding applications*
 - b. *Develop a decision matrix supported by data, which may include:*
 - i. *Usage data (prioritised based on demand)*
 - ii. *Demographic data*
 - iii. *Community input e.g. surveys*
 - iv. *Information from interest groups e.g. Chamber of Commerce*

- v. *Environmental impacts*
- vi. *Social impacts*
- vii. *Value for money/ cost benefit.*

These and other Community Panel recommendations in the areas of developing a Strategic Growth Plan and the questions around Climate Action and Housing have been foundational to the formulation of the Colac Otway Shire 2050 Community Vision and in turn the Colac Otway Shire Council Plan 2021-25.

3.2 2050 Community Vision, Council Plan and Shared Objectives

This Asset Plan has been prepared based on the 2050 Community Vision and Council Plan 2021-25 which in turn have been informed by the participatory and deliberative engagement processes outlined above.

2050 Community Vision:

“By 2050, Colac Otway Shire will be a destination where people come to appreciate our unique and diverse environment and friendly communities.

We value the wisdom of this land’s first caretakers, the Gulidjan and Gadabanud peoples, and recognise all those who have cared for the land since.

We work to preserve what makes our place special. We focus on environmental sustainability to protect our precious natural assets.

We are a proud and resilient community that values our welcoming spirit. We embrace new people, new business, new ideas. Our region is a great place to learn, live, work and play.”

Four key themes were identified:

1. Strong and Resilient Economy
2. Valuing the Natural and Built Environment
3. Healthy and Inclusive Community
4. Strong Leadership and Management.

The **Council Plan 2021-25** cascades directly from the 2050 Community Vision. The four-year Plan, developed by Council, guides the work of the organisation in making progress towards the community’s 30-year vision. The relevant Council Plan objectives and how these are incorporated into this Asset Plan are outlined below:

Council Plan Objectives:

- *Key infrastructure investment supports our economy and liveability.*
- *Colac Otway Shire is a destination to visit.*
- *We mitigate impacts to people and property arising from climate change.*
- *Provide and maintain an attractive and safe built environment.*
- *All people have the opportunity to achieve and thrive in our shire.*
- *People are active and socially connected through engaging quality spaces and places.*
- *We commit to a program of best practice and continuous improvement.*
- *We are a financially robust organisation.*

As reflected by the following Asset Plan features:

- Provides baseline maintenance and operations, renewal, and new/ upgrade works with corresponding funding requirements over the next 10 years - This framework allows informed decision making when budgeting for key infrastructure projects, prioritising grant funding opportunities, and targeted enhancement of Colac Otway Shire as a destination to visit.
- Built upon and informed by Council’s Asset Policy, Asset Strategy, and Asset Management Plans - These documents outline relevant mitigation measures for the impacts of climate change for individual asset categories.
- Provides baseline maintenance and operations, renewal, and new/ upgrade works with corresponding funding requirements over the next 10 years - These works are aimed at providing and maintaining an

attractive, engaging, active, and safe built environment, and allowing the opportunity for all to achieve and thrive as part of an active and socially connected community.

- Targeted provision of a sustainable future within Financial Plan Parameters - Committed to long-term financial sustainability and continuous improvement to achieve best asset and financial management practice.

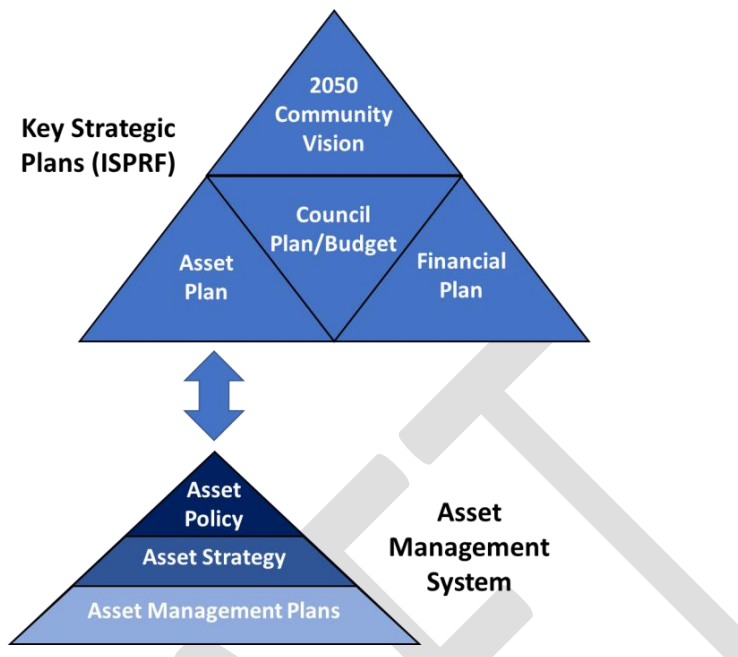
3.3 Fit Between the Asset Plan and Asset Management Practice

This Asset Plan has been informed by Council's asset management practices, data, systems and processes, and forms part of a continual improvement process. Council's Asset Management System includes:

1. Asset Management Policy -
 - Establishes the goals and objectives for asset management providing a platform for service delivery.
 - Integrates long-term asset and financial management with council's strategic objectives.
 - Maximises value for money by adoption of life cycle costing, combined with disciplined performance measurement.
 - Assigns accountability and responsibility for service delivery together with asset management.
 - Promotes sustainability to protect the needs of future generations.
2. Asset Management Strategy –
 - Links and integrates council's plans and resources, indicating which services are to be delivered through which assets.
 - Forecasts future service delivery needs and the capacity of assets to meet those, on a short, medium, and long-term basis.
 - Identifies assets that are critical to the council's operations and outline risk management strategies for these assets.
 - Includes specific actions required to improve the council's asset management capability and projected resource requirements and timeframes.
 - Establishes systems for asset performance measurement.
3. Asset Management Plans –
 - Encompasses all the assets under council's control.
 - Connects the investment of community wealth in assets with service outcomes.
 - Presents at least one scenario that balances with the available funds from the Long-Term Financial Plan.
 - Identifies and communicates risks associated with affordable service levels and how these risks will be managed.
 - May allow for additional lifecycle scenarios (advanced) that manage assets to provide optimal life cycle costs to inform the asset management strategy and the Financial Plan.
 - Includes one scenario that balances the available funds from the Financial Plan with affordable service level targets, and may set out a strategy (advanced) to communicate the corresponding service levels and risks and how these will be managed to Council and the community.
 - For each scenario, presents cash flow forecasts for acquisition (upgrade/new/expansion), operating, maintenance, renewal and where relevant, disposal.

The linkage between the Asset Plan, Council's key strategic plans, and the Asset Management System is shown in Figure 2 following.

Figure 2: How the Asset Management System links to the Asset Plan and Key Strategic Plans



3.4 Financial Fit of the Asset Plan and Financial Plan

Council adopted its first Financial Plan under the Act in September 2021, and this has significantly informed the development of this first Asset Plan. The Financial Plan must be a living plan and regularly reviewed to reflect both external and internal influences on Council's financial current and future situation.

A number of matters has already been identified since the adoption of the current Financial Plan 2021-22 to 2030-31, including through the development of the budget for 2022-23, that need to be incorporated into an updated Financial Plan. Therefore, this Asset Plan has been developed in the context of both the adopted Financial Plan as well as expected changes to that document.

It is intended that this Asset Plan and an updated Financial Plan will be both presented to the community concurrently to enable them to be understood as an integrated set of documents within the ISPRF.

The Financial Plan guides the Asset Plan as outlined in Table 3.4 following.

Table 3.4 Anticipated Changes to Financial Plan

Financial Plan 2021-22 to 2030-31 as adopted in September 2021	Anticipated changes to Financial Plan 2022-23 to 2031-2032
1. Total of \$11,470,000 capital works expenditure in 2022-23 with this entirely allocated to asset renewal expenditure.	Planned allocation of new Council funding to the Capital Asset Renewal program is \$8.254 million. Planned allocation of new or upgraded assets is relatively low compared to historic budgets, with council's capacity to directly fund these projects generally in the order of \$0.5 million average annually.
2. This total amount includes \$9,152,000 Council funding, \$1,786,000 Roads to Recovery recurrent grant funding, and \$532,000 of other grant funding.	Planned funding for asset renewal includes \$1.703 million of Roads to Recovery funding in 2022-23 with the balance of funds to be directly sourced from Council's own funds.
3. Financial allocation of Buildings/ Property \$798,000; Plant and Equipment \$2,994,000; and Infrastructure \$7,678,000.	The planned allocation to Asset Renewal is approx. \$8.254 million with expenditure across the following areas: Building/property \$0.750 million; Plant and equipment \$1.327 million and Infrastructure \$6.548 million.
4. The Financial Plan maintains this quantum of forecast expenditure (in 2022-23 real dollar values) over the remainder of the plan's period.	The allocation to Asset Renewal is planned to increase annually to achieve asset renewal funding of 110% of depreciation in the 10 th year of the plan. If depreciation is maintained over the 10 years, the average annual increase in asset renewal funding is 3.9%.

The **Asset Plan** forecasts:

1. A total Asset renewal demand in the order of \$308 million over the next 10 years as assets reach a condition where Council's asset management policies indicate that intervention is desirable and assets should be renewed, reconstructed or rehabilitated.
2. That Council will continue to have an Asset Renewal Backlog each year of the 10 year planning period, representing the replacement value of assets that are ready for intervention but not able to be funded. The lowest backlog value is expected to be \$20 million in 2032 and the largest backlog is expected to be experienced in 2042 when the unfunded replacement value of assets at intervention will be \$44 million.

It should be also noted that the asset profiles shown in section 4.3 of this Plan are stated in 2021-22 dollar values and have not been adjusted by the plus 2.5% allowed in the Financial Plan for 2022-23 dollar values.

3.4 Financial Indicators

There are multiple financial indicators which can be used to define asset performance and sustainability. Council's Annual Report uses the:

- **Renewal Gap Ratio** – *'This compares the rate of spending on existing assets through renewing, restoring, and replacing existing assets with depreciation. Ratios higher than 100% indicate that spending on existing assets is faster than the depreciation rate. This ratio is about the renewal and upgrade of our existing assets (i.e. replacing one asset with another of the same or better quality).'*
- **Capital Replacement Ratio** – *'This compares the rate of spending on infrastructure, property, plant and equipment, and intangibles with its depreciation and amortisation. This is a long-term indicator, as capital expenditure can differ in the short term if there are insufficient funds available from operations or borrowings. A ratio less than 100% means the spending on capital works has not kept pace with consumption of assets. This ratio is about the overall spending on assets, both new and existing.'*

These and other ratios and their values under the next 10 years' planned expenditure are outlined below.

- A. **Asset Renewal Funding Ratio** - The key indicator for service delivery sustainability is the Asset Renewal Funding Ratio (ARFR) which is expressed as a percentage:

$$\text{Asset Renewal Funding Ratio (ARFR)} = \text{Capital Renewal Planned Budget} / \text{Capital Renewal Forecast} (\%)$$

This Asset Plan provides for a Capital Renewal Planned Budget of \$8.254 million increasing at 3.9% each year for the next 10 years (2022-23 dollar values). Based on modelling, the planned renewal expenditure will result in a decrease in overall asset condition (as expected from an ageing asset base), with an approx. 18% decrease in backlog over this time, refer section 4.3. The decrease in backlog indicates that asset renewal demand is being met over this time.

- B. **Renewal Gap Ratio / Asset Renewal Funding Ratio** – Another indicator for service delivery sustainability is known as the Renewal Gap Ratio in Council's annual reporting, and as the Asset Sustainability Ratio (ASR) in infrastructure financial management, this ratio is expressed as a percentage:

$$\text{Renewal Gap Ratio / Asset Sustainability Ratio (ASR)} = \text{Renewal Planned Budget} / \text{Asset Depreciation} (\%)$$

With a Capital Renewal Planned Budget of \$8.254 million per annum (2022-23 dollar values), a 2020-21 depreciation amount of \$11.1 million (refer section 4.1),

$$\text{Renewal Gap Ratio / Asset Sustainability Ratio (ASR)} = 74\%.$$

- C. **Capital Replacement Ratio** – As outlined above:

$$\text{Capital Replacement Ratio (CRR)} = \text{Capital Renewal, New and Upgrade Budget} / \text{Asset Depreciation} (\%)$$

With a Capital Renewal, New and Upgrade Planned Budget of \$8.9 million in 2022-23, and a depreciation amount of \$11.100 million (refer section 4.1), the:

$$\text{Capital Replacement Ratio (CRR)} = 80\% \quad : \text{ in 2022-23 (State risk category High)}$$

$$\text{Capital Replacement Ratio (CRR)} = 116\% \quad : \text{ in 2031-32 (State risk category Medium).}$$

The figure for 2031-32 is based on growth in renewal spending over the 10-year time frame to 110% of depreciation. Other spending is assumed to be held constant such that the Renewal, New and Upgrade budget would be \$12.85 million.



4. What Have we Got?

4.1 What Assets?

The assets covered by this Plan are those which are owned and/ or managed by Council. These assets are accounted for in reported figures with Table 4.1 below based on the 2020-21 Annual Report financial numbers. These assets have a replacement value of approx. \$555 Million as at 30 June 2021 and are used to provide a wide range of services to the community. The three largest value asset categories of Roads, Bridges, and Buildings make up approx. 76% of Council's total asset replacement cost.

Table 4.1 Assets covered by this Plan

Asset Category	Indicative Quantity/ Description	Replacement Value (\$,000)	Depreciated Value (\$,000)	Annual Depreciation (\$,000)
Land	Largely urban land associated with buildings	\$27,653	\$27,653	\$0
Buildings	162 building structures	\$89,966	\$42,045	\$1,574
Roads	566 km Sealed and 1,058km unsealed roads	\$272,963	\$203,991	\$4,598
Bridges	249 Bridges and major culvert structures	\$55,505	\$28,643	\$404
Pathways	164 km footpaths/ shared paths, 34km rail trail	\$28,987	\$19,442	\$472
Drainage (Stormwater)	5,024 Pits and 152km pipe network	\$43,417	\$33,979	\$384
Other Infrastructure	Retaining structures, playing surfaces, landscaping	\$10,267	\$6,604	\$911
Plant Machinery & Equipment	Fleet, Small Plant, Heavy Plant, Guardrail, fences, lights	\$11,692	\$4,867	\$1,154
Fixtures, Fittings & Furniture	Playgrounds, Skate Parks, street/ other Furniture	\$10,570	\$2,018	\$325
Computers & Telecommunications	CIT Equipment and networks	\$1,657	\$321	\$46
Works in Progress	Works in Progress	\$2,674	\$2,674	\$0
TOTAL		\$555,351	\$372,238	\$9,868

Council's assets as shown in Table 4.1 have been further re-grouped for the purposes of this Plan into six 'long-life' asset groups of Buildings, Roads, Bridges, Pathways, Stormwater, and Open Space and Recreation; plus a 'Plant and Equipment' category which includes fleet, small plant, heavy plant, computers and telecommunications; plus the two categories of Land and Works in Progress. This re-grouping allows for playgrounds, skate parks, street furniture, fences, lights, and playing surfaces to be re-formed as the Open Space and Recreation group, and retaining structures and guardrails to be incorporated as part of the Roads group. This re-grouping with associated values is shown as *Profile 1.0 - Summary – All Assets* in section 4.3.1 following.

4.2 Are they the right Assets managed in the right Way?

4.2.1 Do our Assets Support the Community Vision and Council Plan?

Colac Otway Shire's current asset portfolio provides direct support in the delivery of the 2050 Community Vision and Council Plan as outlined in section 3.2 *2050 Community Vision, Council Plan and Shared Objectives*. The services delivered through the Shire's assets are largely a legislated part of Local Government business, for instance Colac Otway Shire is responsible for managing local transport infrastructure including local Roads, Bridges, Stormwater and Pathways under the Road Management Act (2004). These transport services are vital and are delivered by assets comprising 76% of Council's total asset value. Similarly Council Buildings facilitate services such as arts and libraries,

recreation and leisure, administration, family and community services, administration, and public amenities which are vital to the community's function. Council's Open Space and Recreation assets support active transport and recreation and leisure services which are essential in supporting the 2050 Community Vision and Council Plan.

4.2.2 Do we need to Realign Asset Practices to deliver on the Council Plan?

Colac Otway Shire's current asset practices need further improvement to continue to deliver on the Council Plan as follows:

1. Adoption of a revised Asset Management Policy and an Asset Management Strategy (planned for 2022).
2. Reforming of an Asset Management Steering Group to provide a whole of organisation approach and accountability for asset management practice.
3. Further definition of asset management roles and responsibilities with resourcing as required.
4. Improved Service Planning, Capital Works planning and Asset Management planning/ review.
5. Establishing and/ or improving processes such as Asset Disposal procedures, annual Valuation Reviews, and cyclic Inventory and Condition Assessments for all asset groups.

These improvements form part of the Asset Management Strategy's improvement plan.

4.3 What Shape are our Assets in Now and in 10 Years' Time?

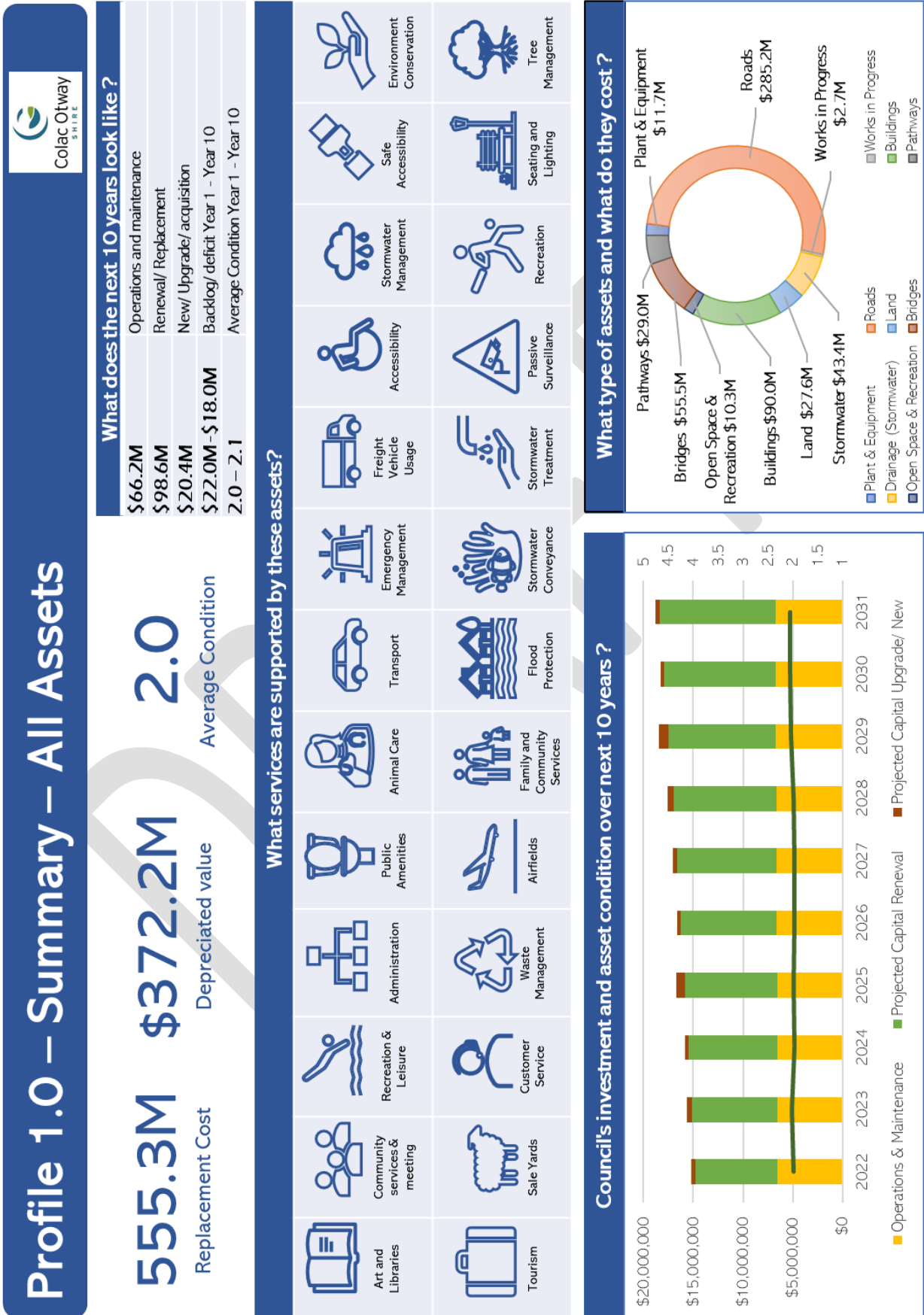
4.3.1 Asset Profiles and Best Use

A 'Summary – All Assets' profile and separate asset profiles for 'Buildings', 'Roads', 'Bridges', 'Pathways', 'Stormwater', and 'Open Space and Recreation' are provided as Profile 1.0 to Profile 1.6 in this section. These profiles outline:

- The type of assets within each asset category.
- The services that are supported by these assets.
- How much they cost to replace and their depreciated value.
- The average condition they are in now and projected condition they will be in 10 years' time.
- What the next 10 years looks like in terms of expenditure and backlog.

The definitions of terms used in the profiles and elsewhere in this Plan are provided below:

1. Depreciated Value – the current value of the asset based on current condition and/ or accumulated depreciation.
2. Condition – the state of asset degradation - a condition scale of 0 to 6 is used in this Plan, with 0=New, 1=Very Good, 2=Good, 3=Fair, 4=Poor, 5=Very Poor, and 6=End of Life condition.
3. Operations – the regular activities to provide services from assets e.g. playground inspections.
4. Maintenance – regular on-going work needed to keep assets operating e.g. road pot-hole patching.
5. Renewal – major work that restores, rehabilitates, replaces, or renews an asset to its original service potential.
6. New – major work that creates a new asset that did not previously exist.
7. Upgrade – major work that will upgrade or improve an existing asset beyond its existing capacity.
8. Acquisition – assets that are (generally) contributed by developers at no cost to Council e.g. new roads and stormwater network contributed as part of a subdivision development.
9. Backlog – the value of assets that are in poorer condition than the intervention level set at which these assets should be renewed.



Profile 1.1 - Buildings



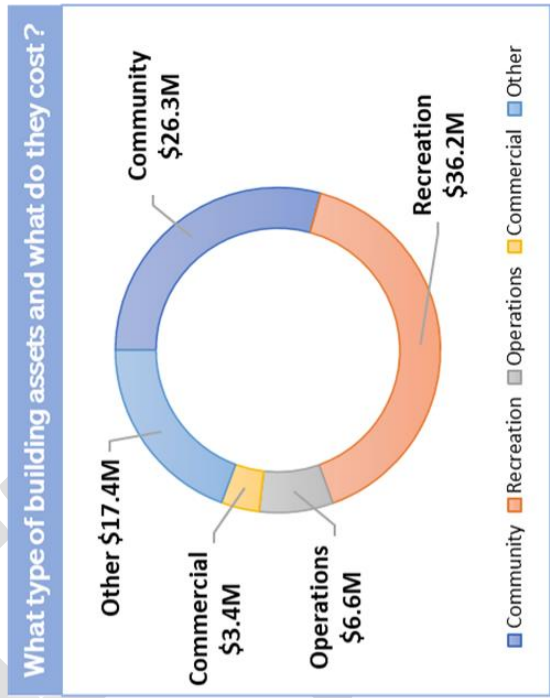
162 Number of Buildings
\$90.0M Replacement Cost
\$42.0M Depreciated value
1.98 Average Condition

What services are supported by buildings?

Art and Libraries	Community services & meeting	Recreation & Leisure	Administration	Public Amenities	Animal Care
Tourism	Sale Yards	Customer Service	Waste Management	Airfields	Family and Community Services

What does the next 10 years look like ?

\$12.2M	Operations and maintenance
\$8.3M	Renewal/ Replacement
\$4.8M	New/ Upgrade/ acquisition
\$0.9M - \$4.2M	Backlog/ deficit Year 1 - Year 10
1.98 - 2.09	Average Condition Year 1 - Year 10



Profile 1.2 - Roads



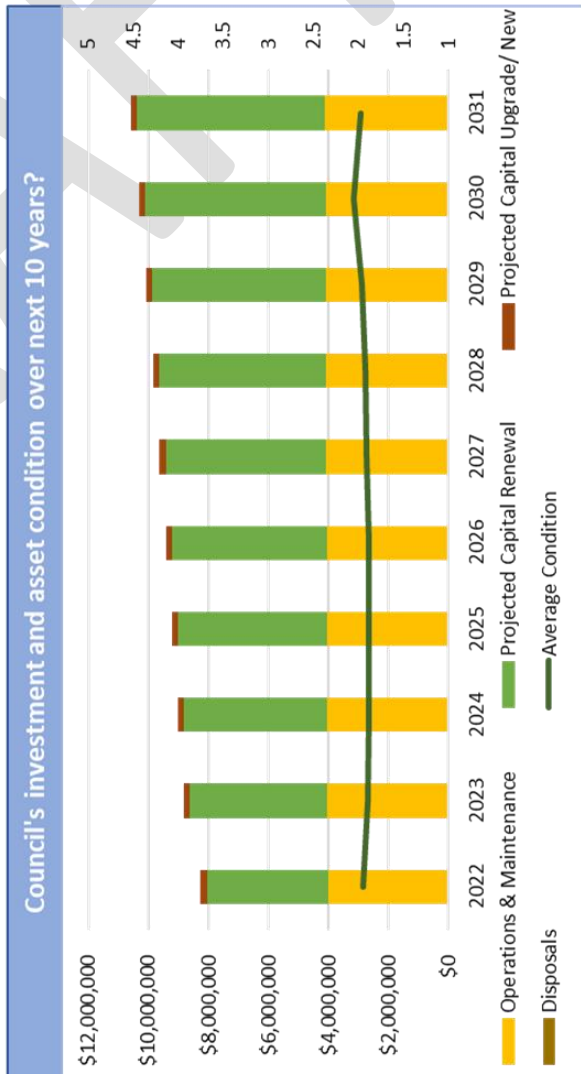
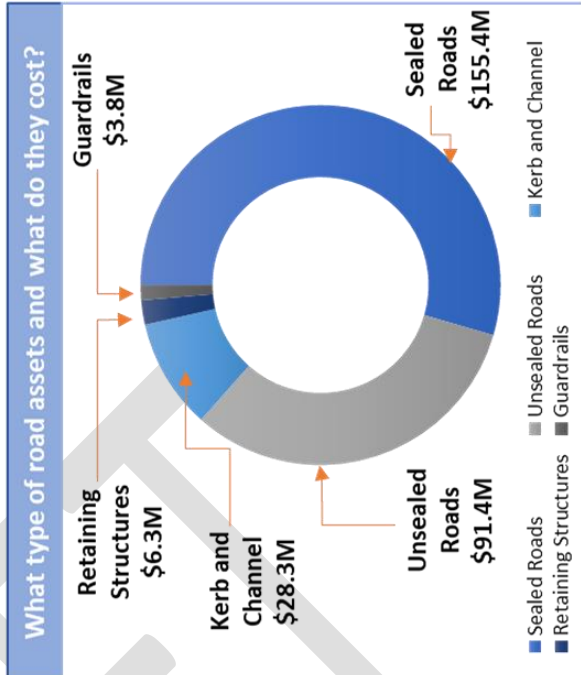
566km Sealed Road **1058km** Unsealed Road **\$285.2M** Replacement Cost **\$210.1M** Depreciated value **1.95** Average Condition

What does the next 10 years look like?

\$40.7M	Operations and maintenance
\$52.5M	Renewal/ Replacement
\$7.0M	New/ Upgrade/ acquisition
\$19.3M - \$12.9M	Backlog/ deficit Year 1 - Year 10
1.95 - 1.98	Average Condition Year 1 - Year 10

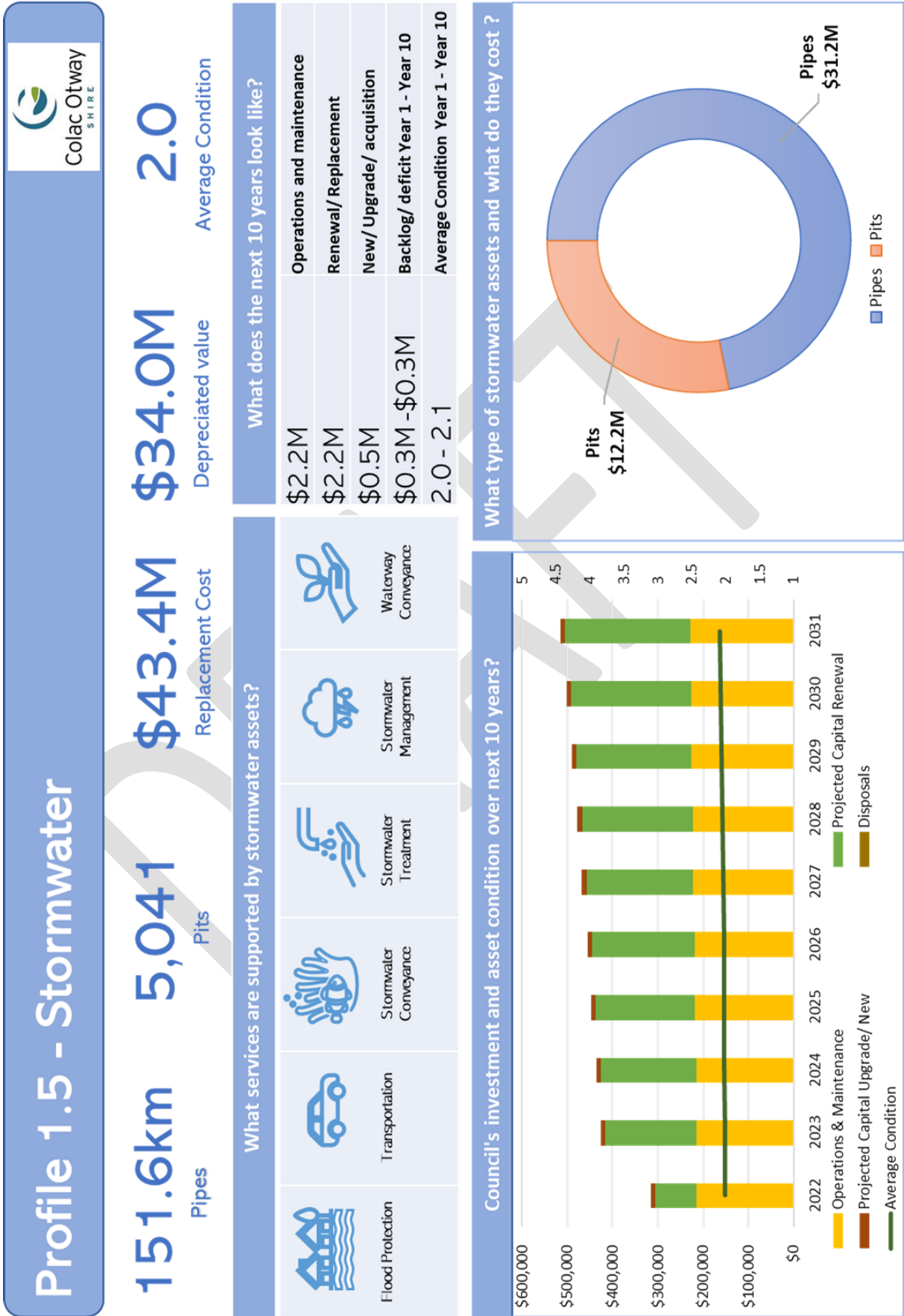
What services are supported by road assets?

	Transportation
	Emergency Management
	Freight Vehicle Usage
	Parking And Traffic Management
	Stormwater Management
	Tourism









Profile 1.6 - Open Space and Recreation



2.3

\$4.1M

\$10.3M

30

Average Condition

Depreciated value

Replacement Cost

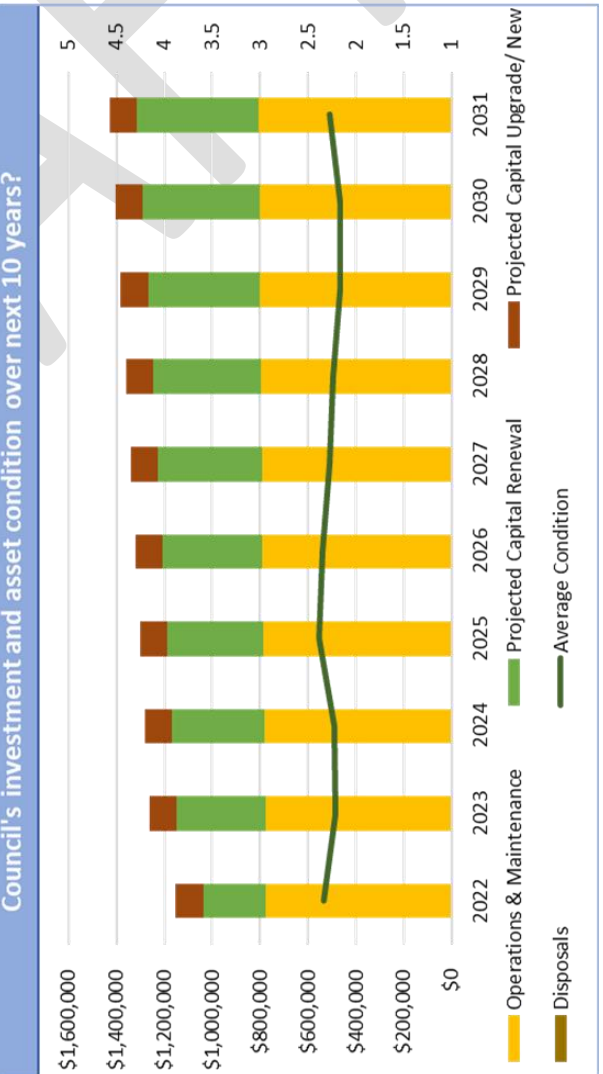
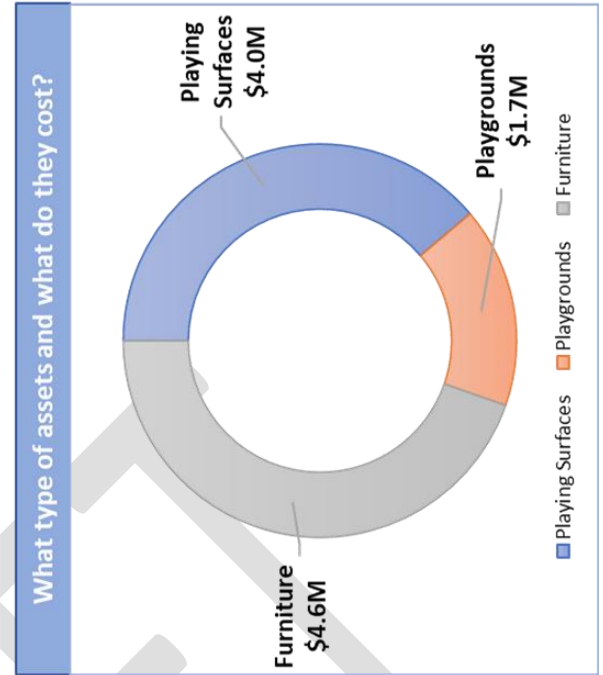
Playgrounds

What does the next 10 years look like?

\$7.9M	Operations and maintenance
\$4.2M	Renewal/ Replacement
\$5.2M	New/ Upgrade/ acquisition
\$0.5M - \$1.7M	Backlog/ deficit Year 1 - Year 10
2.3 - 2.3	Average Condition Year 1 - Year 10

What services are supported by these assets?

- Environment Conservation
- Passive Surveillance
- Recreation
- Seating and Lighting
- Trec Management
- Tourism



4.3.2 State of the Assets

The asset Profiles 1.0 to 1.6 as provided in section 4.3.1 (above) detail the Shire's 'state of the Assets' for key asset categories.

The future state of the assets is based on asset modelling using the planned asset expenditure and asset management plan scenarios, and in an overall sense result in -

- a small decrease in the overall average asset condition over Years 1-10 from 2.0 to 2.1
- a relatively static backlog, with a backlog of \$22M in Year 1 and \$18M at the end of Year 10.

These results indicate that (in an overall sense) current service levels can be maintained from Council's assets over the coming 10 years with the planned expenditure levels as noted in the Plan. The 'State of the Assets' are further summarised for long-life asset categories in Tables 4.3.2.1 to 4.3.2.6 below. The State of the Assets is based upon the planned expenditure in Year 11 continuing to Year 20.

Table 4.3.2.1 Buildings – State of the Assets

<i>Current condition?</i>	From 'Fair', with many individual township and village buildings being older and dated in service provision, to 'Good', with major facilities like Colac's Bluewater Leisure Centre and Library of modern construction.
<i>Is Planned Expenditure adequate?</i>	Not really, there is a modelled expansion of backlog from \$0.9M to \$4.2M in the next 10 years.
<i>Are the assets fit for future Years 1-10?</i>	Yes, backlog expands from \$0.9M to \$4.2M in the next 10 years. This represents a backlog of about 5% which is within the generally accepted backlog range of 4 to 8%.
<i>Are the assets fit for future Years 11-20?</i>	Barely, backlog is modelled to expand from \$4.2M in Year 10 to \$7.0M in Year 20. This represents a backlog of about 8% which is the upper limit of the accepted backlog range of 4 to 8%. This represents a backlog of about 10% which is outside the generally accepted backlog range of 4 to 8%.
<i>Major Shortcomings?</i>	Older Buildings - Poor or non-existent disability access and/ or amenities, and Poor functionality, particularly in terms of kitchen amenity and services provided.
<i>What Risks?</i>	Buildings unsafe for use, not accessible, or out of service. Building facilities provision is mismatched to community need.
<i>What Challenges?</i>	Funding of asset costs with demand/ costs increasing because of increasing population, changing demographics and population distribution, and customer expectations. Prioritising building renewal and new/ upgrade projects that best match community need, followed by planned, prioritised and successful grant funding applications. Disposing of low use facilities, including those resulting from declining populations in rural areas. Service Planning/ services provision and 'access for all' from older building facilities.

Table 4.3.2.2 Roads – State of the Assets

<i>Current condition?</i>	Roads are in an overall Good condition.
<i>Is Planned Expenditure adequate?</i>	Yes, there is a modelled decrease in backlog from \$19.3M in Year 1 to \$12.9M backlog in Year 10.
<i>Are the assets fit for future Years 1-10?</i>	Yes, backlog decreases from \$19.3M to \$12.9M in the next 10 years.
<i>Are the assets fit for future Years 11-20?</i>	No, backlog is modelled to expand from \$12.9M in Year 10 to \$27.2M in Year 20. This represents a backlog of about 10% which is outside the generally accepted backlog range of 4 to 8%.
<i>Major Shortcomings?</i>	Seasonal road closures for heavy vehicles on some unsealed roads. Poor access for higher mass limit vehicles on some minor roads. Old bluestone kerb and channel does not effectively drain and is difficult to maintain.
<i>What Risks?</i>	Road network Unsafe for use. Council does not meet its Road Management Plan obligations. New and upgraded roads don't meet required standards and/ or offer poor climate change resilience.
<i>What Challenges?</i>	Funding of asset costs with demand/ costs increasing because of increasing population, climate change impacts, customer expectations, and the increasing use of higher mass limit vehicles. Prioritising road renewal and new/ upgrade projects that best match community need, followed by planned, prioritised and successful grant funding applications.

Table 4.3.2.3 Bridges – State of the Assets

<i>Current condition?</i>	Bridges are in an overall Fair to Good condition.
<i>Is Planned Expenditure adequate?</i>	Yes, there is a marginal modelled decrease in backlog from \$0.3M in Year 1 to \$0.1M backlog in Year 10.
<i>Are the assets fit for future Years 1-10?</i>	Yes, backlog decreases marginally from \$0.3M to \$0.1M in the next 10 years. This represents a backlog less than 1% which is lower and hence better than the generally accepted backlog range of 4 to 8%.
<i>Are the assets fit for future Years 11-20?</i>	Yes. Backlog is modelled to expand from \$0.1M in Year 10 to \$2.3M in Year 20. This represents a backlog of about 4% which is within the generally accepted backlog range of 4 to 8%.
<i>Major Shortcomings?</i>	Poor flood resilience at one bridge location. Load limiting of approx. 15 bridges.
<i>What Risks?</i>	Bridge network Unsafe for use. Council does not meet its Road Management Plan obligations. New and upgraded bridges don't meet required standards and/ or offer poor climate change resilience.
<i>What Challenges?</i>	Funding of asset costs with demand/ costs increasing because of increasing population, climate change impacts, customer expectations, and the increasing use of higher mass limit vehicles. Prioritising bridge renewal and upgrade projects that best match community need, followed by planned, prioritised and successful grant funding applications.

Table 4.3.2.4 Pathways – State of the Assets

<i>Current condition?</i>	Pathways are in an overall Good condition.
<i>Is Planned Expenditure adequate?</i>	Yes, there is a marginal modelled decrease in backlog from \$0.2M in Year 1 to \$0.1M backlog in Year 10.
<i>Are the assets fit for future Years 1-10?</i>	Yes, backlog decreases marginally from \$0.2M to \$0.1M in the next 10 years. This represents a backlog of about 0.3% which is lower and hence better than the generally accepted backlog range of 4 to 8%.
<i>Are the assets fit for future Years 11-20?</i>	Yes, backlog is modelled to expand from \$0.1M in Year 10 to \$1.0M in Year 20. This represents a backlog of about 3.5% which is below the generally accepted backlog range of 4 to 8%.
<i>Major Shortcomings?</i>	Old Beechy Rail Trail discontinuous along length due to land management issues. Some medium use township and community pathways require construction and/ or upgrade. Barongarook Creek Trail subject to flooding below 20% Annual Exceedance Probability, with large sections in asphalt requiring renewal, insufficient width to meet shared path standards, and missing connections.
<i>What Risks?</i>	Pathway network Unsafe for use. Pathway network closures during bushfire or flood events not clearly communicated. Council does not meet its Road Management Plan obligations. New and upgraded pathways don't meet required standards and/ or offer poor climate change resilience.
<i>What Challenges?</i>	Funding of asset costs with demand/ costs increasing because of increasing population, climate change impacts, and customer expectations. Prioritising pathway renewal and new/ upgrade projects that best match community need, followed by planned, prioritised and successful grant funding applications, often in conjunction with larger Open Space and Recreation projects. The strategic future and priority of Old Beechy Rail Trail.

Table 4.3.2.5 Stormwater – State of the Assets

<i>Current condition?</i>	Stormwater assets are in an overall Good condition.
<i>Is Planned Expenditure adequate?</i>	Yes, there is no modelled increase in backlog from \$0.3M in Year 1 to \$0.3M backlog in Year 10.
<i>Are the assets fit for future Years 1-10?</i>	Yes, backlog does not increase in the next 10 years. The \$0.3M backlog represents a backlog of about 0.8% which is lower and hence better than the generally accepted backlog range of 4 to 8%.
<i>Are the assets fit for future Years 11-20?</i>	Yes, backlog is modelled to expand from \$0.3M in Year 10 to \$3.1M in Year 20. This represents a backlog of about 7% which is within the generally accepted backlog range of 4 to 8%.
<i>Major Shortcomings?</i>	<p>The need for a Shire wide strategic long term prioritised plan to deal with flooding issues, including:</p> <p><i>Apollo Bay</i> - Five drainage lines require upgrade to treat known deficiencies where the network cannot handle 1 in 10 year flows in residential areas, and 1 in 20 year flows in commercial areas.</p> <p><i>Colac</i> - Five flooding hotspots have been identified within Colac where properties will be flooded in 1 in 100 year flood events.</p> <p><i>Birregurra</i> - Five projects have been identified to prevent above floor level flooding in 26 dwellings and 47 properties in a 1 in 100 year storm.</p> <p><i>Kennett/Grey River</i> - Five projects have been identified to mitigate the risk of landslips and flood paths across private properties.</p> <p><i>Skenes Creek</i> - Five projects have been identified to reduce uncontrolled flows and reduce landslip risk.</p> <p><i>Wye River</i> - Underground drainage and associated stormwater discharge points not installed in some areas.</p> <p>The condition of stormwater assets is based on age, in field down-pipe camera assessments are required to verify stormwater renewal demand.</p> <p>Poor inventory and life-cycle cost data for Water Sensitive Urban Design (WSUD) elements such as rain gardens and wetlands.</p>
<i>What Risks?</i>	<p>Flooding of homes, properties, and access routes, with potential injury and risk to life.</p> <p>Internal capability gaps in the management of WSUD assets.</p>
<i>What Challenges?</i>	<p>Formulating a Shire wide strategic long term prioritised plan to deal with stormwater flooding issues.</p> <p>Funding of stormwater drainage projects identified from the Shire wide strategic long term prioritised stormwater drainage plan.</p> <p>Funding costs increasing because of increasing population, climate change impacts, and customer expectations.</p>

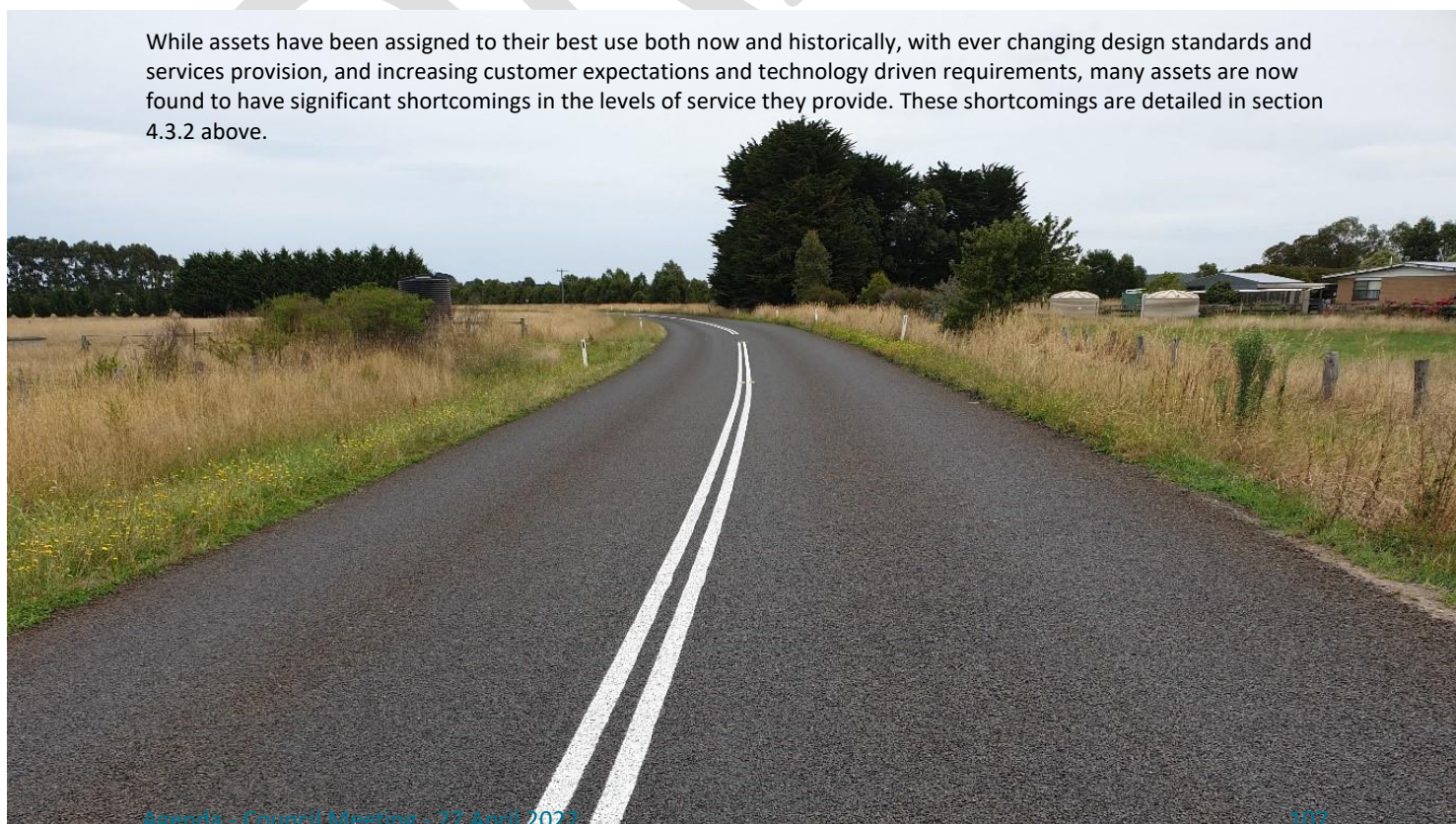
Table 4.3.2.6 Open Space and Recreation – State of the Assets

<i>Current condition?</i>	Open Space and Recreation assets are in an overall Fair-Good condition.
<i>Is Planned Expenditure adequate?</i>	Difficult to say, but 'No' anecdotally - Open Space and Recreation assets have poor asset inventory and condition data, with this 'poor' data indicating a modelled increase in backlog from \$0.5M in Year 1 to \$1.6M backlog in Year 10.
<i>Are the assets fit for future Years 1-10?</i>	'No' anecdotally - Open Space and Recreation's 'poor' asset data indicates a significant modelled increase in backlog from \$0.5M in Year 1 to \$1.6M in Year 10. This represents a backlog of about 16% which is significantly outside the generally accepted backlog range of 4 to 8%.
<i>Are the assets fit for future Years 11-20?</i>	'Yes' anecdotally - Open Space and Recreation's 'poor' asset data indicates a modelled decrease in backlog from \$1.6M in Year 10 to \$1.1M in Year 20. However, this still represents a backlog of about 11% which is significantly outside the generally accepted backlog range of 4 to 8%.
<i>Major Shortcomings?</i>	The existing open space and recreation facilities were not designed to meet modern expectations and will require major upgrade when renewed. Poor open space and recreation asset inventory and condition data limits renewal and other capital works planning. Network deficiencies in terms of asset capacity and performance are detailed in the Public Open Space Strategy 2011, G21 regional sport specific strategies and the upcoming Play Space Strategy. Masterplans, where available, detail the Shire's plans for resolving service deficiencies at the reserve scale.
<i>What Risks?</i>	Open Space and Recreation assets Unsafe for use. Open space asset provision is mismatched to community need.
<i>What Challenges?</i>	Prioritising open space and recreation renewal and upgrade projects that best match community need, followed by planned, prioritised and successful grant funding applications, including Masterplan implementation and Playground Renewal and Upgrades Funding of asset costs with demand/ costs increasing because of increasing population, and customer expectations.

4.3.3 Asset Fit and Maintenance

The State of the Assets outlined in section 4.3.2 above are based on the six asset management plans completed for these asset categories in 2021. These asset management plans and the State of the Assets indicate that Council's assets have been assigned to their best use and will be maintained at an appropriate condition over the ten year life of the Asset Plan. However, if planned funding levels in Year 11 of the Plan (110% of depreciation) are continued to Year 20, modelling indicates that asset condition will deteriorate with backlog increasing from \$18.0M to \$41.7M over this time.

While assets have been assigned to their best use both now and historically, with ever changing design standards and services provision, and increasing customer expectations and technology driven requirements, many assets are now found to have significant shortcomings in the levels of service they provide. These shortcomings are detailed in section 4.3.2 above.



5. What Challenges and Choices?

5.1 The Plan

This Asset Plan is aimed at providing a document that helps everyone understand the quantum of assets that Council owns, and the challenges in maintaining an asset base that services the community into the future in support of the 2050 Community Vision and Council Plan. This is a balancing act at the best of times, the funding bucket is only so big, there are lots of challenges, and we can't do everything.

The risks and cost of not having adequate resources and management practices is enormous. Assets that are poorly inspected, maintained or renewed can result in injury to life, breaching of legislative requirements, higher future costs, inter-generational inequity, loss of reputation, and assets that can't deliver on required services. There are environmental implications such as water quality management, the social implications of a built environment that is not such a great place to 'learn, live, work and play', and financial implications that may be difficult to recover from. This makes it imperative to have a Plan.

This Asset Plan rests on the processes outlined within Council's Asset Management Policy, Asset Management Strategy, and Asset Management Plans. These documents and the processes they describe form a road map for continual improvement in the way Council manages its assets and the services delivered from them. In this balancing act there are ever changing challenges, community conversations and negotiations to be had, choices to be made, and plans to be updated and revised.

This Asset Plan represents the first iteration Asset Plan, with this plan to be financially integrated with Council's Financial Plan 2022-23 to 2031-32 as part of the Integrated Strategic Planning and Reporting process. It represents what the community and Council are in agreement on, that is, it outlines expenditure in line with maintaining current (2021-22) service levels from its asset base, with expenditure in ways that supports the 2050 Community Vision and Council Plan.

In an ever changing environment, there is an increasing chance of flood, storm, and fire events that will compromise the integrity of the asset base. These events will happen, and Council's role in emergency management and the recovery afterwards is vital. It is worthy to note that Federal Government funding provides for restoration of disaster affected infrastructure assets under Disaster Recovery Funding Arrangements as administered by the State Government.

5.2 The Challenges and what we Do

This Asset Plan 2022-23 to 2031-32 is consistent with the Financial Plan 2022-23 to 2031-32 with Asset Plan total lifecycle cost forecasts being balanced with the Financial Plan total budget forecasts. **This is a good start, but.....**

What impact does it have on our assets and the services delivered from them in the coming years?

What about increasing demand on our services from population growth, demographic change, community expectations, and the impacts of climate change?

What about major shortcomings in our existing assets?

What do we do?

This section builds upon section 4.3 *What Shape are our Assets in Now and in 10 Years' Time?* and brings together a response to the questions raised above in Table 5.2 following. Table 5.2 outlines the challenges, the plan to meet those challenges, the inevitable trade-offs, and the importance of community input and negotiation in determining 'what we do' and 'what we don't'. Action is required both now and in an on-going way to meet the challenges ahead.

Table 5.2 The Challenges and what we Do

What Challenge?	What's the Plan?	What Trade-Offs?	Further community input and/or negotiation required?
Delivering services from our existing assets into the future.	<ol style="list-style-type: none"> 1. Review and continuously improve asset data and modelled renewal demand in each asset category. 2. On-going integration of the Asset Plan and Financial Plan to reflect renewal requirements. 3. On-going service planning to define service levels and community priorities. 	<ul style="list-style-type: none"> • Some service levels may need to be lowered or services dropped to enable adequate funding of community prioritised services. • On-going asset backlog. • Potential decommissioning of some assets from service. • Potential 'user pays' services. 	Yes – on-going community input is required to define priority services and required service levels. This will inform and allow improved Service Planning. This in turn will lead to the community conversation around "Here's the funding we have, what do we do and what don't we do?"
Increasing services demand in the face of limited funding.	<ol style="list-style-type: none"> 1. On-going service planning to define service levels and community priorities. 2. Continually review and update asset management planning data and modelling with integration of the Asset and Financial Plans. 3. On-going service planning to define service levels and community priorities. 4. Strategic and prioritised grant funding applications targeted at community needs. 5. Include climate change resilient asset costs and costs of assets requiring higher design standards within asset planning new and renewal costs. 6. Manage increases to the asset portfolio within Council's expected financial capacity. 7. Consider non-asset service solutions where workable. 	<ul style="list-style-type: none"> • Community expectations won't necessarily be met. • Some service levels may need to be lowered or services dropped to enable adequate funding of community prioritised services. • On-going asset backlog. • Potential decommissioning of some assets from service. • Potential 'user pays' services. 	Yes – on-going community input is required to define priority services and required service levels. This will inform and allow improved Service Planning. This in turn will lead to the community conversation around "Here's the funding we have, what do we do and what don't we do?"
Existing Assets with significant service shortcomings.	<ol style="list-style-type: none"> 1. On-going service planning to define service levels and community priorities. 2. Long term strategic planning to define quantum of shortcomings, service levels, and long term programs to rectify. 3. Strategic and prioritised grant funding applications targeted at asset upgrade where this is a community priority. 	<ul style="list-style-type: none"> • Current service levels provided from these assets remain unchanged over time. • Other trade-offs as for the challenges above. 	Yes – on-going community input is required to define priority services and required service levels. This will inform and allow improved Service Planning. This in turn will lead to the community conversation around "Here's the funding we have, what do we do and what don't we do?"
Continuous improvement of asset management practice.	<ol style="list-style-type: none"> 1. Establish and monitor an asset management improvement plan as part of the Asset Management Strategy. 2. On-going reporting of asset management status using an asset management steering group. 	<ul style="list-style-type: none"> • Additional staff resources may be required which will come at a cost. 	No – because these processes are technical and internal to Council's operations they will be established in accord with the Asset Management Strategy and community input will be more appropriate to focus on service planning and funding discussions.

5.3 Funding of Capital Renewal

The draft 2022-23 budget contains investment on asset renewal of \$8.254 million. With asset depreciation of \$11.1 million we are currently funding renewal at 74% of depreciation. If assets are wearing out faster than we are replacing them then in the long term this will obviously result in a situation where an increasing number of assets are not fit for the purpose.

We propose that depreciation is a very good measuring stick for the amount that should be invested into asset renewal.

It is proposed to increase asset renewal funding over the next 10 years to 110% of depreciation.

Hence the asset renewal funding would increase over the next 10 years from \$8.254 million to \$12.21 million. This could be achieved by an annual increase of 3.9%. The renewal funding in year 2 would be \$8.576 million, an increase of \$322,000.

The following should be noted:

1. We have chosen 110% because every renewal project can have elements that are technically not classed as renewal. An example would be the replacement of sports lighting with more powerful lights. Most of the project would be renewal, for instance the poles, but the lighting itself would be classed as upgrade.
2. We propose that depreciation be measured as a rolling 5-year average amount, to avoid the sudden shocks that can sometimes occur with measuring depreciation. An example might be the inclusion of new data on assets showing that the condition was worse than previously thought or the construction cost for an asset type had risen sharply.
3. We would move to a position where the renewal funding is an annual allocation, rather than being driven by a list of projects.
4. The renewal projects to be funded from the allocation would be driven by service, risk and condition considerations.
5. We would recalculate the allocation each year based on condition asset data, depreciation and asset decisions made during the year by Council.
6. We would establish an Asset Renewal Reserve.
7. It may be that in a particular year there are savings on individual renewal projects or that choices are made to not expend the full allocation because we are driving some assets to last longer. In that event the unexpended renewal funds would be returned to the Asset Renewal Reserve.

6.0 REFERENCES

- 'Colac Otway Shire 2050 Community Vision', Colac Otway Shire Council
- 'Council Plan 2021-25', Colac Otway Shire Council (2021)
- 'Financial Plan 2021-22 to 2030-31', Colac Otway Shire Council
- 'Colac Otway Shire Council 2020-2021 Annual Report', Colac Otway Shire Council
- 'Colac Otway Shire Community Profile', IDcommunity - Demographic Resources
- 'Draft Asset Management Plans – Building/ Road/ Bridge/ Pathway/ Stormwater/ Open Space and Recreation', Colac Otway Shire Council
- 'Draft Asset Management Strategy', Colac Otway Shire Council
- Local Government Act 2020 (Victoria)
- 'Asset Plan Guidance 2022', Local Government Victoria
- 'Integrated Strategic Planning and Reporting Framework Guidance', State Government
- 'Asset Management Better Practice Guide', State Government
- 'International Infrastructure Management Manual', IPWEA, 2020
- 'International Infrastructure Financial Management Manual', IPWEA, 2020



Item: 10.7

Preparation of 2022/23 Draft Budget - Endorse for Exhibition

OFFICER	Amanda Barber
GENERAL MANAGER	Errol Lawrence
DIVISION	Corporate Services
ATTACHMENTS	<ol style="list-style-type: none">1. Colac Otway Shire Draft Budget 2022 - 2023 [10.7.1 - 60 pages]2. 2022-23 Statutory Fees & Charges Schedule [10.7.2 - 11 pages]3. 2022-23 Council Fees & Charges Schedule [10.7.3 - 32 pages]

1. PURPOSE

To present the Draft Budget 2022/23 and Draft 2022/23 Fees and Charges to Council for endorsement prior to public exhibition.

2. EXECUTIVE SUMMARY

The Draft Budget 2022/23 and Draft 2022/23 Fees and Charges (attached) have been developed over a period of months, with Council officers working collaboratively with Councillors through fees and charges, operating budgets and business cases for new initiatives and capital works at six budget workshop sessions. The Draft Budget 2022/23 has been guided by the Revenue and Rating Plan, Workforce Plan and Long Term Financial Plan to enable the priorities identified within the Council Plan 2021-2025 to be achieved within the available resources of the Council.

The proposed budget has been prepared in the form set out in the Local Government Model Financial Report (LGMFR) and developed in accordance with the financial management principles outlined in the *Local Government Act 2020* (LGA 2020), which will enable the budget to be adopted by 30 June 2022 in accordance with the LGA 2020.

The key financial outcomes from the attached budget include:

- Net Surplus - \$0.291m
- Adjusted Underlying Result (deficit) - (\$2.7m)
- Closing Cash Balance - \$14.3m

- Reserve Balance - \$13.6m
- \$12.1m Capital Works Program
- \$8.5m renewal, which equates to 70% of depreciation.

Council has considered the low interest rates currently available on borrowings and its capacity to allocate cash to existing obligations and new initiatives. Council proposes to source new borrowings of \$0.380 million in the Draft Budget 2022/23 over a three year term. The purpose of the new borrowings is to spread the final payments of an existing loan which is due to be fully paid in 2022/23, over a further two years. Council borrowings will reduce by \$0.216m in 2022/23.

This Draft Budget proposes to increase rate revenue in line with the Fair Go Rates System which is capped at 1.75% for the 2022-23 financial year. The cap is set by the State Government and applies to the total revenue generated through general rates and the municipal charge. The rate cap includes a Municipal Charge of \$198 per annum for each rateable property, where applicable. Table 1 in this report provides a summary of the calculation, according to the formula prescribed by the State Government.

A portion of Council's overall waste and resource recovery services is funded through rate revenue, with Council also receiving specific income through levying of a waste management charge. The charge is applied as follows:

- Properties receiving a weekly kerbside collection will be levied a charge of \$319 per annum.
- Properties receiving a fortnightly kerbside collection will be levied a charge of \$243 per annum.

A Council must ensure that the budget gives effect to the Council Plan and requires commentary on the description and funding of services in the budget and the major initiatives that will contribute to the achievement of one of the four Strategic Objectives in the Council Plan 2021-2025. The Draft Budget 2022/23 also includes investment across all four themes of the Council Plan through ongoing delivery of Council day to day operations as well as some specific initiatives and projects.

The three year projections included in the draft budget have been developed based on assumptions developed in the Long Term Financial Plan, which was adopted by Council on 27 October 2021, and take into account current information available in the budget.

3. RECOMMENDATION

That Council:

- 1. Endorses the Draft Budget 2022/23 for the financial year, and subsequent 3 financial years, for the purposes of Section 94 of the Local Government Act 2020, including the Draft 2022/23 Fees and Charges.***
- 2. Gives public notice via Council's website, local newspapers and social media that Council has prepared a Draft Budget for the 2022/23 year and subsequent 3 financial years, including the Draft 2022/23 Fees and Charges.***
- 3. Determines that the public consultation period will be no less than five weeks from the initial public notice, to ensure sufficient time to adopt the budget by 30 June 2022.***
- 4. Schedules a Submissions Committee meeting to be held on Wednesday 15 June 2022, commencing at 4pm at the Colac Otway Performing Arts and Cultural Centre, to provide the***

opportunity for any person wishing to speak to their written submission to be heard, or a nominated representative to speak to their submission on behalf of the person.

- 4. Authorises the Chief Executive Officer to undertake administrative procedures necessary to enable Council to carry out its obligations under sections 94, 95 and 96 of the Local Government Act 2020.**
- 5. Considers for adoption the Budget 2022/23, and subsequent 3 financial years, including the 2022/23 Fees and Charges at a Special Council meeting scheduled to be held on Wednesday 29 June 2022 at 4pm at Colac Otway Performing Arts and Cultural Centre after consideration of any written and verbal submissions received by Council at its Submissions Committee meeting on Wednesday 15 June 2022.**

4. KEY INFORMATION

Council has prepared a Draft Budget for the 2022/23 financial year which seeks to support its provision of important services and infrastructure that are affordable for our community. The Draft Budget is informed by the principles and assumptions contained in the Financial Plan and discussions with Councillors through 2022 as the Draft Budget was developed.

In 2021, Colac Otway Shire Council adopted the community vision and Council Plan 2021-2025 with the support and collaboration of its community. The Council Plan, inclusive of the Municipal Health and Wellbeing Plan, guides Council's work over the remainder of its term and has four key themes:

1. Strong and Resilient Economy
2. Valuing the Natural and Built Economy
3. Healthy and Inclusive Community
4. Strong Leadership and Management

This Draft Budget includes investment across all four themes through ongoing delivery of Council's day to day operations as well as some specific initiatives and projects.

The Draft Budget development process has been extensive, involving collaboration between Officers and Councillors. This process takes many months to undertake, with all aspects of the budget being reviewed to ensure the services identified within the Council Plan are being delivered, within available resources. It has also been prepared in accordance with the requirements of the LGA 2020.

The following items have been reviewed and discussed by Council:

- Average rate Increase;
- Fees and Charges;
- Proposed Business Cases;
- Operating Income and Expenditure.

MAJOR INITIATIVES

As per section 94 of the *Local Government Act 2020*, Council has identified and funded a number of major initiatives that achieve goals set in the Council Plan 2021-25, including the following:

- Future planning for Deans Creek Growth Corridor
- Remaining Carbon Neutral
- Caring for our older persons
- Improving the customer experience

The detail of Council initiatives is contained in section 2 of the attached budget.

RATES AND CHARGES

This Draft Budget proposes to increase rate revenue in line with the Fair Go Rates System which is capped at 1.75% for the 2022/23 financial year. The cap is set by the State Government and applies to the total revenue generated through general rates and the municipal charge. Council's rate revenue also increases from supplementary rates which arise throughout the year from the building of new homes or properties, subdivisions or existing property development.

As legislated, each property across the state is subject to an independent annual valuation, and these values will be used to calculate individual property rates. This annual revaluation does not result in a net gain or loss of revenue to Council, but it redistributes the rates burden according to updated property values. During 2021 and 2022, property values changed drastically across the state, and so while Council's overall rate revenue will only increase by 1.75%, individual properties may increase by more or less than this average due to the varied property valuation increases.

Rates and Charges calculations within the Draft Budget have been based on the indicative valuation data for 1 January 2022 provided by the Valuer-General Victoria. This is currently indicating a total increase in Capital Improved Value (CIV) of approximately \$2.370b, or 30% across the Shire from \$7.964b to \$10.334b). This has had the effect of decreasing each rate in the dollar by 20%, to ensure Council complies with the 1.75% rate cap. The detail is contained in note 4.1.1 of the attached budget.

Table 1 provides a summary of the calculation, according to the formula prescribed by the State Government.

Table 1

Forecast Annualised Rate Revenue at 30 June 2022	\$29,317,074
Forecast Number of Assessments at 30 June 2022	15,745
Forecast Base Average Rate 2021/22 per assessment	\$1,862
Budget Rate Revenue 2022/23	\$29,824,428
Capped Average Rate 2022/23 per assessment	\$1,894
Average Capped Increase	1.75%

FINANCIAL PERFORMANCE AND SUSTAINABILITY

The key financial outcomes from the attached budget include:

- Net Surplus - \$0.291m
- Adjusted Underlying Result (deficit) – (\$2.7m)
- Closing Cash Balance - \$14.3m
- Reserve Balance - \$13.6m
- Closing Working Capital Surplus - \$5.1m
- \$12.1m Capital Works Program
- \$8.5m renewal, which equates to 70% of depreciation.

Net Surplus

The budgeted net surplus represents all revenues less operating expenses and is further detailed in Council's formal statement (section 3 of the attached budget). The Draft Budget for the 2022/23 financial year delivers a surplus of \$0.291 million, which is \$2.978 million lower than the budget for the previous financial year 2021/22. The decline is attributable to two key factors: firstly the budget for the financial year 2021/22 included higher user fees and monetary contributions for one-off projects, and secondly the 2022/23 budget includes a materially higher depreciation amount following an adjustment for the bridge asset class.

Adjusted Underlying Surplus

The regulations prescribe the method for calculating the 'Adjusted Underlying Result'. The purpose for calculating the Adjusted Underlying Result is to remove the effect on the budget of one-off revenue items that may otherwise overstate Council's 'normal' performance. Under the regulations the 2022/23 deficit of \$2.709 million is calculated as follows:

Table 2

Total Comprehensive Result	\$0.291m
Non-recurrent grants used to fund capital expenditure	(\$3.000m)
Non-monetary asset contributions	-
Other contributions to fund capital expenditure	-
Adjusted Underlying Surplus/(Deficit)	(\$2.709m)

Without important changes to Council's service offering and delivery models, future years will also present deficits and erode Council's ability to support the community in the future. Council is committed to address its financial sustainability over the long term to address these challenges.

Revenue

The following key points relate to the budgeted revenue of \$55.7m which is budgeted to decrease from the 2021/22 forecast of \$66.7m:

- Rates and charges total \$33.7m. This increase is the result of a 1.75% average increase in rates and charges, compounded by supplementary valuations.
 - The average increase of 1.75% includes a Municipal Charge of \$198.
- The annual kerbside collection charges total \$3.4m and is budgeted to increase by 6.1% due to higher number of assessments being levied the waste management charge, with:
 - the weekly waste charge increasing by \$11 from \$308 to \$319, representing a 3.6% increase, and
 - the fortnightly waste charge increasing by \$8 from \$235 to \$243, representing a 3.4% increase.
- User Fees and Charges have increased by \$0.98m to \$7.5m. This increase is primarily derived from a higher number of Home Care Packages in 2022/23 and the expectation that the Bluewater Leisure Centre will operate without the major disruptions that have occurred through 2020 and 2021 as a result of the pandemic.
- Operating grants have decreased by \$10.4m to \$8.6m. This is primarily due to an early payment of a large component of the 2022/23 Federal Assistance Grants. This grant is expected to be received in 2021/22 but is provided by the Federal Government to support Council's service delivery in 2022/23.
- Capital grants are budgeted to be \$3.0 million for the Elliminyt Wetlands project (non-recurrent grant).

Expenditure

The following key points relate to the budgeted expenditure of \$53.4m which has decreased by \$8.0m compared to the 2021/22 forecast:

- Employee costs have increased by \$2.0m, or 9.3%, to \$23.9m, including:
 - Employee entitlements through the Enterprise Agreement 2019.
 - Additional \$1.252 million in employee leave as annual leave not used in 2021/22 is expected to be taken and sick leave is likely to remain relatively high following removal of COVID-19 restrictions.
 - Additional employees will be needed to service an increase in Home Care Packages, resulting in higher employee costs of \$0.725 million (offsetting income is included in the User Fee analysis).

- New employees will be recruited to replace higher cost contractors in targeted areas of project management and engineering, with employee costs offset by reduced contractor costs.
- Allowance for WorkCover premium to increase by \$64k which reflects actual costs over recent years.
- Employment of 253 Full-time Equivalent Employees (FTE). The FTE movement is explained in detail in Note 4.1.7 of the attached Budget.
- Materials and services are budgeted to decrease by \$10.1m, or 35%, to \$18.9m, with a comparison to previous financial years being difficult due to the high project-related expenses in the 2021/22 budget. Putting aside project costs, Council has managed to constrain growth in materials and services to ensure service delivery represents value for money and these expenses are \$0.041 million lower than the previous budget for recurrent operations.
- Depreciation expense will increase by \$0.18m to \$11.1m. The depreciation is \$2.09 million higher than the 2021/22 budget which is largely due to adjustment in the bridges asset class.

Balance Sheet

Key points to note are:

- Council's working capital will decrease by \$0.228m, from \$5.9m to \$5.7m. The Budget assumes that cash held for projects carried forward from previous years will be completed in 2021/22.
- Council's net worth will increase by \$0.290m to \$382m.
- Property, infrastructure, plant and equipment comprise 95% of Council's total assets.
- Working capital is in surplus \$5.7m. Current assets will be 1.5 times current liabilities at the end of the financial year, up from 1.4 in 2021/22.
- Borrowings will decrease by \$0.216m.

The balance of borrowings from Council's single existing loan is forecast to be \$0.596 million on 30 June 2022. This 10-year loan was drawn to fund a roof on the Colac Saleyards and is due to be fully paid in the 2022/23 financial year.

Council has considered the low interest rates currently available and its capacity to allocate cash to existing obligations and new initiatives. Council has included new borrowings of \$0.380 million in the Draft Budget 2022/23 to source new borrowings over a three year term to spread the final payments of the existing loan over a further two years. The total amount of borrowings is presented in Section 4.2.3 of the attached Budget.

Cash Flow

The closing cash balance is budgeted to be \$14.3m at 30 June 2023.

The cash balance at 30 June 2023 is budgeted to include \$3.6m or 50% of the 2023/24 Federal Assistance Grant received in advance.

SALE OF LAND

Council has identified two parcels of land that are surplus to municipal needs and are appropriate for sale. One property (Bruce Street, Colac) was undergoing an open-market sale process while the Draft Budget 2022/23 was being developed. Council is still to determine its preferred sale process for a second property (McLachlan Street, Apollo Bay). While the two properties may be sold during 2022/23 they are not yet under contract and so the Draft Budget 2022/23 does not include any proposed income from sale of land.

CAPITAL WORKS

The key points to note are:

- The capital works program for 2022/23 totals \$12.1m, \$8.1m less than the 2021/22 forecast of \$20.2m due to projects carried forward from previous years and increased funding renewal and upgrade works. The 2021/22 Capital Works Program has increased from the 2021/22 Adopted Budget (\$13.7m) by \$6.5m.
- The program is divided between capital renewal (70%), capital upgrade (29%) and new assets (1%).
- The capital works budget is funded from a mix of external and internal sources. 39% is funded by grants and contributions and 61% by operations.

Following is a summary of the major items of capital expenditure funded in the budget:

- Eliminyt wetlands development \$3.0m
- Sealed road reconstruction program \$2.5m
- Heavy plant replacement \$1.2m
- Unsealed road reconstruction program \$1.0m
- Bridge renewal programme \$0.984m
- Building renewal programme \$0.750m
- Computers and telecommunications renewal and upgrade \$0.455m
- Major patching program \$0.350m
- Light fleet replacement \$0.300m
- Road safety \$0.275m
- Asset condition assessment \$0.250m
- Building upgrade programme \$0.234m
- Eliminyt Recreation Reserve oval lighting replacement \$0.200m
- Footpath renewal \$0.179m
- Stormwater renewal and upgrade \$0.140m

5. CONSIDERATIONS

Overarching Governance Principles (S(9)(2) LGA 2020)

A number of relevant governance principles under S(9)(2) of the LGA 2020 apply to this report, including:

- a) Council decisions are to be made and actions taken in accordance with the relevant law:
 - i. The Draft Budget 2022/23 has been:
 - developed in accordance with the financial management principles as outlined in Section 101 of LGA 2020 and Council's Community Engagement Policy. (S96 LGA 2020),
 - developed to ensure that it gives effect to the Council Plan (S94(2) LGA 2020),
 - prepared in compliance with the 1.75% average rate cap set by the State Government for the 2022/23 financial year (S94(3) LGA 2020),
 - prepared to include commentary on the description and funding of services in the budget and the major initiatives that will contribute to the achievement of one of the four Strategic Objectives Council Plan 2021-2025 (S94(2) LGA 2020),
 - prepared in the form set out in the Local Government Model Financial Report (LGMFR) in accordance with the regulations, and
 - developed and prepared in accordance with a rigorous schedule, discussions with Councillors through 2022 as the Draft Budget was developed, development of a community vision and Council Plan 2021-2025 with the community, and finally, a

- community engagement process prior to consideration by Council for adoption by 30 June (S94(1) LGA 2020).
- b) priority is to be given to achieving the best outcomes for the municipal community, including future generations:
- i. Commentary is included in section 2 of the Draft Budget on how the allocation of financial resources to services and initiatives in the budget will achieve the Strategic Objectives in the Council Plan 2021-2025.
- c) innovation and continuous improvement is to be pursued:
- i. Initiatives include Council's commitment to:
 - undertake a four yearly planning scheme review,
 - continue to grow its asset management capabilities, undertaking asset condition assessments for drainage and open space in 2022/23, and
 - improving the customer experience through implementation of a new Customer Request System (CRS).
- d) the ongoing financial viability of the Council is to be ensured:
- i. The budget forecasts have been updated to provide:
 - a meaningful projection of Council's long term financial position and provide a current understanding of Council's ongoing financial viability, and
 - financial indicators that describe Council's current and projected performance across a range of key financial performance indicators.
- e) regional, state and national plans and policies are to be taken into account in strategic planning and decision making:
- i. Budget allocations include available funding opportunities for initiatives and capital works that will contribute to the achievement of Council's Strategic Objectives in the Council Plan 2021-2025, if known at the time of preparation of the budget, and
 - ii. The budget provides commentary relating to adjustment of the 2021/22 and 2022/23 Financial Assistance Grant allocations to be paid to Council in advance. This is in response to advice from the Victorian Grants Commission in April 2022 that the Commonwealth will increase the grant allocation advance paid to councils in June 2022 for the 2022/23 financial year, which is an increase from 50% to 75% of the allocation. The advance is budgeted to be held in cash (and identified in equity as a Reserve) for allocation in the following financial year.
- f) the transparency of Council decisions, actions and information is to be ensured:
- i. Council's Community Engagement Policy is applied to the Council budget development, including Council Fees and Charges.
 - ii. Statutory fees and charges, which are set by the State Government, are also included in the budget process alongside Council fees and charges to ensure transparency of all fees and charges collected by the Council. Statutory fees and charges applicable from 1 July 2022 are subject to a separate State Government review process and may therefore change.
 - li. The standard public exhibition period of six weeks in the Community Engagement Policy is proposed to be reduced to a period of five weeks to ensure sufficient time to adopt the budget by 30 June 2022 in accordance with the requirement of Section 94(1) of LGA 2020.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

In relation to the Budget, Council has specific obligations under the following sections of the LGA 2020:

- Section 94 – The Budget
- Section 95 – Revised Budget
- Section 96 – Preparation of budget and revised budget

Section 94 requires that:

- a) A Council must prepare and adopt a budget for each financial year and the subsequent 3 financial years by 30 June each year.
- b) The budget must give effect to the Council Plan and contain a list of prescribed information, which is in the form set out in the Local Government Model Financial Report (LGMFR) in accordance with the regulations.
- c) If Council determines to apply a rate increase above the average rate cap for the financial year, the budget must contain a statement that Council intends to apply for an increase above the average rate cap, or is waiting for the outcome of an application, or specify any approved average rate cap that applies.

Section 95 requires that a Council must prepare and adopt a revised budget before the Council can make a variation to the declared rates or charges, undertake any borrowings not previously approved in the budget, or where Council considers a change to the budget should be the subject of community engagement.

In addition, Part 4 - Division 4 of the Act requires Council to implement the prescribed financial management principles in undertaking their duties. Section 96 specifically states that:

A Council must develop the budget and any revised budget in accordance with—

- a) the financial management principles; and
- b) its community engagement policy.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020

The Draft Budget, and subsequent 3 financial years, must reflect the objectives of the Council Plan. Therefore, the resources allocated to environmental, social, cultural and economic issues must be considered as part of the process.

Section 2 of the Draft Budget outlines the activities and initiatives under major service categories that will be delivered to contribute to the achievement of one of the four Strategic Objectives in the Council Plan 2021-2025.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

In 2021, Colac Otway Shire Council adopted the community vision and Council Plan 2021-2025 with the support and collaboration of its community.

Due to the time constraints in ensuring the budget is adopted by 30 June 2022, it is proposed that the Draft Budget 2022/23, including the Draft 2022/23 Fees and Charges, be placed on public exhibition for a period of five weeks. During this time submissions will be invited to be considered by Council.

Public Transparency (s58 LGA 2020)

The Chief Executive Officer, authorised by Council, will give public notice via Council's website, local newspapers and social media following endorsement of the Draft Budget 2022/23, including the Draft 2022/23 Fees and Charges, at this Council Meeting, in accordance with Council's Community Engagement Policy.

The public notice will inform the community that Council has prepared the Draft Budget, including the Draft Fees and Charges, for the 2022/23 and will be on public exhibition for a period of five weeks. Copies of the Draft Budget will be available via Council's website, local newspapers and social media

to view on Council's website at www.colacotway.vic.gov.au or in person at Council's Customer Service Centres in Colac (2-6 Rae Street) or Apollo Bay (100 Great Ocean Road).

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 4 – Strong Leadership and Management

Objective 1: We commit to a program of best practice and continuous improvement

Objective 2: We are a financially robust organisation

Objective 4: We support and invest in our people

Financial Management (s101 Local Government Act 2020)

S96 of the LGA 2020 specifies that Council must develop the budget in accordance with the financial management principles outlined in S101 of the LGA 2020. The budget has been prepared in the form set out in the Local Government Model Financial Report (LGMFR), in accordance with the regulations. This presentation aims to assist the reader to understand how the following financial management principles have been considered in preparation of the budget:

- (a) revenue, expenses, assets, liabilities, investments and financial transactions must be managed in accordance with a Council's financial policies and strategic plans,
- (b) financial risks must be monitored and managed prudently having regard to economic circumstances (financial risks include any risk relating to the financial viability of the Council, the management of current and future liabilities of the Council and the beneficial enterprises of the Council,
- (c) financial policies and strategic plans, including the Revenue and Rating Plan, must seek to provide stability and predictability in the financial impact on the municipal community, and
- (d) accounts and records that explain the financial operations and financial position of the Council must be kept.

Specifically, the budget document includes commentary on:

- a) how the budget is guided by the Revenue and Rating Plan, Workforce Plan and Long Term Financial Plan to enable the priorities identified within the Council Plan 2021-2025 to be achieved,
- b) the description and funding of services in the budget and the major initiatives that will contribute to the achievement of one of the four Strategic Objectives in the Council Plan 2021-2025,
- c) three year projections developed based on assumptions developed in the Long Term Financial Plan, which was adopted by Council on 27 October 2021, to provide a meaningful projection of Council's long term financial position and provide a current understanding of Council's ongoing financial viability, and
- d) financial indicators that describe Council's current and projected performance across a range of key financial performance indicators.

Service Performance (s106 Local Government Act 2020)

Not applicable.

Risk Assessment

The budget process must comply with a rigorous schedule to ensure the budget meets the statutory requirements outlined in this report, including final adoption by Council of the budget by 30 June. As a consequence, the standard public exhibition period of six weeks has been reduced to a period of five weeks (as provided for in Council's Community Engagement Policy), to ensure sufficient time to adopt the budget by 30 June 2022.

The financial sustainability of the Council over the long term has been a focus of this budget and Council is committed to address these challenges. Without important changes to Council's service offering and delivery models, future years will also present deficits and erode Council's ability to support the community in the future.

Communication/Implementation

The draft budget is planned to be placed on public exhibition for a period of five weeks, following endorsement at this Council Meeting as per Council's Community Engagement Policy. In order to achieve the legislated deadline of adoption by 30 June, submissions will be invited during May and any person wishing to be heard in support of their submission will be invited to a Submissions Committee meeting scheduled on 15 June 2022 prior to consideration and adoption of the Budget at the Special Council Meeting to be scheduled on 29 June 2022.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Option 1 – Endorse the Draft Budget 2022/23 for the financial year, and subsequent 3 financial years, including the Draft 2022/23 Fees and Charges as presented

This option is recommended by officers. The prepared budget document has been developed over a number of months, has been guided by Councillors participating in dedicated budget briefing sessions, and incorporates Council's most recent information and decisions. Importantly, the Draft Budget 2022-23 incorporates important initiatives to support the community and will support ongoing service delivery. Endorsement of the Draft Budget at this meeting will also fulfil Council's obligations under the *Local Government Act 2020*.

Amendments to the Draft Budget may be made by Council following consideration of:

- a) public submissions to be heard in June 2022, and
- b) officer recommendations to incorporate any recent information, including updated forecasts, where appropriate.

Option 2 – Endorse the Draft Budget 2022/23 for the financial year, and subsequent 3 financial years, including the Draft 2022/23 Fees and Charges with amendments

This option is not recommended by officers as the implications of amendments to the Draft Budget at this meeting will not be able to be assessed, nor financial implications determined to inform Councillors' consideration of the changes.

Option 3 – Do not endorse the Draft Budget 2022/23 for the financial year, and subsequent 3 financial years, including the Draft 2022/23 Fees and Charges

This option is not recommended by officers.

If Council does not endorse a Draft Budget for the next financial year, or delays the adoption of an annual budget it may:

- i. Compromise its ability to strike rates in accordance with legislation,
- ii. Compromise the opportunity for its community to participate in Council's decision making prior to Council considering the budget for adoption,
- iii. Delay the opportunity for the community to receive benefits from new initiatives,

- iv. Impact delivery of important ongoing services,
- v. Compromise Council's ability to comply with its obligations under the *Local Government Act 2020* and *Local Government Act 1989*.



Colac Otway

SHIRE

COLAC OTWAY SHIRE BUDGET 2022/23

Draft to be adopted 29 June 2022

This Budget Report has been prepared with reference to Local Government Victoria (LGV) Local Government Model Financial Report (LGMFR) 2022/23.

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Mayor's Summary

I am pleased to present the Draft Budget 2022/23 on behalf of the Colac Otway Shire Council. This draft budget clearly set out Council's financial investment in year ahead as we work with our community to achieve its vision for 2050. The Community Vision was endorsed by Council last year and guides our decision-making as we develop our integrated strategic plans and deliver our important services.

The Draft Budget 2022/23 includes a proposed 1.75% average rate increase in line with the Fair Go Rates system. Council is aware of the ongoing impacts of the pandemic, particularly on tourism, hospitality and exports, and as we focus on our community's recovery, we encourage ratepayers who are struggling to make contact to discuss how we can help.

The Draft Budget 2022/23 will allow Council to invest a further \$12.1 million in capital works projects of which \$8.255 million is directed to Council's asset renewal program to ensure that our assets continue to support economic prosperity and healthy connected communities. Council remains committed to ensuring its road network remains in good condition and has allocated \$5.219 million to roads and bridges which is additional to works that have already commenced in 2021/22.

The Draft Budget 2022/23 allocates \$0.644 million to capital projects that upgrade Council's assets including upgrade to the Colac Maternal and Child Health building, traffic calming works in Alexander Street, Colac, and upgrade works at various locations impacted by landslips in 2021. Council has also allocated \$0.274 million to simplify the Planning Scheme and make improvements in Council's technology that will improve its ability to record, track and report on customer requests. These projects that will enhance Council's ability to respond to the community and customers and plan for the future.

Key projects in the Draft Budget 2022/23 include:

- Elliminyt Wetlands development, \$3.0 m
- Sealed road reconstruction program, \$2.5 m
- Unsealed road reconstruction program, \$1.0m
- Building renewal programme, \$0.75 m
- New Customer Request System, \$0.17 m

Executive Summary

Council has prepared a Draft Budget for the 2022/23 financial year which seeks to support its provision of important services and infrastructure that are affordable for our community. The Draft Budget is informed by the principles and assumptions contained in the Financial Plan and discussions with Councillors through 2022 as the Draft Budget was developed.

In 2021, Colac Otway Shire Council adopted the community vision and Council Plan 2021-2025 with the support and collaboration of its community. The Council Plan, inclusive of the Municipal Health and Wellbeing Plan, guides Council's work over the remainder of its term and has four key themes:

1. Strong and Resilient Economy
2. Valuing the Natural and Built Economy
3. Healthy and Inclusive Community
4. Strong Leadership and Management

This Draft Budget 2022/23 includes investment across all four themes through ongoing delivery of Council's day to day operations as well as some specific initiatives and projects.

RATES AND CHARGES

This draft budget proposes to increase rate revenue in line with the Fair Go Rates System which is capped 1.75% for the 2022/23 financial year. The cap is set by the State Government and applies to the total revenue generated through general rates and the municipal charge. Council's rate revenue also increases from supplementary rates which arise throughout the year from the building of new homes or properties, subdivisions or existing property development.

As legislated, each property across the state is subject to an independent annual valuation, and these values will be used to calculate individual property rates. This annual revaluation does not result in a net gain or loss of revenue to Council, but it redistributes the rates burden according to updated property values. During 2021 and 2022, property values changed drastically across the state, and so while Council's overall rate revenue will only increase by 1.75%, individual properties may increase by more or less than this average due to the varied property valuation increases.

The budget provides for an average annual rate increase of 1.75%. The table below provides a summary of the calculation, according to the formula prescribed by the State Government.

Forecast Annualised Rate Revenue at 30 June 2022	\$29,314,074
Forecast Number of Assessments at 30 June 2022	15,745
Forecast Base Average Rate 2021/22 per assessment	\$1,862
Budget Rate Revenue 2022/23	\$29,824,428
Capped Average Rate 2022/23 per assessment	\$1,894
Average Capped Increase	1.75%

FINANCIAL PERFORMANCE AND SUSTAINABILITY

The key financial outcomes from the Draft Budget 2022/23 include:

• Net Surplus	\$0.291 m
• Adjusted Underlying Result (deficit)	(\$2.7 m)
• Closing Cash Balance	\$14.3 m
• Reserves balance	\$13.6 m
• Capital Works Program	\$12.1 m
• Capital renewal allocation (70% of depreciation)	\$ 8.5 m

The Financial Performance Indicators are detailed in Section 5 on this document.

MAJOR INITIATIVES

As per section 94 of the Local Government Act 2020, Council has identified and funded a number of major initiatives that achieve goals set in the Council Plan 2021-25, including the following:

Theme 1. A strong and resilient economy

Future planning for Deans Creek Growth Corridor

Of major significance in the Draft Budget 2022/23 will be the progression of the strategic planning to unlock residential land development in the Deans Creek Growth Corridor, which will be supported by financial assistance from the Victorian Government. This important strategic work will result in the development of a Precinct Structure Plan that will establish the location of key open space reserves and linear linkages, drainage requirements, roads and key traffic intersections, and any other social and community infrastructure. The project will also deliver a Development Contributions Plan to guide how the required infrastructure would be delivered across the growth area. Upon completion, the Precinct Structure Plan and associated planning scheme changes will result in rezoned land for residential development.

Theme 2. Valuing the built and natural environment

Remaining Carbon Neutral

Council determined to become carbon neutral in the 2021/22 Budget through a series of important initiatives to reduce carbon emissions and a one-off budget allocation to offset residual carbon emissions. The Draft Budget 2022/23 embeds that commitment through the introduction of an recurrent financial commitment to Council achieving its Carbon Neutral Target in the years ahead.

Theme 3. Healthy and inclusive communities

Caring for our older persons

The Draft Budget 2022/23 incorporates continued growth in the delivery of services to our aged community. This important service provides essential care for our aging community, supporting people to age safely in their own homes for as long as possible.

Theme 4. Strong leadership and management

Improving the customer experience

The most significant project under this theme will be the implementation of a new Customer Request System (CRS) – A good CRS is a vital tool to assist with the effective and efficient operations of Council. For a number of years Council has persisted with a system that is lacking in its capacity to deliver to a satisfactory level. The new system will be user friendly, provide good efficiencies, greatly improved response times, integration opportunities and offer improved front end engagement with ratepayers. Council has determined that significantly improved benefits can be gained with the implementation of a new CRS, ensuring that customer requests for service are captured, tracked and completed.

ANNUAL BUDGET RESULTS

Net Surplus

The budgeted net surplus represents all revenues less operating expenses and is further detailed in Council's formal statement (section 3). The Draft Budget for the 2022/23 financial year delivers a surplus of \$0.291 million, which is \$2.978 million lower than the budget for the previous financial year 2021/22. The decline is attributable to two key factors: firstly the budget for the financial year 2021/22 included higher user fees and monetary contributions for one-off projects, and secondly the 2022/23 budget includes a materially higher depreciation amount following an adjustment for the bridge asset class.

Adjusted Underlying Result

The regulations prescribe the method for calculating the 'Adjusted Underlying Result'. The purpose for calculating the Adjusted Underlying Result is to remove the effect on the budget of one-off revenue items that may otherwise overstate Council's 'normal' performance. Under the regulations the 2022/23 deficit of \$2.709 million is calculated as follows:

Total Comprehensive Result	\$0.291 m
Non-recurrent grants used to fund capital expenditure	(\$3.000 m)
Non-monetary asset contributions	-
Other contributions to fund capital expenditure	-
Adjusted Underlying Result (deficit)	(\$2.709 m)

Without important changes to Council's service offering and delivery models, future years will also present deficits and erode Council's ability to support the community in the future. Council is committed to address its financial sustainability over the long term to address these challenges.

Revenue

The Draft Budget 2022/23 anticipates total revenue of \$55.7 million.

Rates and Municipal Charge

Total income of \$33.7 million is expected to be derived through rates and municipal charges as per the following key factors:

- An overall increase in rates and charges that is in line with the Fair Go Rates System cap, set at 1.75% for 2022/23
- A Municipal Charge of \$198 per annum for each rateable property in respect of which a municipal charge can be levied; and
- Compounding effect of supplementary valuations.

Waste Management Charge

While a portion of Council's overall waste and resource recovery services is funded through rate revenue, Council also receives specific income through levying of a waste management charge. The charge is applied as follows:

- Properties receiving a weekly kerbside collection will be levied a charge of \$319 per annum
- Properties receiving a fortnightly kerbside collection will be levied a charge of \$243 per annum

The above charges represent increases of 3.6% and 3.4% respectively when compared to the waste management charges levied on individual properties in the previous financial year.

The total income to be received through waste management charges will be \$3.407 million will be 6.1% higher than the previous financial year due to the higher number of assessments being levied the waste management charge.

User fees and charges

Many of Council's services are wholly or partly funded through general revenue, however a range of services are funded in full or part through user fees. Council's draft budget is based on \$7.5 million income through user fees and charges, representing an increase of \$0.98 million through user fees and charges when compared to the 2021/22 budget.

The increase in income through user fees and charges is primarily derived from a higher number of Home care packages in 2022/23 and the expectation that the Bluewater Leisure Centre will operate without the major disruptions that have occurred through 2020 and 2021 as a result of the pandemic.

Grants

Council receives recurrent grants that help Council to deliver regular services each year, and non-recurrent grants that are tied to specific projects and outcomes. Grants are further categorised as being for operating or capital investments which recognises the relationship of the activity to Council's asset portfolio.

- Operating grants are budgeted to be \$8.605 million, which is lower than the Budget 2021/22 due to an early payment of a large component of the 2022/23 Federal Assistance Grants. This grant is expected to be received in 2021/22 but is provided by the Federal Government to support Councils service delivery in 2022/23.
- Capital grants are budgeted to be \$3.0 million for the Elliminyt Wetlands project (non recurrent grant), which is very similar to \$2.99 million (non recurrent grant) included in the Budget 2021/22.

Expenditure

Employee Costs

These expenses include all labour related expenditure such as wages and salaries and on-costs such as allowances, leave entitlements, employer superannuation and workers compensation insurance. Employee costs in the Income Statement does not include capitalised labour.

Employee costs are budgeted to increase by 9.3% or \$2.043 million compared to 2021/22 due to the following:

- Employee entitlements through the Enterprise Agreement 2019.
- Additional \$1.252 million in employee leave as annual leave not used in 2021/22 is expected to be taken and sick leave is likely to remain relatively high following removal of COVID-19 restrictions.
- Additional employees will be needed to service an increase in Home Care Packages, resulting in higher employee costs of \$0.725 million (offset offsetting income is included in the User Fee analysis).
- New employees will be recruited to replace higher cost contractors in targeted areas of project management and engineering, with employee costs offset by reduced contractor costs.
- Allowance for WorkCover premium to increase by \$64k which reflects actual costs over recent years.

The Draft Budget 2022/23 is based on employment of 253 Full-time Equivalent Employees (FTE). The increase of FTE in the 2021/22 budget results from the following:

- Additional 2.1 FTE to deliver new projects in strategic planning and youth engagement (fully funded)
- Additional 0.1 FTE in the Maternal and Child Health team to comply with new regulatory requirements
- Net increase of 4.2 FTE to move to internal skills (offset by reduction in contractors and agency staff)
- Additional 3.1 FTE to deliver increased number of Home Care Packages (fully funded by user fees)
- Additional 2.5 FTE to support post-pandemic service at Bluewater Leisure Centre (funded through increased user fees)
- Additional 2.0 FTE identified that were included in previous costs but not in FTE calculation
- Reduction of 0.4 FTE through review of support roles

Materials and Services

Comparison of materials and services expenses to previous financial years is difficult due to the high project-related expenses in the 2021/22 budget. Putting aside project costs, Council has managed to constrain growth in materials and services to ensure service delivery represents value for money and these expenses are \$0.041 million lower than the previous budget for recurrent operations.

Depreciation

The Draft Budget 2022/23 includes depreciation expense of \$11.10 million which is \$0.18 million higher than the 2021/22 forecast. The depreciation is \$2.09 million higher than the 2021/22 budget which is largely due to adjustment in the bridges asset class.

Borrowings

The balance of borrowings from Council's single existing loan is forecast to be \$0.596 million on 30 June 2022. This 10-year loan was drawn to fund a roof on the Colac Saleyards and is due to be fully paid in the 2022/23 financial year.

Council has considered the low interest rates currently available and its capacity to allocate cash to existing obligations and new initiatives. Council has included new borrowings in the Draft Budget 2022/23 to source \$0.380 million over a three year term to spread the final payments of the existing loan over a further two years. The total amount to be borrowed is presented in Section 4.2.3.

BALANCE SHEET

The key points to note are:

- Council's working capital will decrease by \$228k, from \$5.9m to \$5.7m. The Budget assumes that cash held for projects carried forward from previous years will be completed in 2021/22.
- Council's net worth will increase by \$290k to \$382m.
- Property, infrastructure, plant and equipment comprise 95% of Council's total assets.
- Working capital is in surplus \$5.7m. Current assets will be 1.5 times current liabilities at the end of the financial year, up from 1.4 in 2021/22.
- Borrowings will decrease by \$216k due to scheduled repayments of \$84k and the proposed additional payout of \$130k of the loan liability in 2022/23, with refinancing of the remaining balance of \$380k in June 2023.

CASH FLOW

The closing cash balance is budgeted to be \$14.3m at 30 June 2023.

The cash balance at 30 June 2023 is budgeted to include \$3.6m or 50% of the 2023/24 Federal Assistance Grants received in advance (2021/22: \$5.5m or 75%).

SALE OF LAND

Council has identified two parcels of land that are surplus to municipal needs and are appropriate for sale. One property (Bruce Street, Colac) was undergoing an open-market sale process while the Draft Budget 2022/23 was being developed. Council is still to determine its preferred sale process for a second property (McLachlan Street, Apollo Bay). While the two properties may be sold during 2022/23 they are not yet under contract and so the Draft Budget 2022/23 does not include any proposed income from sale of land.

CAPITAL WORKS

The key points to note are:

- The capital works program for 2022/23 totals \$12.1m, \$8.1m less than the 2021/22 forecast of \$20.2m due to projects carried forward from previous years and increased funding renewal and upgrade works. The 2021/22 Capital Works Program has increased from the 2021/22 Adopted Budget (\$13.7m) by \$6.5m.
- The program is divided between capital renewal (70%), capital upgrade (29%) and new assets (1%).
- The capital works budget is funded from a mix of external and internal sources. 39% is funded by grants and 61% by operations.

Following is a summary of the major items of capital expenditure funded in the budget:

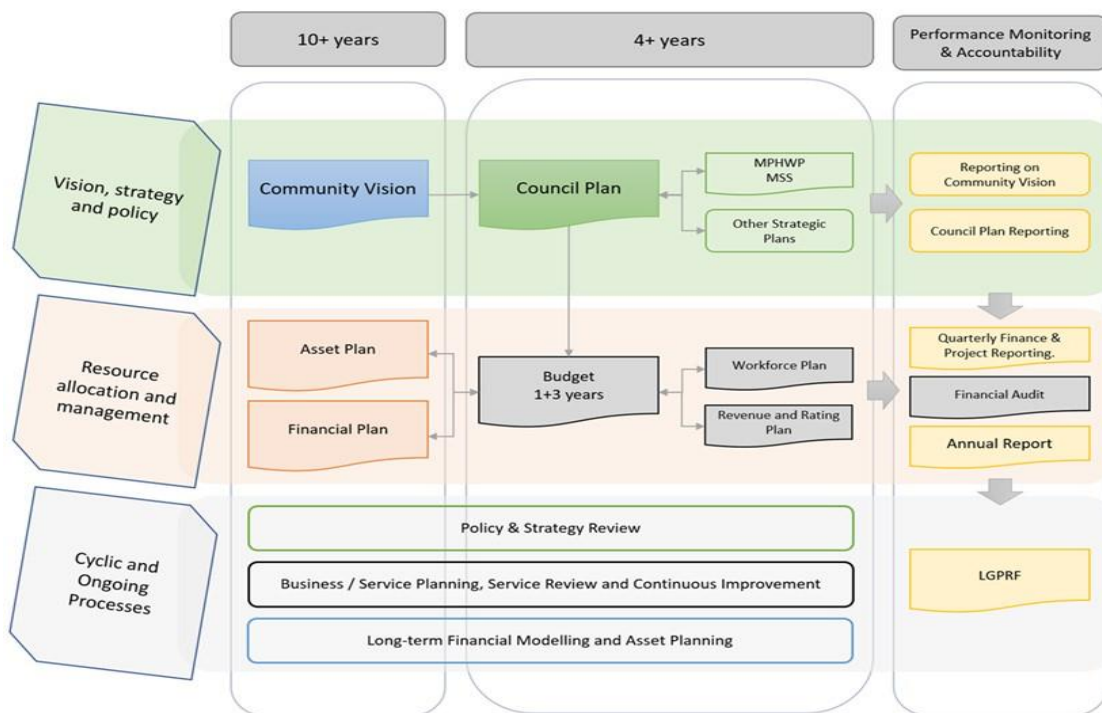
- Eliminyt wetlands development \$3.0m
- Sealed road reconstruction program \$2.5m
- Heavy plant replacement \$1.2m
- Unsealed road reconstruction program \$1.0m
- Bridge renewal programme \$984k
- Building renewal programme \$750k
- Computers and telecommunications renewal and upgrade \$455k
- Major patching program \$350k
- Light fleet Replacement \$300k
- Road safety \$275k
- Asset condition assessment \$250k
- Building upgrade programme \$234k
- Eliminyt Recreation Reserve oval lighting replacement \$200k
- Footpath renewal \$179k
- Stormwater renewal and upgrade \$140k

1. Link to the Strategic Integrated Planning and Reporting Framework

This section describes how the Budget links to the achievement of the Community Vision and Council Plan within an overall integrated planning and reporting framework. This framework guides the Council in identifying community needs and aspirations over the long term (Community Vision and Financial Plan), medium term (Council Plan, Workforce Plan, and Revenue and Rating Plan) and short term (Budget) and then holding itself accountable (Annual Report).

1.1 Legislative Planning and accountability framework

The Budget is a rolling four-year plan that outlines the financial and non-financial resources that Council requires to achieve the strategic objectives described in the Council Plan. The diagram below depicts the integrated planning and reporting framework that applies to local government in Victoria. At each stage of the integrated planning and reporting framework there are opportunities for community and stakeholder input. This is important to ensure transparency and accountability to both residents and ratepayers.



Source: Department of Jobs, Precincts and Regions

The timing of each component of the integrated planning and reporting framework is critical to the successful achievement of the planned outcomes.

1.1.2 Key planning considerations

Service level planning

Although councils have a legal obligation to provide some services— such as animal management, local roads, food safety and statutory planning—most council services are not legally mandated, including some services closely associated with councils, such as libraries, building permits and sporting facilities. Further, over time, the needs and expectations of communities can change. Therefore councils need to have robust processes for service planning and review to ensure all services continue to provide value for money and are in line with community expectations. In doing so, councils should engage with communities to determine how to prioritise resources and balance service provision against other responsibilities such as asset maintenance and capital works. Community consultation needs to be in line with a Council's adopted Community Engagement Policy and Public Transparency Policy.

1.2 Our purpose

Our 2050 Vision is

"By 2050, Colac Otway Shire will be a destination where people come to appreciate our unique and diverse environment and friendly communities.

We value the wisdom of this land's first caretakers, the Gulidjan and Gadabanud peoples, and recognise all those who have cared for the land since.

We work to preserve what makes our place special. We focus on environmental sustainability to protect our precious natural assets.

We are a proud and resilient community that values our welcoming spirit. We embrace new people, new business, new ideas. Our region is a great place to learn, live, work and play."

Our values

Colac Otway Shire Council strives to be a values-based organisation.

Our values were developed by our people and guide our behaviours, our approach to our work and to each other.

Our Values

- We are **supportive, inclusive and respectful**
- We take a **positive approach** to our work
- We commit to **safe work** practices
- We are **accountable and proactive**
- We act with **integrity**
- We **communicate effectively**
- We are **flexible and progressive**

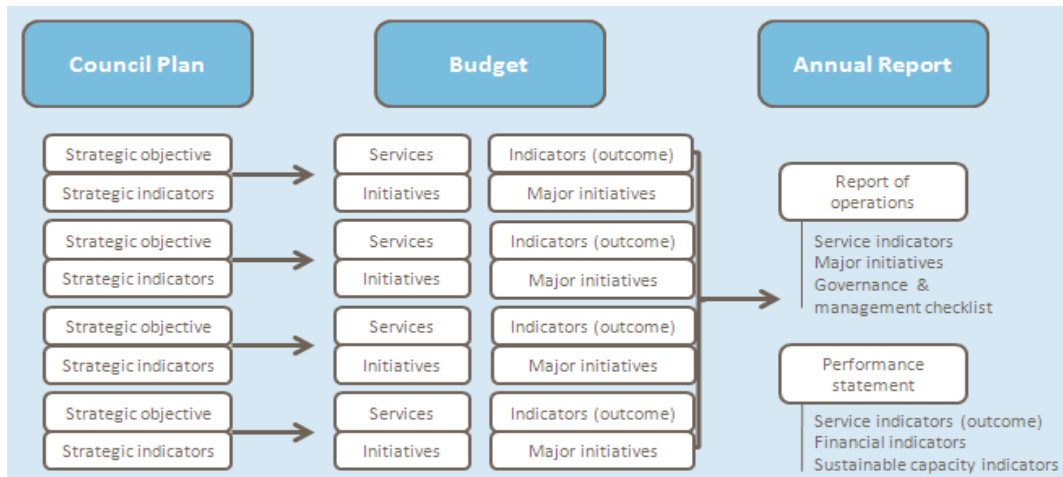
1.3 Strategic objectives

Council delivers activities and initiatives under major service categories. Each contributes to the achievement of one of the four Strategic Objectives as set out in the Council Plan 2021-2025. The following table lists the four Strategies Objectives as described in the Council Plan.

Strategic Theme	Description
1. Strong and Resilient Economy	We are committed to expanding our diverse industries, vibrant arts community, world-renowned tourism, and professional health services. A healthy, growing economy will provide sustainable industries and jobs, and opportunities for all ages.
2. Valuing The Natural and Built Environment	We will protect our natural environment and communities, by maintaining and providing resilient infrastructure, and being leaders in sustainable living, modelling innovation and best practice.
3. Healthy and Inclusive Community	We will continue to be a great place to live. We embrace our diverse community, take care of our older community and prepare our children for success. We care for each other, are friendly and welcoming, and enjoy a vibrant and active lifestyle. We are a small population with big hearts.
4. Strong Leadership & Management	We will be leaders in good governance, transparency and strive for ongoing improvement.

2. Services and service performance indicators

This section provides a description of the services and initiatives to be funded in the Budget for the 2022/23 year and how these will contribute to achieving the strategic objectives outlined in the Council Plan. It also describes several initiatives and service performance outcome indicators for key areas of Council's operations. Council is required by legislation to identify major initiatives, initiatives and service performance outcome indicators in the Budget and report against them in their Annual Report to support transparency and accountability. The relationship between these accountability requirements in the Council Plan, the Budget and the Annual Report is shown below



Source: Department of Jobs, Precincts and Regions

2.1 Strategic Theme 1: Strong and Resilient Economy

We are committed to expanding our diverse industries, vibrant arts community, world-renowned tourism, and professional health services. A healthy, growing economy will provide sustainable industries and jobs, and opportunities for all ages.

Services

Service area	Description of services provided		2020/21 Actual \$'000	2021/22 Forecast \$'000	2022/23 Budget \$'000
Building Control	This service provides for planned building developments to meet present and future community requirements.	<i>Exp</i>	1,409	1,330	1,374
		<i>Rev</i>	(141)	(113)	(151)
		NET	1,268	1,216	1,223
Events	This service provides for active community involvement in the provisioning of management and support for community entertainment and events.	<i>Exp</i>	123	198	129
		<i>Rev</i>	(1)	(4)	(6)
		NET	122	195	123
Economic Development	This service facilitates a healthy and resilient economy by providing effective leadership, advocacy, and partnership, by working with government business and the community.	<i>Exp</i>	1,404	2,958	1,206
		<i>Rev</i>	(232)	(1,368)	(36)
		NET	1,172	1,590	1,170
Tourism	This service provides economic benefit by promoting the Shire as a location for visitors to enjoy, explore and return to. Visitor information is provided via Council's two Visitor Information Centres and via media.	<i>Exp</i>	563	768	865
		<i>Rev</i>	(106)	(235)	(265)
		NET	457	532	600
Apollo Bay Harbour	This service manages and maintains the Apollo Bay Harbour for the enjoyment of the community.	<i>Exp</i>	1,065	1,041	1,027
		<i>Rev</i>	(1,020)	(1,041)	(1,027)
		NET	44	-	-
Colac Livestock Selling Centre	This service provides a vital link in our rural infrastructure by providing a marketplace for buying and selling livestock.	<i>Exp</i>	365	354	396
		<i>Rev</i>	(432)	(445)	(467)
		NET	(67)	(90)	(71)
Statutory Planning	This service fulfils Council's statutory obligations in being the responsible authority for the management and regulation of land use and development, with the aim of achieving sustainable outcomes in the interests of current and future generations.	<i>Exp</i>	1,425	1,402	1,487
		<i>Rev</i>	(418)	(323)	(376)
		NET	1,007	1,079	1,111
Strategic Planning	This service ensures that land use planning is undertaken to meet the sustainable long term needs of current and future generations.	<i>Exp</i>	528	943	477
		<i>Rev</i>	5	(175)	-
		NET	534	768	477

Major Initiatives

Ongoing commitment to a strong and resilient economy

Council will continue to facilitate economic growth and investment in the region through its Draft Budget 2022/23. A key initiative is the continued investment in renewing Forest Street Colac, ensuring it remains an important strategic road that services much of Colac's industrial areas in the township's east. In addition, the COPACC Civic Hall floor will see improvements to its structural integrity enabling the space to host a range of cultural activities not currently possible. Council will also provide over \$300,000 to community groups and businesses through its long standing Community Grants Program, which results in a range of social, environmental and economic outcomes, strengthening the opportunity for a grass-roots recovery from the pandemic.

Future planning for Deans Creek Growth Corridor

Of major significance in 2022/23 will be the progression of the strategic planning to unlock residential land development in the Deans Creek Growth Corridor, which will be supported by financial assistance from the Victorian Government. This important strategic work will result in the development of a Precinct Structure Plan that will establish the location of key open space reserves and linear linkages, drainage requirements, roads and key traffic intersections, and any other social and community infrastructure. The project will also deliver a Development Contributions Plan to guide how the required infrastructure would be delivered across the growth area. Upon completion, the Precinct Structure Plan and associated planning scheme changes will result in rezoned land for residential development.

Service Performance Outcome Indicators

Service	Indicator	Performance Measure	Computation
Statutory planning	Decision making	Council planning decisions upheld at VCAT. (Percentage of planning application decisions subject to review by VCAT and that were not set aside)	[Number of VCAT decisions that did not set aside Council's decision in relation to a planning application / Number of VCAT decisions in relation to planning applications] x100

2.2 Strategic Theme 2: Valuing The Natural and Built Environment

We will protect our natural environment and communities, by maintaining and providing resilient infrastructure, and being leaders in sustainable living, modelling innovation and best practice.

Services

Service area	Description of services provided		2020/21 Actual \$'000	2021/22 Forecast \$'000	2022/23 Budget \$'000
Emergency Management	This service provides for the necessary support for the community in the case of an emergency event occurring.	<i>Exp</i>	1,004	710	254
		<i>Rev</i>	(5)	(14)	(14)
		NET	999	696	240
Environment	This service provides for management of our natural environment to the betterment and enjoyment of all members of our community.	<i>Exp</i>	583	639	659
		<i>Rev</i>	(0)	(1)	(1)
		NET	583	638	658
Infrastructure Services	This service provides for the physical assets required by the community to maintain a happy, healthy and sustainable lifestyle.	<i>Exp</i>	6,935	6,725	6,771
		<i>Rev</i>	(476)	(766)	(571)
		NET	6,459	5,959	6,200
Parks, Gardens and Reserves	This service provides for the maintenance of open space for the enjoyment of all community members.	<i>Exp</i>	1,320	2,260	2,267
		<i>Rev</i>	(0)	-	(1)
		NET	1,320	2,260	2,266
Waste Management	This service provides for the efficient and effective control of waste products produced by our community. It includes the provision of waste collection services as well as for disposal to landfill.	<i>Exp</i>	3,693	5,761	5,039
		<i>Rev</i>	(3,209)	(3,421)	(3,722)
		NET	484	2,340	1,317

Major Initiatives

Ongoing commitment to the natural and built environment

Council recognises the importance of greening our urban streets, for our ecosystem and our community. The Draft Budget 2022/23 will support tree planting in our streetscapes, supporting the ecosystem but also helping urban cooling in years ahead.

Council's budget supports the development of our Environment Strategy and Climate Change Action Plan which are recognised initiatives in the Council Plan 2021-2025.

Remaining Carbon Neutral

The Draft Budget 2022/23 also introduces an ongoing financial commitment to Council achieving its Carbon Neutral Target in the years ahead.

Service Performance Outcome Indicators

Service	Indicator	Performance Measure	Computation
Roads	Satisfaction	Satisfaction with sealed local roads. (Community satisfaction rating out of 100 with how Council has performed on the condition of sealed local roads)	Community satisfaction rating out of 100 with how Council has performed on the condition of sealed local roads.
Waste collection	Waste diversion	Kerbside collection and waste diverted from landfill. (Percentage of garbage, recyclables and green organics collected from kerbside bins that is diverted from landfill)	[Weight of recyclables and green organics collected from kerbside bins / Weight of garbage, recyclables and green organics collected from kerbside bins] x100

2.3 Strategic Theme 3: Healthy and Inclusive Community

We will continue to be a great place to live. We embrace our diverse community, take care of our older community and prepare our children for success. We care for each other, are friendly and welcoming, and enjoy a vibrant and active lifestyle. We are a small population with big hearts.

Services

Service area	Description of services provided		2020/21 Actual \$'000	2021/22 Forecast \$'000	2022/23 Budget \$'000
Arts & Culture	This service is responsible for the management and provision of arts and cultural services to the community. This service is responsible for the running of the Colac Otway Performing Arts & Cultural Centre.	<i>Exp</i>	505	937	929
		<i>Rev</i>	(368)	(261)	(399)
		NET	138	675	531
Leisure Centres	This service actively promotes a healthy lifestyle for our community by directly providing swimming and gymnasium facilities.	<i>Exp</i>	1,638	1,942	2,215
		<i>Rev</i>	(616)	(1,147)	(1,534)
		NET	1,022	796	679
Children and Family Services	This service provides support to our children, families and youth to encourage and nurture their growth and development.	<i>Exp</i>	1,078	1,854	1,171
		<i>Rev</i>	(792)	(1,047)	(822)
		NET	286	808	349
Healthy Active Communities	This service provides the delivery of high quality, sustainable community health and wellbeing services that lead to a healthier and more active community.	<i>Exp</i>	1,053	1,164	789
		<i>Rev</i>	(139)	(170)	(108)
		NET	914	994	682
Library Services	The library service provides resources and oversight to the Corangamite Regional Library Corporation for the provision of information, education, recreation and enrichment for the community.	<i>Exp</i>	813	857	941
		<i>Rev</i>	(40)	(1)	-
		NET	774	856	941
Local Laws	This service provides for community safety and health by providing for a framework for behaviours which affect our community wellbeing.	<i>Exp</i>	739	736	866
		<i>Rev</i>	(346)	(136)	(364)
		NET	393	600	502
Older Persons & Disability Services	This service provides support to older and disabled members of our community in order to sustain quality of life for all our residents.	<i>Exp</i>	3,587	4,059	5,039
		<i>Rev</i>	(5,287)	(4,777)	(5,278)
		NET	- 1,700	- 718	- 239
Public Health	This service promotes a healthy and safe lifestyle by actively promoting and policing public health issues.	<i>Exp</i>	478	534	523
		<i>Rev</i>	(121)	(279)	(254)
		NET	357	255	269
Recreation	This service provides for active community involvement and the promotion of healthy lifestyles by providing for suitable sporting and recreational facilities.	<i>Exp</i>	306	369	335
		<i>Rev</i>	23	(80)	-
		NET	329	289	335

Major Initiatives

Ongoing commitment to a healthy and inclusive community

Council recognises that the Colac Botanic Gardens is a special place for the community and visitors, where people can live, play and learn. The Draft Budget 2022/23 will ensure that the Botanic Gardens thrives for decades to come through investment in a Masterplan Review to protect its natural assets and allow it to flourish in the future.

The Draft Budget 2022/23 will fund tile replacement, roof renewal and concourse re-surfacing at the Bluewater Leisure Centre through coordinated works that minimise disruption to users. Council will also undertake detailed design for the Elliminyt Recreation Reserve Pavilion to prepare for future investment in active recreation and social connection.

Caring for our older persons

The Draft Budget 2022/23 incorporates continued growth in the delivery of services to our aged community. This important service provides essential care for our aging community, supporting people to age safely in their own homes for as long as possible.

Service Performance Outcome Indicators

Service	Indicator	Performance Measure	Computation
Libraries	Participation	Active library members. (Percentage of the municipal population that are active library members)	[Number of active library members / municipal population] x100
Maternal and Child Health	Participation	Participation in the MCH service. (Percentage of children enrolled who participate in the MCH service)	[Number of children who attend the MCH service at least once (in the year) / Number of children enrolled in the MCH service] x100
		Participation in MCH service by Aboriginal children. (Percentage of Aboriginal children enrolled who participate in the MCH service)	[Number of Aboriginal children who attend MCH service at least once (in the year) / Number of Aboriginal children enrolled in the MCH service] x100
Animal Management	Health and safety	Animal management prosecutions. (Number of successful animal management prosecutions)	Number of successful animal management prosecutions
Food safety	Health and safety	Critical and major non-compliance notifications. (Percentage of critical and major non-compliance notifications that are followed up by Council)	[Number of critical non-compliance notifications and major non-compliance notifications about a food premises followed up / Number of critical non-compliance notifications and major non-compliance notifications about food premises] x100
Aquatic Facilities	Utilisation	Utilisation of aquatic facilities. (Number of visits to aquatic facilities per head of municipal population)	Number of visits to aquatic facilities / Municipal population

2.4 Strategic Theme 4: Strong Leadership & Management

We will be leaders in good governance, transparency and strive for ongoing improvement.

Services

Service area	Description of services provided		2020/21 Actual \$'000	2021/22 Forecast \$'000	2022/23 Budget \$'000
Councillors and Chief Executive	This area of governance includes the Mayor, Councillors, Chief Executive Officer, Business Improvement Officer and Public Relations Team and associated support which cannot be easily attributed to the direct service provision areas.	<i>Exp</i>	1,756	1,801	1,820
		<i>Rev</i>	(11)	(5)	(1)
		NET	1,745	1,796	1,819
Finance, Property and Rates	This service has the responsibility to generate revenue for Council via rate, levies and charges and to provide sustainable and accountable financial management of Council's resources.	<i>Exp</i>	1,556	1,712	1,694
		<i>Rev</i>	(7,663)	(7,290)	(5,314)
		NET	(6,108)	(5,578)	(3,621)
Customer Service	This service has the responsibility to provide the first point of contact between Council and the public through Council's Customer Service Centres. The service provides overall corporate customer service to the wider community and assists all areas of Council with the provision of corporate responsibility.	<i>Exp</i>	448	481	575
		<i>Rev</i>	-	-	-
		NET	448	481	575
Corporate Services Management	This service has the responsibility to maintain strong governance and administrative systems and to ensure that these systems are responsive, accountable and transparent to internal users and community needs.	<i>Exp</i>	1,456	610	576
		<i>Rev</i>	(13)	(15)	(16)
		NET	1,443	595	560
Contract Management	This service provides oversight and governance on contractual and procurement services undertaken by Council	<i>Exp</i>	260	269	279
		<i>Rev</i>	-	-	-
		NET	260	269	279
Information Services	This services provides management and governance of information flows, storage and retrieval within the organisation in accordance with appropriate legislation and standards.	<i>Exp</i>	2,346	2,918	2,729
		<i>Rev</i>	-	-	-
		NET	2,346	2,918	2,729
People, Performance & Culture	This service provides and develops a cultural of high performance, productivity and accountability across the organisation.	<i>Exp</i>	727	722	780
		<i>Rev</i>	-	-	-
		NET	727	722	780
Risk Management Services	This service has the responsibility to identify, record and manage all business risk associated with Council's activities. This service manages Council's insurance portfolio.	<i>Exp</i>	874	854	1,165
		<i>Rev</i>	(104)	(115)	(115)
		NET	770	739	1,050

Major Initiatives

Ongoing commitment to strong leadership and management

Council will continue to display strong leadership and management in 2022/23 with a range of significant projects to be funded.

Council will undertake a four yearly planning scheme review. This will assess the performance of Council's planning scheme to meet legislative requirements and identify improvements to the planning scheme, as well as establish a forward-looking strategic planning work program. The Planning Scheme will also be made more efficient with additional VicSmart provisions to be incorporated into the Planning Scheme. This project involves the identification of planning permit triggers which can be removed and identify permit triggers that can be reclassified as VicSmart to streamline assessment time lines.

Council will continue to grow its asset management capabilities, undertaking asset condition assessments for drainage and open space in 2022/23. Over recent years Council has made a significant investment into improving its asset management regime. This work is vitally important to ensure Council's asset portfolio is maintained at a level to meet the ongoing demands of the community now and into the future. Part of this important work includes condition assessments across each of Council's asset classes.

Improving the customer experience

The most significant project under this theme will be the implementation of a new Customer Request System (CRS) – A good CRS is a vital tool to assist with the effective and efficient operations of Council. For a number of years Council has persisted with a system that is lacking in its capacity to deliver to a satisfactory level. The new system will be user friendly, provide good efficiencies, greatly improved response times, integration opportunities and offer improved front end engagement with ratepayers. Council has determined that significantly improved benefits can be gained with the implementation of a new CRS, ensuring that customer requests for service are captured, tracked and completed.

Service Performance Outcome Indicators

Service	Indicator	Performance Measure	Computation
Governance	Satisfaction	Satisfaction with Council decisions. (Community satisfaction rating out of 100 with how Council has performed in making decisions in the interests of the community)	Community satisfaction rating out of 100 with how Council has performed in making decisions in the interests of the community

2.5 Reconciliation with budgeted operating result

	Net Cost (Revenue)	Expenditure	Revenue
	\$'000	\$'000	\$'000
Strong and Resilient Economy	4,632	6,960	(2,329)
Valuing The Natural and Built Environment	10,681	14,989	(4,308)
Healthy and Inclusive Community	4,049	12,809	(8,758)
Strong Leadership & Management	4,173	9,618	(5,446)
Total	23,535	44,376	(20,841)
Expenses added in:			
Depreciation	11,076		
Amortisation - right of use assets	24		
Finance costs	57		
Deficit before funding sources	34,692		
Funding sources added in:			
Rates and charges revenue (excluding Waste)	(30,280)		
Capital grants	(4,703)		
Total funding sources	(34,983)		
Operating (surplus)/deficit for the year	(291)		

3. Financial Statements

This section presents information in regard to the Financial Statements and Statement of Human Resources. The budget information for the year 2022/23 has been supplemented with projections to 2025/26.

This section includes the following financial statements prepared in accordance with the Local Government Act 2020 and the Local Government (Planning and Reporting) Regulations 2020.

- Comprehensive Income Statement
- Balance Sheet
- Statement of Changes in Equity
- Statement of Cash Flows
- Statement of Capital Works
- Statement of Human Resources

3.1 Comprehensive Income Statement

For the four years ending 30 June 2026

	NOTES	Forecast	Budget	Projections		
		2021/22 \$'000	2022/23 \$'000	2023/24 \$'000	2024/25 \$'000	2025/26 \$'000
Income						
Rates and charges	4.1.1	32,773	33,687	34,486	35,412	36,358
Statutory fees and fines	4.1.2	826	866	851	864	877
User fees	4.1.3	6,548	7,526	7,753	7,870	7,988
Grants - Operating	4.1.4	19,033	8,605	10,962	11,180	11,401
Grants - Capital	4.1.4	6,619	4,703	1,746	1,789	1,834
Contributions - monetary	4.1.5	420	25	25	25	25
Contributions - non-monetary	4.1.5	-	-	-	-	-
Net gain/(loss) on disposal of property, infrastructure, plant and equipment		(142)	25	-	-	-
Share of net profits/(losses) of associates and joint ventures		30	(68)	-	-	-
Other income	4.1.6	540	365	376	382	387
Total income		66,648	55,735	56,200	57,520	58,870
Expenses						
Employee costs	4.1.7	21,868	23,911	24,509	25,121	25,749
Materials and services	4.1.8	28,917	18,854	19,424	19,715	20,011
Depreciation	4.1.9	10,900	11,076	11,200	11,300	11,400
Amortisation - right of use assets	4.1.10	24	24	17	-	-
Bad and doubtful debts		20	20	20	20	20
Borrowing costs		39	32	5	3	1
Finance Costs - leases		139	25	-	-	-
Other expenses	4.1.11	1,559	1,501	1,296	1,070	843
Total expenses		63,466	55,444	56,473	57,229	58,025
Surplus/(deficit) for the year		3,183	291	(273)	291	846
Other comprehensive income						
Items that will not be reclassified to surplus or deficit in future periods						
Net asset revaluation increment /(decrement)		-	-	-	-	-
Share of other comprehensive income of associates and joint ventures		-	-	-	-	-
Items that may be reclassified to surplus or deficit in future periods (detail as appropriate)						
		-	-	-	-	-
Total other comprehensive income		-	-	-	-	-
Total comprehensive result		3,183	291	(273)	291	846

3.2 Balance Sheet

For the four years ending 30 June 2026

	NOTES	Forecast	Budget	Projections		
		2021/22 \$'000	2022/23 \$'000	2023/24 \$'000	2024/25 \$'000	2025/26 \$'000
Assets						
Current assets						
Cash and cash equivalents		15,999	14,278	16,165	17,873	19,810
Trade and other receivables		3,819	2,748	1,516	1,556	1,593
Inventories		140	175	175	175	175
Other assets		533	366	366	366	366
Total current assets	4.2.1	20,491	17,566	18,222	19,970	21,944
Non-current assets						
Property, infrastructure, plant & equipment		380,816	381,663	379,809	378,253	377,013
Investments in associates, joint arrangement and subsidiaries		467	399	399	399	399
Right-of-use assets	4.2.4	41	17	-	-	-
Total non-current assets	4.2.1	381,324	382,080	380,208	378,652	377,412
Total assets		401,815	399,646	398,430	398,622	399,356
Liabilities						
Current liabilities						
Trade and other payables		8,374	5,685	4,943	5,031	5,107
Trust funds and deposits		678	1,147	1,147	1,147	1,147
Provisions		4,871	4,871	4,784	4,784	4,784
Interest-bearing liabilities	4.2.3	596	125	127	129	-
Lease liabilities	4.2.4	24	18	-	-	-
Total current liabilities	4.2.2	14,543	11,846	11,001	11,090	11,038
Non-current liabilities						
Provisions		5,792	5,792	5,819	5,759	5,699
Interest-bearing liabilities	4.2.3	-	255	129	-	-
Lease liabilities	4.2.4	18	-	-	-	-
Total non-current liabilities	4.2.2	5,810	6,047	5,948	5,759	5,699
Total liabilities		20,353	17,894	16,948	16,849	16,737
Net assets		381,462	381,752	381,481	381,773	382,618
Equity						
Accumulated surplus		141,510	143,578	143,306	143,598	144,443
Reserves		239,951	238,174	238,175	238,175	238,175
Total equity		381,462	381,752	381,481	381,773	382,618

3.3 Statement of Changes in Equity

For the four years ending 30 June 2026

	NOTES	Total \$'000	Accumulated Surplus \$'000	Revaluation Reserve \$'000	Other Reserves \$'000
2022 Forecast Actual					
Balance at beginning of the financial year		378,279	130,794	224,584	22,901
Impact of adoption of new accounting standards		-	-	-	-
Adjusted opening balance		378,279	130,794	224,584	22,901
Surplus/(deficit) for the year		3,183	3,183	-	-
Net asset revaluation increment/(decrement)		-	-	-	-
Transfers to other reserves		-	(9,807)	-	9,807
Transfers from other reserves		-	17,340	-	(17,340)
Balance at end of the financial year		381,462	141,510	224,584	15,367
2023 Budget					
Balance at beginning of the financial year		381,462	141,510	224,584	15,367
Surplus/(deficit) for the year		291	291	-	-
Net asset revaluation increment/(decrement)		-	-	-	-
Transfers to other reserves	4.3.1	-	(6,987)	-	6,987
Transfers from other reserves	4.3.1	-	8,764	-	(8,764)
Balance at end of the financial year	4.3.2	381,752	143,578	224,584	13,590
2024					
Balance at beginning of the financial year		381,752	143,578	224,584	13,590
Surplus/(deficit) for the year		(271)	(271)	-	-
Net asset revaluation increment/(decrement)		-	-	-	-
Transfers to other reserves		-	-	-	-
Transfers from other reserves		-	-	-	-
Balance at end of the financial year		381,481	143,307	224,584	13,590
2025					
Balance at beginning of the financial year		381,481	143,307	224,584	13,590
Surplus/(deficit) for the year		291	291	-	-
Net asset revaluation increment/(decrement)		-	-	-	-
Transfers to other reserves		-	-	-	-
Transfers from other reserves		-	-	-	-
Balance at end of the financial year		381,773	143,598	224,584	13,590
2026					
Balance at beginning of the financial year		381,773	143,598	224,584	13,590
Surplus/(deficit) for the year		846	846	-	-
Net asset revaluation increment/(decrement)		-	-	-	-
Transfers to other reserves		-	-	-	-
Transfers from other reserves		-	-	-	-
Balance at end of the financial year		382,618	144,444	224,584	13,590

3.4 Statement of Cash Flows

For the four years ending 30 June 2026

	Notes	Forecast	Budget	Projections		
		2021/22 \$'000	2022/23 \$'000	2023/24 \$'000	2024/25 \$'000	2025/26 \$'000
		Inflows (Outflows)	Inflows (Outflows)	Inflows (Outflows)	Inflows (Outflows)	Inflows (Outflows)
Cash flows from operating activities						
Rates and charges		32,660	34,822	35,230	35,371	36,320
Statutory fees and fines		826	866	869	863	876
User fees		6,548	7,526	7,921	7,863	7,982
Grants - operating		19,015	8,689	11,199	11,169	11,391
Grants - capital		6,619	4,703	1,784	1,787	1,832
Contributions - monetary		420	25	25	25	25
Trust funds and deposits taken		-	469	-	-	-
Other receipts		540	365	385	381	387
Employee costs		(21,868)	(23,911)	(24,910)	(25,047)	(25,681)
Materials and services		(28,966)	(21,578)	(19,742)	(19,677)	(19,979)
Trust funds and deposits repaid		(63)	-	-	-	-
Other payments		(1,559)	(1,501)	(1,378)	(1,154)	(928)
Net cash provided by/(used in) operating activities	4.4.1	14,172	10,475	11,382	11,581	12,226
Cash flows from investing activities						
Payments for property, infrastructure, plant and equipment		(20,236)	(12,109)	(9,346)	(9,744)	(10,160)
Proceeds from sale of property, infrastructure, plant and equipment		1,155	210	-	-	-
Net cash provided by/ (used in) investing activities	4.4.2	(19,081)	(11,899)	(9,346)	(9,744)	(10,160)
Cash flows from financing activities						
Finance costs		(39)	(32)	(5)	(3)	(1)
Proceeds from borrowings		-	380	-	-	-
Repayment of borrowings		(209)	(596)	(125)	(127)	(129)
Interest paid - lease liability		(139)	(25)	-	-	-
Repayment of lease liabilities		(664)	(24)	(18)	-	-
Net cash provided by/(used in) financing activities	4.4.3	(1,051)	(296)	(149)	(130)	(130)
Net increase/(decrease) in cash & cash equivalents		(5,959)	(1,721)	1,887	1,708	1,937
Cash and cash equivalents at the beginning of the financial year		21,958	15,999	14,278	16,165	17,873
Cash and cash equivalents at the end of the financial year		15,999	14,278	16,165	17,873	19,810

3.5 Statement of Capital Works

For the four years ending 30 June 2026

	Notes	Forecast	Budget	Projections		
		2021/22 \$'000	2022/23 \$'000	2023/24 \$'000	2024/25 \$'000	2025/26 \$'000
Property						
Land		-	-	-	-	-
Buildings		1,442	984	784	819	856
Total land & Buildings		1,442	984	784	819	856
Total property	4.5.2	1,442	984	784	819	856
Plant and equipment						
Plant, machinery and equipment		2,205	1,537	1,606	1,678	1,754
Fixtures, fittings and furniture		22	-	-	-	-
Computers and telecommunications		103	455	387	404	422
Total plant and equipment	4.5.2	2,330	1,992	1,993	2,082	2,176
Infrastructure						
Roads		8,126	4,235	4,213	4,403	4,601
Bridges		2,239	984	1,028	1,075	1,123
Footpaths and cycleways		1,477	191	187	195	204
Drainage		977	140	94	98	103
Other infrastructure		3,643	3,583	1,047	1,071	1,097
Total infrastructure	4.5.2	16,463	9,133	6,569	6,842	7,128
Total capital works expenditure		20,236	12,109	9,346	9,744	10,160
Represented by:						
New asset expenditure		659	158	250	250	250
Asset renewal expenditure		15,087	8,465	8,846	9,244	9,660
Asset upgrade expenditure		4,490	3,486	250	250	250
Total capital works expenditure		20,236	12,109	9,346	9,744	10,160
Funding Sources represented by:						
Grants		6,803	4,703	1,746	1,789	1,834
Contributions		120	-	-	-	-
Council Cash		13,313	7,406	7,600	7,955	8,326
Borrowings		-	-	-	-	-
Total capital works expenditure		20,236	12,109	9,346	9,744	10,160

3.6 Statement of Human Resources

For the four years ending 30 June 2026

	Forecast	Budget	Projections		
	2021/22	2022/23	2023/24	2024/25	2025/26
	\$'000	\$'000	\$'000	\$'000	\$'000
Staff expenditure					
Employee costs - operating	21,868	23,911	24,509	25,121	25,749
Employee costs - capital	954	1,119	860	925	965
Total staff expenditure	22,822	25,030	25,369	26,046	26,714
	FTE	FTE	FTE	FTE	FTE
Staff numbers					
Employees	238.4	253.0	253.0	253.0	253.0
Total staff numbers	238.4	253.0	253.0	253.0	253.0

A summary of human resources expenditure categorised according to the organisational structure of Council is included below:

Department	Budget 2022/23 \$'000	Comprises			
		Permanent		Casual	Temp
		Full Time \$'000	Part time \$'000	\$'000	\$'000
Chief Executive Office	763	661	103	-	-
Corporate Services	3,703	3,052	652	-	-
Development and Community Services	9,628	4,536	4,545	548	-
Environment and Infrastructure Services	9,817	9,261	557	-	-
Total permanent staff expenditure	23,911	17,510	5,857	548	-
Capitalised labour costs	1,119				
Total expenditure	25,030				

A summary of the number of full time equivalent (FTE) Council staff in relation to the above expenditure is included below:

Department	Budget 2022/23	Comprises			
		Permanent		Casual	Temp
		Full Time	Part time		
Chief Executive Office	8	7	1	-	-
Corporate Services	39	32	7	-	-
Development and Community Services	102	48	48	6	-
Environment and Infrastructure Services	104	98	6	-	-
Total staff	253	185	62	6	-

3.7 Summary of Planned Human Resources Expenditure

For the four years ending 30 June 2026

	2022/23 \$'000	2023/24 \$'000	2024/25 \$'000	2025/26 \$'000
Chief Executive Office				
Permanent - Full time	661	653	669	685
Women	661	653	669	685
Men	0	0	0	0
Self-described gender	0	0	0	0
Permanent - Part time	104	103	105	108
Women	104	103	105	108
Men	0	0	0	0
Self-described gender	0	0	0	0
Total Chief Executive Office	765	756	774	792
Corporate Services				
Permanent - Full time	3,051	3,015	3,085	3,160
Women	1,946	1,923	1,968	2,015
Men	756	747	764	783
Self-described gender	350	345	353	362
Permanent - Part time	652	644	659	675
Women	491	485	497	509
Men	0	0	0	0
Self-described gender	161	159	162	166
Total Corporate Services	3,703	3,660	3,744	3,835
Development and Community Services				
Permanent - Full time	4,535	4,481	4,585	4,696
Women	2,645	2,614	2,674	2,739
Men	1,512	1,494	1,528	1,565
Self-described gender	378	373	382	391
Permanent - Part time	4,544	4,490	4,594	4,706
Women	3,760	3,716	3,801	3,894
Men	444	439	449	460
Self-described gender	340	336	344	352
Total Development and Community Services	9,079	8,972	9,179	9,402
Environment and Infrastructure Services				
Permanent - Full time	9,258	9,149	9,360	9,588
Women	1,323	1,307	1,337	1,370
Men	7,180	7,095	7,259	7,435
Self-described gender	756	747	764	783
Permanent - Part time	557	551	564	577
Women	312	308	315	323
Men	0	0	0	0
Self-described gender	246	243	248	254
Total Environment and Infrastructure Services	9,816	9,700	9,924	10,165
Casuals, temporary and other expenditure	548	562	576	590
Capitalised labour costs	1,119	860	925	965
Total staff expenditure	25,030	24,509	25,121	25,749

	2022/23 FTE	2023/24 FTE	2024/25 FTE	2025/26 FTE
Chief Executive Office				
Permanent - Full time	7.0	7.0	7.0	7.0
Women	7.0	7.0	7.0	7.0
Men	0.0	0.0	0.0	0.0
Self-described gender	0.0	0.0	0.0	0.0
Permanent - Part time	1.1	1.1	1.1	1.1
Women	1.1	1.1	1.1	1.1
Men	0.0	0.0	0.0	0.0
Self-described gender	0.0	0.0	0.0	0.0
Total Chief Executive Office	8.1	8.1	8.1	8.1
Corporate Services				
Permanent - Full time	32.3	32.3	32.3	32.3
Women	20.6	20.6	20.6	20.6
Men	8.0	8.0	8.0	8.0
Self-described gender	3.7	3.7	3.7	3.7
Permanent - Part time	6.9	6.9	6.9	6.9
Women	5.2	5.2	5.2	5.2
Men	0.0	0.0	0.0	0.0
Self-described gender	1.7	1.7	1.7	1.7
Total Corporate Services	39.2	39.2	39.2	39.2
Development and Community Services				
Permanent - Full time	48.0	48.0	48.0	48.0
Women	28.0	28.0	28.0	28.0
Men	16.0	16.0	16.0	16.0
Self-described gender	4.0	4.0	4.0	4.0
Permanent - Part time	48.1	48.1	48.1	48.1
Women	39.8	39.8	39.8	39.8
Men	4.7	4.7	4.7	4.7
Self-described gender	3.6	3.6	3.6	3.6
Total Development and Community Services	96.1	96.1	96.1	96.1
Environment and Infrastructure Services				
Permanent - Full time	98.0	98.0	98.0	98.0
Women	14.0	14.0	14.0	14.0
Men	76.0	76.0	76.0	76.0
Self-described gender	8.0	8.0	8.0	8.0
Permanent - Part time	5.9	5.9	5.9	5.9
Women	3.3	3.3	3.3	3.3
Men	0.0	0.0	0.0	0.0
Self-described gender	2.6	2.6	2.6	2.6
Total Environment and Infrastructure Services	103.9	103.9	103.9	103.9
Casuals and temporary staff	0.8	0.8	0.8	0.8
Capitalised labour	5.0	5.0	5.0	5.0
Total staff numbers	253.1	253.1	253.1	253.1

4. Notes to the financial statements

This section presents detailed information on material components of the financial statements. Council needs to assess which components are material, considering the dollar amounts and nature of these components.

4.1 Comprehensive Income Statement

4.1.1 Rates and charges

Rates and charges are required by the Act and the Regulations to be disclosed in Council's budget.

As per the Local Government Act 2020, Council is required to adopt a four year Revenue and Rating Plan which is a four year plan for how Council will generate income to deliver the Council Plan, program and services and capital works commitments over a four-year period.

In developing the Budget, rates and charges were identified as an important source of revenue. Planning for future rate increases has therefore been an important component of the financial planning process. The Fair Go Rates System (FGRS) sets out the maximum amount councils may increase rates in a year. For 2022/23 the FGRS cap has been set at 1.75%. The cap applies to both general rates and municipal charges and is calculated on the basis of council's average rates and charges.

The level of required rates and charges has been considered in this context, with reference to Council's other sources of income and the planned expenditure on services and works to be undertaken for the community.

To achieve these objectives while maintaining service levels and a strong capital expenditure program, the average general rate and the municipal charge will increase by 1.75% in line with the rate cap.

The annual kerbside collection charge is budgeted to increase, with the weekly waste charge increasing by \$11 from \$308 to \$319 and the fortnightly waste charge by \$8 from \$235 to \$243.

4.1.1(a) The reconciliation of the total rates and charges to the Comprehensive Income Statement is as follows:

	2021/22 Forecast \$'000	2022/23 Budget \$'000	Change \$'000	%
General rates*	26,193	26,881	688	2.63%
Municipal charge*	2,880	2,944	64	2.22%
Waste management charge	3,211	3,407	196	6.1%
Special rates and charges	22	22	-	0.00%
Supplementary rates and rate adjustments	100	100	0	-
Revenue in lieu of rates	227	233	6	2.73%
Interest on rates and charges	140	100	(40)	(28.6%)
Total rates and charges	32,773	33,687	914	2.79%

*These items are subject to the rate cap established under the FGRS

4.1.1(b) The rate in the dollar to be levied as general rates under section 158 of the Act for each type or class of land compared with the previous financial year

Type or class of land	2021/22 cents/\$CIV	2022/23 cents/\$CIV	Change
Residential - Colac/Elliminyt	0.003580	0.002858	(20.2%)
Residential - Balance Of Shire	0.003043	0.002429	(20.3%)
Holiday Rental	0.003580	0.002858	(20.2%)
Rural Farm	0.002685	0.002144	(20.1%)
Commercial/Industrial - Colac/Elliminyt	0.005907	0.004716	(20.2%)
Commercial/Industrial - Balance Of Shire	0.005012	0.004001	(20.2%)

4.1.1(c) The estimated total amount to be raised by general rates in relation to each type or class of land, and the estimated total amount to be raised by general rates, compared with the previous financial year

Type or class of land	2021/22	2022/23	Change	
	\$	\$	\$	%
Residential - Colac/Elliminyt	7,519,246	7,541,879	22,633	0.3%
Residential - Balance Of Shire	8,074,780	8,869,530	794,750	9.8%
Holiday Rental	1,473,743	1,463,153	(10,590)	(0.7%)
Rural Farm	6,026,064	6,239,932	213,868	3.5%
Commercial/Industrial - Colac/Elliminyt	2,112,455	1,849,469	(262,986)	(12.4%)
Commercial/Industrial - Balance Of Shire	986,778	916,997	(69,781)	(7.1%)
Total amount to be raised by general rates	26,193,066	26,880,960	687,894	2.6%

4.1.1(d) The number of assessments in relation to each type or class of land, and the total number of assessments, compared with the previous financial year

Type or class of land	2021/22	2022/23	Change	
	Number	Number	Number	%
Residential - Colac/Elliminyt	5,853	5,875	22	0.4%
Residential - Balance Of Shire	5,342	5,441	99	1.9%
Holiday Rental	618	580	(38)	(6.1%)
Rural Farm	2,838	2,855	17	0.6%
Commercial/Industrial - Colac/Elliminyt	658	662	4	0.6%
Commercial/Industrial - Balance Of Shire	328	332	4	1.2%
Total number of assessments	15,637	15,745	108	0.7%

4.1.1(e) The basis of valuation to be used is the Capital Improved Value (CIV).

4.1.1(f) The estimated total value of each type or class of land, and the estimated total value of land, compared with the previous financial year

Type or class of land	2021/22	2022/23	Change	
	\$	\$	\$	%
Residential - Colac/Elliminyt	2,100,348,000	2,638,866,000	538,518,000	25.6%
Residential - Balance Of Shire	2,653,559,000	3,651,515,000	997,956,000	37.6%
Holiday Rental	411,660,000	511,950,000	100,290,000	24.4%
Rural Farm	2,244,344,000	2,910,416,000	666,072,000	29.7%
Commercial/Industrial - Colac/Elliminyt	357,619,000	392,169,000	34,550,000	9.7%
Commercial/Industrial - Balance Of Shire	196,883,000	229,192,000	32,309,000	16.4%
Total value of land	7,964,413,000	10,334,108,000	2,369,695,000	29.8%

4.1.1(g) The municipal charge under Section 159 of the Act compared with the previous financial year

Type of Charge	Per Rateable Property 2021/22	Per Rateable Property 2022/23	Change	
	\$	\$	\$	%
Municipal Charge	195	198	3	1.5%

4.1.1(h) The estimated total amount to be raised by municipal charges compared with the previous financial year

Type of Charge	2021/22	2022/23	Change	
	\$	\$	\$	%
Municipal Charge	2,879,955	2,943,468	63,513	2.2%

4.1.1(i) The rate or unit amount to be levied for each type of service rate or charge under Section 162 of the Act compared with the previous financial year

Type of Charge	Per Rateable Property	Per Rateable Property	Change	
	2021/22	2022/23	\$	%
Weekly Kerbside collection	\$ 308	\$ 319	\$ 11	3.6%
Fortnightly Kerbside collection	\$ 235	\$ 243	\$ 8	3.4%

4.1.1(j) The estimated total amount to be raised by each type of service rate or charge, and the estimated total amount to be raised by service rates and charges, compared with the previous financial year

Type of Charge	2021/22	2022/23	Change	
	\$	\$	\$	%
Weekly Kerbside collection	3,171,784	3,366,088	194,304	6.1%
Fortnightly Kerbside collection	39,245	41,067	1,822	4.6%
Total	3,211,029	3,407,155	196,126	6.1%

4.1.1(k) The estimated total amount to be raised by all rates and charges compared with the previous financial year

	2021/22	2022/23	Change	
	\$	\$	\$	%
General rates	26,193,065	26,880,960	687,895	2.6%
Municipal charge	2,879,955	2,943,468	63,513	2.2%
Kerbside collection and recycling	3,211,029	3,407,155	196,126	6.1%
Tirrengower Drainage Scheme	22,500	22,500	-	-
Total Rates and charges	32,306,549	33,254,083	947,534	2.9%

4.1.1(l) Fair Go Rates System Compliance

Colac Otway Shire Council is required to comply with the State Government's Fair Go Rates System (FGRS). The table below details the budget assumptions consistent with the requirements of the Fair Go Rates System.

	2021/22	2022/23
Total Rates	\$ 28,646,750	\$ 29,314,074
Number of rateable properties	15,637	15,745
Base Average Rate	\$ 1,832	\$ 1,862
Maximum Rate Increase (set by the State Government)	1.50%	1.75%
Capped Average Rate	\$ 1,859	\$ 1,894
Maximum General Rates and Municipal Charges Revenue	\$ 29,076,451	\$ 29,827,070
Budgeted General Rates and Municipal Charges Revenue	\$ 29,073,020	\$ 29,824,428
Budgeted Supplementary Rates	\$ 100,000	\$ 100,000
Budgeted Total Rates and Municipal Charges Revenue	\$ 29,173,020	\$ 29,924,428

4.1.1(m) Any significant changes that may affect the estimated amounts to be raised by rates and charges

There are no known significant changes which may affect the estimated amounts to be raised by rates and charges. However, the total amount to be raised by rates and charges may be affected by:

- The making of supplementary valuations (2022/23: estimated \$100,000 and 2021/22: \$100,000)
- The variation of returned levels of value (e.g. valuation appeals)
- Changes of use of land such that rateable land becomes non-rateable land and vice versa
- Changes of use of land such that residential land becomes business land and vice versa.

4.1.1(n) Differential rates

The rate and amount of rates payable in relation to land in each category of differential are listed above in item 4.1.1(b).

Each differential rate will be determined by multiplying the Capital Improved Value of rateable land (categorised by the characteristics described below) by the relevant rate in the dollar listed above.

Council believes each differential rate will contribute to the equitable and efficient carrying out of council functions. Details of the objectives of each differential rate, the types of classes of land which are subject to each differential rate and the uses of each differential rate are set out below.

General Rates Charges

Please note, the following categories and differentials are subject to adoption of the Revenue and Rating Plan 2021 - 2025.

Residential – Colac/Elliminyt

Definition:

Any land, whether vacant or built upon, which is located in Colac, Colac East, Colac West and Elliminyt that is not zoned for commercial or industrial use and which does not have the characteristics of:

- a) Rural Farm Land;
- b) Holiday Rental Land; or
- c) Commercial/Industrial Land – Colac, Colac East, Colac West or Elliminyt.

and whose highest and best use is deemed to be as residential land.

Objectives:

To ensure that Council has adequate funding to undertake its strategic, statutory, service provision and community services obligations and to ensure that the differential rate in the dollar declared for defined general rate land properties is fair and equitable, having regard to the cost and the level of benefits derived from provision of Council services.

Types and Classes:

Rateable land having the relevant characteristics described below:

- a) used primarily for residential purposes,
- b) highest and best use is deemed to be as residential,
- c) any land that is not defined as Holiday rental land, Farm Land or Commercial/Industrial Land.

Use of Rate:

The differential rate will be used to fund items of expenditure described in the Budget adopted by Council. The level of the differential rate is the level which Council considers is necessary to achieve the objectives specified above.

Level of Rate:

100% of the base rate. This rating category is deemed to be the "base rate" due to it containing the majority of assessments.

Use of Land:

Any use permitted under the Colac Otway Shire Council Planning Scheme to be used for residential purposes.

Geographic Location:

In the localities of Colac, Colac East, Colac West and Elliminyt.

Planning Scheme Zoning:

The zoning applicable to each rateable land within this category, as determined by consulting maps referred to in the relevant Colac Otway Shire Council Planning Scheme.

Types of Buildings:

All buildings which are already constructed on the land or which are constructed prior to the end of the financial year.

Residential – Balance of Shire

Definition:

Any land, whether vacant or built upon, which is located in Colac, Colac East, Colac West and Elliminyt that is not zoned for commercial or industrial use and which does not have the characteristics of:

- a) Rural Farm Land;
- b) Holiday Rental Land; or
- c) Commercial/Industrial Land – Colac, Colac East, Colac West or Elliminyt.

and whose highest and best use is deemed to be as residential land.

Objectives:

To ensure that Council has adequate funding to undertake its strategic, statutory, service provision and community services obligations and to ensure that the differential rate in the dollar declared for defined general rate land properties is fair and equitable, having regard to the cost and the level of benefits derived from provision of Council services.

Characteristics:

The characteristics of the planning scheme zoning are applicable to the determination of vacant land which will be subject to the rate of residential land. The vacant land affected by this rate is that which is zoned residential under the Colac Otway Shire Council Planning Scheme. The classification of the land will be determined by the occupation of that land for its best use and have reference to the planning scheme zoning.

Types and Classes:

Rateable land having the relevant characteristics described below:

- a) used primarily for residential purposes,
- b) highest and best use is deemed to be as residential,
- c) any land that is not defined as Holiday rental land, Farm Land or Commercial/Industrial Land.

Use of Rate:

The differential rate will be used to fund items of expenditure described in the Budget adopted by Council. The level of the differential rate is the level which Council considers is necessary to achieve the objectives specified above.

Level of Rate:

85% of the base rate. The justification for this category to be rated at a lesser rate than the base rate is that properties in this category are:

- generally in smaller townships or rural areas;
- have less access to the full suite of services and amenities provided by Council; and
- due to small populations are generally less likely to attract expenditure by Council.

Use of Land:

Any use permitted under the Colac Otway Shire Council Planning Scheme to be used for residential purposes.

Geographic Location:

In the localities of Colac, Colac East, Colac West and Elliminyt.

Planning Scheme Zoning:

The zoning applicable to each rateable land within this category, as determined by consulting maps referred to in the relevant Colac Otway Shire Council Planning Scheme.

Types of Buildings:

All buildings which are already constructed on the land or which are constructed prior to the end of the financial year.

Holiday Rental

Definition:

Any land that contains a dwelling, cabin or house or part of a house that:

- a) Is used for the provision of holiday accommodation for the purpose of generating income; or
- b) Is made generally available for holiday accommodation and is a secondary or supplemental source of income for the owner.

Note: Typically, the category will include absentee owned holiday houses publicly made available for short term accommodation for a tariff, owner occupied "Bed and Breakfast" establishments, farm properties with accommodation cabins, holiday farms and the like.

The category will not include:

- absentee owned holiday houses that are not publicly made available for hire but are used by family/friends of the owner for short term holiday accommodation, and
- land used to provide tourist/holiday accommodation on an overtly commercial scale and basis where the provision of accommodation is an integral part of the use of the property.

The types of properties excluded from this category would therefore include motels, resorts, hotels with accommodation, caravan parks, centrally managed and promoted multi-unit developments and the like.

Objectives:

To ensure that Council has adequate funding to undertake its strategic, statutory, service provision and community services obligations and to ensure that the differential rate in the dollar declared for defined general rate land properties is fair and equitable, having regard to the cost and the level of benefits derived from provision of Council services.

Characteristics:

Properties included in this rating category will be characterised by their use and/or availability for short term holiday accommodation for a tariff. The proportion of the year for which they are used for this purpose is not relevant.

The extent to which a property is let out for short term holiday accommodation will vary from property to property and will depend on a variety of factors.

A common factor however is the most property owners have the property set up as a business for taxation purposes.

Types and Classes:

Rateable land having the relevant characteristics described below:

- a) used for the provision of holiday accommodation for the purpose of generating income,
- b) Is made generally available for holiday accommodation and is a secondary or supplemental source of income for the owner.

Use of Rate:

The differential rate will be used to fund items of expenditure described in the Budget adopted by Council. The level of the differential rate is the level which Council considers is necessary to achieve the objectives specified above.

Level of Rate:

100% of the base rate. The justification for this category to be rated at the base rate is that

- the provision of short term holiday accommodation is generally conducted as a semi commercial activity, so rating these properties at the Commercial rate in the dollar would be unfair;
- There is also a wide variation as to the extent to which these properties are used for this purpose, so rating these properties at the Commercial rate in the dollar would be unfair and may force reluctant property owners to make the property available more often, possibly saturating the market and reducing returns able to be generated by many
- Use of these properties for this purpose tends to be seasonal

It is recognised however that:

- these properties are in direct competition with other holiday accommodation property types that are included in the Commercial rating category;
- owners of these properties benefit from using the property in this manner and that customers to these properties use facilities and infrastructure provided by the shire; and
- rates paid for properties in this category are generally a tax deductible expense.

It is therefore considered fair and equitable that these properties pay a rate in the dollar higher than the "Residential - Balance of Shire" rate in the dollar, but less than the Commercial rate in the dollar.

It is noted this means the Holiday rental properties in Colac/Elliminyt pay no more than the "Residential – Colac/Elliminyt" rate. Historically, there have been few properties in Colac/Elliminyt used for short term holiday accommodation, however with the rise of AirBnB, etc, this is an issue that will be monitored.

Use of Land:

Any use permitted under the Colac Otway Shire Council Planning Scheme that allows use of the property to provide short term holiday accommodation.

Geographic Location:

In all the localities of the Colac Otway Shire.

Planning Scheme Zoning:

The zoning applicable to each rateable land within this category, as determined by consulting maps referred to in the relevant Colac Otway Shire Council Planning Scheme.

Types of Buildings:

All buildings which are already constructed on the land or which are constructed prior to the end of the financial year.

Rural Farm

Definition:

Any land located within the shire which is "Farm Land" within the meaning of section 2 of the Valuation of Land Act 1960 and is zoned to allow land to be used for rural and/or farming purposes.

Any land which is "Farm Land" within the meaning of Section 2(1) of the Valuation of Land Act 1960.

- a) Farm Land means any rateable land that is 2 or more hectares in area;
- b) used primarily for primary producing purposes from its activities on the land; used primarily for grazing (including agistment), dairying, pig-farming, poultry farming, fish farming, tree farming, bee keeping, viticulture, horticulture, fruit growing or the growing of crops of any kind or for any combination of those activities; and

That is used by a business –

- That has a significant and substantial commercial purpose of character;
- That seeks to make a profit on a continuous or repetitive basis from its activities on the land; and
- That is making a profit from its activities on the land, or that has a reasonable prospect of making a profit from its activities on the land if it continues to operate in the way that it is operating.

Typically, these properties may contain buildings used as a residence and for farm purposes and will also contain land with no buildings located upon it.

In addition, it may include small parcels of undeveloped land that do not meet the meaning of "Farm Land" prescribed in of section 2 of the Valuation of Land Act 1960, but are also deemed unlikely to be granted a town planning permit for a dwelling to be located on the property.

Typically these properties will be:

- a) up to 5 hectares in area;
- b) be zoned to allow the land to be used for rural and/or farming purposes;
- c) been deemed unviable for the purposes of carrying on a business of primary production by Council; and
- d) been deemed unsuitable to allow the construction of a dwelling.

Objectives:

To ensure that Council has adequate funding to undertake its strategic, statutory, service provision and community services obligations and to ensure that the differential rate in the dollar declared for defined Farm Rate land properties is fair and equitable, having regard to the cost and the level of benefits derived from provision of Council services with considerations to maintain agriculture as a major industry in the municipal district, to facilitate the longevity of the farm sector and achieve a balance between providing for municipal growth and retaining the important agricultural economic base.

Characteristics:

The characteristics of the Rural Farm planning scheme zoning are applicable to the determination of whether land is included in the Rural Farm rating category.

Types and Classes:

Farm Land having the relevant characteristics described above that is:

- a) used primarily for primary production purposes; or
- b) any land that is not defined as Residential, Holiday Rental or Commercial/Industrial Land.

Use of Rate:

The differential rate will be used to fund items of expenditure described in the Budget adopted by Council. The level of the differential rate is the level which Council considers is necessary to achieve the objectives specified above.

Level of Rate:

75% of the base rate. The justification for this category to be rated at a lesser rate than the base rate is that properties in this category are:

- in rural areas;
- have less access to the full suite of services and amenities provided by Council;
- are generally less likely to attract expenditure by Council;
- due to the land area required to operate, these properties have higher valuations (and therefore higher rates) than residential properties; and
- tend to operate in an environment that is subject to the vagaries of weather and external factors beyond the farmer's control.

Use of Land:

Any use permitted under the Colac Otway Shire Council Planning Scheme.

Geographic Location:

In all the localities of the Colac Otway Shire that contain land zoned in the Colac Otway Planning Scheme as Rural Farm.

Planning Scheme Zoning:

The zoning applicable to each rateable land within this category, as determined by consulting maps referred to in the relevant Colac Otway Shire Council Planning Scheme.

Types of Buildings:

All buildings which are already constructed on the land or which are constructed prior to the end of the financial year.

Commercial/Industrial – Colac/Elliminyt

Definition:

Any land which is located in Colac, Colac East, Colac West or Elliminyt which does not have the characteristics of:

- a) Rural Farm Land;
- b) Residential Land – Colac, Colac East, Colac West or Elliminyt; or
- c) Holiday Rental Land; and;

Is used primarily for:

- a. The sale of goods or services;
- b. Other commercial purposes; or
- c. Industrial purposes, or

is land which is vacant but zoned for commercial or industrial use.

Objectives:

To ensure that Council has adequate funding to undertake its strategic, statutory, service provision and community services obligations and to ensure that the differential rate in the dollar declared for defined Commercial/Industrial Rate land properties is fair and equitable, having regard to the cost and the level of benefits derived from provision of Council services.

The commercial businesses of Colac Otway Shire Council benefit from ongoing significant investment by Council in services and infrastructure. Council also notes the tax deductibility of Council rates for commercial properties which is not available to the residential sector, and also the income generating capability of commercial based properties.

The Commercial differential rate is applied to promote the economic development objectives for the Colac Otway Shire Council as outlined in the Council Plan. These objectives include an ongoing significant investment to create a vibrant economy and includes the maintenance and improvement of tourism infrastructure. Construction and maintenance of public infrastructure, development and provision of health and community services and the general provision of support services and promotion of business in the municipality.

Characteristics:

The characteristics of the planning scheme zoning are applicable to the determination of vacant land which will be subject to the rate applicable to Commercial/Industrial Land. The classification of the land will be determined by the occupation of that land for its best use and have reference to the planning scheme zoning.

Types and Classes:

Commercial/Industrial having the relevant characteristics described below:

- a) used primarily for commercial or industrial purposes; or
- b) any land that is not defined as Residential, Holiday Rental or Farm Land.

Use of Rate:

The differential rate will be used to fund items of expenditure described in the Budget adopted by Council. The level of the differential rate is the level which Council considers is necessary to achieve the objectives specified above.

Level of Rate:

165% of the base rate. The rationale for this category to be rated at a rate above the base rate is that:

- businesses conducted at these properties benefit from the services and facilities provided by Council;
- services and facilities provided by the shire help to attract residents to the shire, which can provide businesses with both a source of labour and customers; and
- businesses generally have a capacity pay, which is complimented by rates being a tax deductible expense.

It is therefore deemed fair and equitable that properties in this category pay rates at a higher rate in the dollar than the base rate.

Use of Land:

Any use permitted under the Colac Otway Shire Council Planning Scheme.

Geographic Location:

In the localities of Colac, Colac East, Colac West and Elliminyt.

Planning Scheme Zoning:

The zoning applicable to each rateable land within this category, as determined by consulting maps referred to in the relevant Colac Otway Shire Council Planning Scheme.

Types of Buildings:

All buildings which are already constructed on the land or which are constructed prior to the end of the financial year.

Commercial/Industrial – Balance of Shire

Definition:

Any land which is located in localities other than Colac, Colac East, Colac West or Elliminyt which does not have the characteristics of:

- a) Rural Farm Land;
- b) Residential Land – Colac, Colac East, Colac West or Elliminyt; or
- c) Holiday Rental Land; and;

is used primarily for:

- a. The sale of goods or services;
- b. Other commercial purposes; or
- c. Industrial purposes, or

is land which is vacant but zoned for commercial or industrial use.

Objectives:

To ensure that Council has adequate funding to undertake its strategic, statutory, service provision and community services obligations and to ensure that the differential rate in the dollar declared for defined Commercial/Industrial Rate land properties is fair and equitable, having regard to the cost and the level of benefits derived from provision of Council services.

The commercial businesses of Colac Otway Shire Council benefit from ongoing significant investment by Council in services and infrastructure. Council also notes the tax deductibility of Council rates for commercial properties which is not available to the residential sector, and also the income generating capability of commercial based properties.

The Commercial differential rate is applied to promote the economic development objectives for the Colac Otway Shire Council as outlined in the Council Plan. These objectives include an ongoing significant investment to create a vibrant economy and includes the maintenance and improvement of tourism infrastructure. Construction and maintenance of public infrastructure, development and provision of health and community services and the general provision of support services and promotion of business in the municipality.

Characteristics:

The characteristics of the planning scheme zoning are applicable to the determination of vacant land which will be subject to the rate applicable to Commercial/Industrial Land. The classification of the land will be determined by the occupation of that land for its best use and have reference to the planning scheme zoning.

Types and Classes:

Commercial/Industrial having the relevant characteristics described below:

- a) used primarily for commercial or industrial purposes; or
- b) any land that is not defined as Residential, Holiday Rental or Farm Land.

Use of Rate:

The differential rate will be used to fund items of expenditure described in the Budget adopted by Council. The level of the differential rate is the level which Council considers is necessary to achieve the objectives specified above.

Level of Rate:

140% of the base rate. The rationale for this category to be rated at a rate above the base rate is that:

- businesses conducted at these properties benefit from the services and facilities provided by Council;
- services and facilities provided by the shire help to attract residents to the shire, which can provide businesses with both a source of labor and customers; and
- businesses generally have a capacity pay, which is complimented by rates being a tax deductible expense.

However, as properties in this category are generally located in smaller townships, there can be less opportunity to generate revenue. This can vary depending on the type of business.

It is therefore deemed fair and equitable that properties in this category pay rates at a higher rate in the dollar than the base rate but less than the rate in the dollar for "Commercial/Industrial - Colac/Elliminyt"

Use of Land:

Any use permitted under the Colac Otway Shire Council Planning Scheme.

Geographic Location:

In the localities of Colac, Colac East, Colac West and Elliminyt.

Planning Scheme Zoning:

The zoning applicable to each rateable land within this category, as determined by consulting maps referred to in the relevant Colac Otway Shire Council Planning Scheme.

Types of Buildings:

All buildings which are already constructed on the land or which are constructed prior to the end of the financial year.

Other Charges

Municipal Charge

A Municipal Charge be declared for the budgeted period pertaining to this budget document to cover some of the administrative costs of the Council.

The Municipal Charge to be as stated in item 4.1.1(g) per annum for each rateable property in respect of which a municipal charge can be levied.

Annual Service (Waste Management) Charges

An annual service charge for the weekly and fortnightly domestic kerbside collection service is also levied. The aim of the charge is to apportion the total cost of managing the collection, transportation and disposal of domestic waste, to the owners of all properties that derive a benefit from having the service available for use.

The charge is therefore levied on all developed assessments used primarily for residential or commercial purposes that are located on the designated collection routes.

The charge is not levied on vacant land properties. Commercial/Industrial properties may apply for an exemption from the charge if they produce non domestic types of waste and provide proof they have engaged a contractor to collect and dispose of their waste.

Tirrengower Special (Drainage) Scheme

Colac Otway Shire Council utilise Special Charges on a case-by-case basis, except for the application of the Tirrengower Special (Drainage) Scheme. This is an ongoing scheme where landholders who benefit from the infrastructure contribute an annual amount equal to \$2.50 per hectare.

The special charge for the Tirrengower drainage works previously declared by Council to be fixed at \$2.50 per hectare for the period 1 July 2021 to 30 June 2022.

4.1.2 Statutory fees and fines

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Statutory Planning Operations	320	373	53	16.6%
Public Health Operations	257	232	(25)	(9.7%)
Building Services Operations	107	118	11	10.1%
Local Laws Operations	72	72	0	-
Property & Rates Operations	33	42	9	27.3%
Infrastructure Customer Services	20	11	(9)	(45.0%)
Emergency Management Operations	14	14	0	-
Planning Compliance	3	3	0	4.0%
Corporate Services Management	-	1	1	-
Total statutory fees and fines	826	866	40	4.8%

The statutory fees generated from Council are expected to increase slightly in 2022/23.

4.1.3 User fees

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Aged Care Management Administration	3,357	3,958	601	17.9%
Bluewater Fitness Centre Operations	1,362	1,500	138	10.1%
Colac Livestock Selling Centre Operations	445	467	22	4.9%
COPACC Management Operations	304	263	(42)	(13.7%)
Great Ocean Road VIC Operations	224	224	0	-
Waste Management Administration	210	315	104	49.6%
Local Laws Operations	171	218	48	27.9%
Apollo Bay Harbour Admin	145	147	2	1.4%
Infrastructure Development	140	175	35	25.0%
Family & Children's Services Operations	124	81	(43)	(34.7%)
Colac Visitor Information Centre Operations	35	35	0	-
Airfield Operations	20	22	2	11.4%
Building Services Operations	6	5	(2)	(27.4%)
Public Health Operations	3	3	0	-
Standpipe Management Operations	1	1	(0)	(16.7%)
Risk Management Operations	1	1	0	-
Statutory Planning Operations	1	1	0	-
Strategic Asset & Property Services Operations	-	108	108	-
Financial Services Operations	-	2	2	-
Events Operations	-	4	4	-
Total user fees	6,548	7,526	978	14.9%

The budgeted increase in user fees is largely due to continued expected growth in delivery of fully-funded Home Care Packages in 2022/23. This increase is offset by the costs to deliver the additional packages, as shown in the '4.1.7 Employee Cost' analysis.

4.1.4 Grants

Grants are required under the Act and the Regulations to be disclosed in Council's annual budget.

	Forecast 2021/22 \$'000	Budget 2022/23 \$'000	Change \$'000	%
Grants were received in respect of the following:				
Summary of grants				
Commonwealth funded grants	18,328	7,454	(10,874)	(59.3%)
State funded grants	7,325	5,855	(1,470)	(20.1%)
Total grants received	25,653	13,309	(12,344)	(48.1%)
(a) Operating Grants				
Recurrent - Commonwealth Government				
Family & Children's Services Operations	425	330	(95)	(22.4%)
Aged Care Management Administration	91	91	0	-
Other	66	66	0	-
Victorian Grants Commission	9,134	5,264	(3,870)	(42.4%)
Recurrent - State Government				
Aged Care Management Administration	1,047	1,048	1	0.1%
Port of Apollo Bay Operations	891	878	(13)	(1.5%)
Maternal & Child Health Operations	507	410	(97)	(19.1%)
Regional Assessment Service Operations	182	182	0	0.0%
COPACC Management Operations	-	95	95	-
School Crossing Supervision Operations	55	55	0	-
Revenue Services	49	50	1	2.3%
Public Health Operations	19	19	0	1.1%
Family & Children's Services Operations	1	1	0	-
Bluewater Leisure Centre	-	10	10	-
Total recurrent grants	12,466	8,498	(3,873)	(31.1%)
Non-recurrent - Commonwealth Government				
City Deal Projects	4,449	-	(4,449)	(100.0%)
Non-recurrent - State Government				
Economic Development Operations	1,391	-	(1,391)	(100.0%)
Community Services Management	227	108	(119)	(52.6%)
Recreation & Open Spaces	200	-	(200)	100.0%
Port of Apollo Bay Operations	300	-	(300)	(100.0%)
Total non-recurrent grants	6,567	108	(6,459)	(98.4%)
Total operating grants	19,033	8,606	(10,428)	(54.8%)
(b) Capital Grants				
Recurrent - Commonwealth Government				
Roads to recovery	1,776	1,703	-	-
Total recurrent grants	1,776	1,703	(73)	(4.1%)
Non-recurrent - Commonwealth Government				
Recreation, Leisure and Community Facilities	2,387	-	(2,387)	(100.0%)
Non-recurrent - State Government				
Local Roads and Community Infrastructure Funding	1,606	-	(1,606)	(100.0%)
Recreation, Leisure and Community Facilities	850	3,000	2,150	253.0%
Total non-recurrent grants	4,843	3,000	(1,843)	(38.1%)
Total capital grants	6,619	4,703	(1,916)	(28.9%)
Total Grants	25,653	13,309	(12,344)	(48.1%)

The budgeted recurrent operating grants are similar to the 2021/22 forecast, with the expectation that Federal Assistant Grant (Victorian Grants Commission) funding will increase, with 75% of the 2022/23 grant received in advance in 2021/22 and 50% of the 2023/24 grant estimated to be received in advance. The budgeted reduction in non-recurrent operating grants predominantly relates to the receipt of \$4.4m for the City Deals Project in 2021/22, which has an offsetting expense of \$4.6m recognised in Materials and Services. The 2021/22 forecast also includes \$1.39m funding for Economic and Business Enterprise one-off projects, which has an offsetting expense.

The budgeted capital grants have decreased compared to 2021/22 by \$11.3m. 2021/22 includes capital grant funding received for capital works carried forward from 2021/22 and additional Local Roads and Community Infrastructure programme funding of \$2.34m. 2022/23 capital grants include funding for Roads to Recovery of \$1.7m. The reduction in expected capital grants is reflected in the reduced capital works program (refer '4.5 Capital works program').

4.1.5 Contributions

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Monetary	420	25	(395)	(94.0%)
Non-monetary	-	-	-	-
Total contributions	420	25	(395)	(94.0%)

Monetary contributions are expected to decrease due to 2021/22 contributions relating to one-off projects and anticipated public open space contributions. 2021/22 project contributions related to the Deans Creek Precinct Structure Plan (\$175k), Community Sport Lighting Upgrades (\$50k), and the replacement and upgrade bridge on King Track Chapple Vale (\$50k). Council anticipates Public Open Space contributions of \$100k in 2021/22.

4.1.6 Other income

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Reimbursements	282	150	(133)	(47.0%)
Port of Apollo Bay Administration Income	60	60	-	-
Interest	51	20	(31)	(60.8%)
Other income	47	52	4	9.2%
Works on Road Permits	40	30	10	(25.0%)
Rates Legal Costs Recovered	40	40	-	-
Landing Fees	20	14	6	(30.0%)
Total other income	540	365	(175)	(32.5%)

Interest on investments is expected to decrease by 30k due to a combination of a continued low RBA Cash Rate and Council not holding as much cash as in previous years. The 2021/22 reimbursements includes \$120k carried forward from 2020/21 relating to funding for the Colac Civic Rail & Health Precinct project. Reimbursements also include reimbursed wages for employees on long-term WorkCover.

4.1.7 Employee costs

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Wages and salaries	16,573	17,206	632	3.8%
Employee Leave	1,635	2,887	1,252	76.6%
Superannuation	1,898	1,982	84	4.4%
Casual Staff	565	591	25	4.5%
Sick Leave	576	565	(12)	(2.0%)
Other Employee Benefits	17	9	(8)	(49.5%)
Fringe Benefits Tax	170	174	4	2.5%
WorkCover	433	497	64	14.8%
Total employee costs	21,868	23,911	2,042	9.3%

The 2021/22 Forecast includes one-off operating project wages and salaries of \$273k. Employee leave is expected to increase significantly in 2022/23 as annual leave not used in 2021/22 is expected to be taken and sick leave is likely to remain relatively high following removal of COVID-19 restrictions. The 2022/23 Budget includes the EBA increase. Additional employee costs are required to service increased fully-funded Home Care Packages (\$725k), which has offsetting income as shown within the User Fee analysis. The WorkCover premium is expected to increase by \$64k.

The Draft Budget 2022/23 is based on employment of 253 Full-time Equivalent Employees (FTE). The increase of FTE in the 2021/22 budget results from the following:

- Additional 2.1 FTE to deliver new projects in strategic planning and youth engagement (fully funded)
- Additional 0.1 FTE in the Maternal and Child Health team to comply with new regulatory requirements
- Net increase of 4.2 FTE to move to internal skills (offset by reduction in contractors and agency staff)
- Additional 3.1 FTE to deliver increased number of Home Care Packages (fully funded by user fees)
- Additional 2.5 FTE to support post-pandemic service at Bluewater Leisure Centre (funded through increased user fees)
- Additional 2.0 FTE identified that were included in previous costs but not in FTE calculation
- Reduction of 0.4 FTE through review of support roles

4.1.8 Materials and services

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Contractors	15,708	8,222	(7,486)	(47.7%)
Materials	4,378	3,636	(742)	(16.9%)
Subscriptions and memberships	1,910	2,360	449	23.5%
Utilities	1,290	1,254	(36)	(2.8%)
Consultants	2,605	989	(1,615)	(62.0%)
Agency staff	1,509	543	(967)	(64.0%)
Insurances	555	938	383	69.1%
Training costs	434	504	70	16.1%
Plant and equipment (maintenance & internal charge)	327	214	(113)	(34.6%)
Legal costs	146	144	(2)	(1.4%)
Venue Hire	33	31	(2)	(6.1%)
Other expenditure	15	15	0	-
Permits	4	2	(3)	(59.5%)
Merchant Fees	3	3	0	-
Total materials and services	28,917	18,854	(10,062)	(34.8%)

The budget for materials and services is expected to reduce in 2022/23, largely due to the 2021/22 forecast including projects carried forward from previous years, as well as non-recurrent operational initiatives. These significant initiatives total \$9.46m and include \$4.6m contractor costs relating to the City Deals Projects and \$930k for expenses related to the Forrest Mountain Bike Trail; which have offsetting operational grants. 2021/22 operating project initiatives also included the fourth glass bin kerbside service (\$450k). Operating project initiatives in 2022/23 total \$316k and recurrent operations materials and services is expected to decrease by \$41k.

4.1.9 Depreciation

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Buildings	1,466	1,489	24	1.6%
Plant & equipment	1,742	1,770	28	1.6%
Infrastructure	7,692	7,816	124	1.6%
Total depreciation	10,900	11,076	176	1.6%

4.1.10 Amortisation - Right of use assets

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Right of use assets	24	24	(0)	(0.8%)
Total amortisation - right of use assets	24	24	(0)	(0.8%)

4.1.11 Other expenses

	Forecast	Budget	Change	
	2021/22	2022/23	\$'000	%
	\$'000	\$'000	\$'000	%
Grants and donations paid	866	699	(166)	(19.2%)
Elected Members Allowances	234	234	0	-
Other costs	239	338	99	41.4%
Fire service levy	65	70	5	7.7%
Auditors remuneration	47	47	0	(0.4%)
Rates Written Off	29	30	1	3.4%
Elected Members Superannuation Contribution	24	24	-	-
Elected Member Mileage Allowance per km	20	20	-	-
Animal registration levy	20	23	3	15.0%
Royalties and commissions	5	5	0	-
Interest Payments Interfund	5	5	0	-
Remote Area Councillor Travel Allowance	3	3	-	-
Corporate Card Expenses	2	3	-	-
Total other expenses	1,559	1,501	(58)	(3.7%)

The budgeted movement mainly relates to finalisation of the COVID-19 Community Support Package in 2021/22, which provided financial support of \$135k.

4.2 Balance Sheet

4.2.1 Assets

Assets will decrease in 2022/23 with Cash increasing and Property, infrastructure, plant and equipment expected to decrease. Property, infrastructure, plant and equipment comprise 96% of Council's total assets and the decrease is largely due to the capital works program being lower than depreciation. 'Right-of-Use' assets have reduced to \$17k and account for existing leases for equipment, which are funded by 'Lease Liabilities' in the liabilities section of the balance sheet.

4.2.2 Liabilities

Liabilities decrease in 2022/23, due to payout of two way radio leases in 2021/22, proposed repayment of the balance of an existing loan and new borrowings of \$380k in June 2023 to spread the final payments of the existing loan over a further two years. Scheduled loan repayments of \$86k and lease payments of \$24k are also expected to reduce Council's overall liabilities in 2022/23. The lease liabilities of \$18k reflect the existing liability for committed lease payments for equipment. The leased equipment assets are represented by 'Right of Use' assets in the balance sheet.

4.2.3 Borrowings

The table below shows information on borrowings specifically required by the Regulations.

	Forecast	Budget
	2021/22	2022/23
	\$'000	\$
Amount borrowed as at 30 June of the prior year	805	596
Amount proposed to be borrowed	-	380
Amount projected to be redeemed	(209)	(596)
Amount of borrowings as at 30 June	596	380

4.2.4 Leases by category

As a result of the introduction of AASB 16 Leases, right-of-use assets and lease liabilities have been recognised as outlined in the table below.

	Forecast	Budget
	2021/22	2022/23
	\$'000	\$
Right-of-use assets	-	-
Plant and equipment	41	17
Total right-of-use assets	41	17
Lease liabilities		
Current lease Liabilities		
Plant and equipment	24	18
Total current lease liabilities	24	18
Non-current lease liabilities		
Plant and equipment	18	-
Total non-current lease liabilities	18	-
Total lease liabilities	42	18

Where the interest rate applicable to a lease is not expressed in the lease agreement, Council applies the average incremental borrowing rate in the calculation of lease liabilities. The current incremental borrowing rate is 4.25%.

4.3 Statement of changes in Equity

4.3.1 Reserves

Reserve Name	Reserve Type	Forecast	Budget
		2021/22 \$'000	2022/23 \$'000
Asset Revaluation Reserve	Discretionary	224,584	224,584
Financial Assistance Grants Received in Advance	Discretionary	5,535	3,599
Waste Management Reserve	Discretionary	1,426	1,361
Landfill Rehabilitation (Alvie) Reserve	Discretionary	1,094	1,151
Long Service Leave Reserve	Discretionary	2,941	2,941
Plant Replacement Reserve	Discretionary	1,458	1,617
Recreational Lands Reserve	Statutory	949	949
Rehabilitation Reserve	Discretionary	1,048	1,046
Water Sensitive Urban Design	Statutory	54	64
Disaster Recovery	Discretionary	6	6
Strategic Projects Reserve	Discretionary	832	832
Tirrengower Drainage Scheme Reserve	Contractual	24	24
Total Equity Reserves		239,951	238,174

Purposes for Reserves

Asset Revaluation Reserve

This reserve captures the reassessment of the value of Council's capital assets.

Financial Assistance Grants received in advance

The purpose of this reserve is to set aside any Commonwealth Financial Assistance Grant funding received in advance of its intended allocation.

Waste Management Reserve

This reserve was set up as a source of funding the replacement of kerbside bins. All funds in this reserve are collected from the waste collection service charge and are to be used only in connection with the waste collection service.

Long Service Leave Reserve

The purpose of this reserve is to ensure that the nominal long service leave balances owing to employees are maintained.

Landfill Rehabilitation (Alvie) Reserve

This reserve relates to the funds required to restore the Alvie landfill. The rehabilitation reserve will continue to grow until the landfill closes, at which time, the funds will be utilised to meet this obligation.

Water Sensitive Urban Design

Statutory reserve to be used for the construction of water saving initiatives within council's waste water network.

Disaster Recovery

This reserve relates to disaster recovery funds received for bushfire and flood events.

Recreational Lands Reserve

Statutory reserve to be used for the development of recreational reserves and public open space.

Rehabilitation Reserve

This reserve is to fund the rehabilitation and aftercare of the various closed waste disposal sites across the Colac Otway Shire.

Plant replacement Reserve

This reserve is to fund the replacement of council's plant at the end of their useful lives. Inflows to the reserve accrue out of any plant operating surplus with the funds then being used for the changeover of plant.

Strategic Projects Reserve

The purpose of this reserve is for strategic projects and acquisitions of new or expanded assets that are of an intergenerational nature.

Tirrengower Drainage Scheme Reserve

These funds are collected via a special rate and must be expended against the purpose of the drainage scheme at Tirrengower.

4.4 Statement of Cash Flows

4.4.1 Net cash flows provided by/used in operating activities

There is an decrease in cash provided by operating activities, predominantly due to decreased capital grant funding in 2022/23 by \$8.68m and 75% of the Financial Assistance Grant received in advance in 2021/22 with 50% of the 2023/24 grant estimated to be received in advance in 2022/23. 2021/22 includes capital grant funding received for capital works carried forward from 2021/22 and additional Local Roads and Community Infrastructure programme funding of \$2.34m. Receipts from operating grants are expected to decrease, largely due to the 2021/22 funding received for the City Deal Project (\$4.4m). It is important to note that this funding has associated offsetting outflow of funds from Materials and Services and Employee Costs. The capital programme is budgeted to reduce in 2022/23, as carried forward projects are completed and with less new funding anticipated.

4.4.2 Net cash flows provided by/used in investing activities

New capital works budgeted in 2022/23 is lower than the 2021/22 budgeted programme of \$13.7m by \$4.3m. The decrease in 'Payments for property, infrastructure, plant and equipment' mainly reflects this reduced program, carried forward projects of \$4.3m from 2020/21 to 2021/22 and increased Local Roads and Community Infrastructure programme of \$2.3m included in the 2021/22 forecast. Carried-forward projects included in 2021/22 are fully funded projects from previous budgets and it is assumed are to be completed in 2021/22.

4.4.3 Net cash flows provided by/used in financing activities

One remaining loan is due for settlement in 2022/23. It is proposed that an additional repayment of \$130k of the loan liability due for settlement in 2022/23 is made and the remaining balance of \$380k is refinanced in June 2023. 2022/23 repayments represent scheduled loan repayments of \$86k and the \$130k one-off repayment.

4.5 Capital works program

This section presents a listing of the capital works projects that will be undertaken for the 2022/23 year, classified by expenditure type and funding source. Works are also disclosed as current budget or carried forward from prior year.

4.5.1 Summary

	Forecast 2021/22 \$'000	Budget 2022/23 \$'000	Change \$'000	%
Property	1,442	984	(458)	-31.77%
Plant and equipment	2,330	1,992	(339)	-14.53%
Infrastructure	16,463	9,133	(7,330)	-44.52%
Total	20,236	12,109	(8,127)	-40.16%

	Project Cost \$'000	Asset expenditure types			Summary of Funding Sources			
		New	Renewal	Upgrade	Grants	Contrib.	Council cash	Borrowings
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Property	984	-	750	234	-	-	984	-
Plant and equipment	1,992	85	1,907	-	-	-	1,992	-
Infrastructure	9,133	73	5,808	3,252	4,703	-	4,430	-
Total	12,109	158	8,465	3,486	4,703	-	7,406	-

The 2021/22 forecast figures include capital works carried forward from previous years and increased funding renewal and upgrade works. The 2021/22 Capital Works Program has increased from the 2021/22 Adopted Budget (\$13.7m) by \$6.5m. It is anticipated that 50% of the Capital Works program will be completed by 30 June 2021 with the remainder carried forward to 2022/23.

4.5.2 Current Budget

Capital Works Area	Project Cost \$'000	Asset expenditure types			Summary of Funding Sources			
		New \$'000	Renewal \$'000	Upgrade \$'000	Grants \$'000	Contrib. \$'000	Council cash \$'000	Borrowings \$'000
PROPERTY								
Buildings								
<i>Building Renewal Programme</i>	750	-	750	-	-	-	750	-
<i>Building Upgrade Programme</i>	234	-	-	234	-	-	234	-
<i>Bluewater Heat Pump Upgrade</i>	-	-	-	-	-	-	-	-
TOTAL PROPERTY	984	-	750	234	-	-	984	-
PLANT AND EQUIPMENT								
Plant, Machinery and Equipment								
<i>Annual Heavy Plant Replacement Program</i>	1,237	-	1,237	-	-	-	1,237	-
<i>Annual Light Fleet Replacement Program</i>	300	-	300	-	-	-	300	-
Computers and Telecommunications								
<i>IM - Content Manager Upgrade</i>	35	-	35	-	-	-	35	-
<i>ICT - Device Renewal</i>	100	-	100	-	-	-	100	-
<i>ICT - Critical Infrastructure Improvement</i>	150	-	150	-	-	-	150	-
<i>CRM Replacement</i>	170	85	85	-	-	-	170	-
TOTAL PLANT AND EQUIPMENT	1,992	85	1,907	-	-	-	1,992	-

4.5.2 Current Budget (cont.)

Capital Works Area	Project Cost \$'000	Asset expenditure types			Summary of Funding Sources			
		New \$'000	Renewal \$'000	Upgrade \$'000	Grants \$'000	Contrib. \$'000	Council cash \$'000	Borrowings \$'000
INFRASTRUCTURE								
Roads								
<i>Crack Sealing Program</i>	80	-	80	-	-	-	80	-
<i>Kerb and Channel Renewal Program</i>	80	-	80	-	-	-	80	-
<i>Major Patching Program</i>	350	-	350	-	-	-	350	-
<i>Sealed Road Reconstruction Renewal Program</i>	2,450	-	2,450	-	1,703	-	747	-
<i>Unsealed Road Reconstruction Program</i>	1,000	-	1,000	-	-	-	1,000	-
<i>Road Safety New Program</i>	13	13	-	-	-	-	13	-
<i>Road Safety Renewal Program</i>	72	-	72	-	-	-	72	-
<i>Road Safety Upgrade Program</i>	190	-	-	190	-	-	190	-
Bridges								
<i>Bridge Renewal Program</i>	984	-	984	-	-	-	984	-
Footpaths and Cycleways								
<i>Footpath Renewal Program</i>	179	-	179	-	-	-	179	-
<i>Footpath Upgrade Program</i>	12	-	-	12	-	-	12	-
Drainage								
<i>Stormwater Renewal Program</i>	90	-	90	-	-	-	90	-
<i>Stormwater Upgrade Program</i>	50	-	-	50	-	-	50	-
Other infrastructure								
<i>Eastern Reserve Netball Courts Resurfacing</i>	63	-	63	-	-	-	63	-
<i>Elliminyt Recreation Reserve Oval Lighting replacement</i>	200	-	200	-	-	-	200	-
<i>Fixture, Fittings and Furniture Replacement Program</i>	10	-	10	-	-	-	10	-
<i>Tree Planting Program</i>	60	60	-	-	-	-	60	-
<i>Asset Condition Assessment</i>	250	-	250	-	-	-	250	-
<i>Elliminyt Wetlands</i>	3,000	-	-	3,000	3,000	-	-	-
TOTAL INFRASTRUCTURE	9,133	73	5,808	3,252	4,703	-	4,430	-
TOTAL NEW CAPITAL WORKS	12,109	158	8,465	3,486	4,703	-	7,406	-

4.6 Summary of Planned Capital Works Expenditure

For the years ending 30 June 2024, 2025 & 2026

2023/24	Asset Expenditure Types					Funding Sources				
	Total	New	Renewal	Expansion	Upgrade	Total	Grants	Contributions	Council Cash	Borrowings
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Property										
Land	0	0	0	0	0	0	0	0	0	0
Land improvements	0	0	0	0	0	0	0	0	0	0
Total Land	0	0	0	0	0	0	0	0	0	0
Buildings	784	0	784	0	0	784	0	0	784	0
Total Buildings	784	0	784	0	0	784	0	0	784	0
Total Property	784	0	784	0	0	784	0	0	784	0
Plant and Equipment										
Plant, machinery and equipment	1,606	0	1,606	0	0	1,606	0	0	1,606	0
Fixtures, fittings and furniture	0	0	0	0	0	0	0	0	0	0
Computers and telecommunications	387	0	387	0	0	387	0	0	387	0
Total Plant and Equipment	1,993	0	1,993	0	0	1,993	0	0	1,993	0
Infrastructure										
Roads	4,213	0	4,213	0	0	4,213	1,746	0	2,467	0
Bridges	1,028	0	1,028	0	0	1,028	0	0	1,028	0
Footpaths and cycleways	187	0	187	0	0	187	0	0	187	0
Drainage	94	0	94	0	0	94	0	0	94	0
Other infrastructure	1,047	250	547	0	250	1,047	0	0	1,047	0
Total Infrastructure	6,569	250	6,069	0	250	6,569	1,746	0	4,823	0
Total Capital Works Expenditure	9,346	250	8,846	0	250	9,346	1,746	0	7,600	0

2024/25	Asset Expenditure Types					Funding Sources				
	Total \$'000	New \$'000	Renewal \$'000	Expansion \$'000	Upgrade \$'000	Total \$'000	Grants \$'000	Contributions \$'000	Council Cash \$'000	Borrowings \$'000
Property										
Land	0	0	0	0	0	0	0	0	0	0
Land improvements	0	0	0	0	0	0	0	0	0	0
Total Land	0	0	0	0	0	0	0	0	0	0
Buildings	819	0	819	0	0	819	0	0	819	0
Total Buildings	819	0	819	0	0	819	0	0	819	0
Total Property	819	0	819	0	0	819	0	0	819	0
Plant and Equipment										
Plant, machinery and equipment	1,678	0	1,678	0	0	1,678	0	0	1,678	0
Fixtures, fittings and furniture	0	0	0	0	0	0	0	0	0	0
Computers and telecommunications	404	0	404	0	0	404	0	0	404	0
Total Plant and Equipment	2,082	0	2,082	0	0	2,082	0	0	2,082	0
Infrastructure										
Roads	4,403	0	4,403	0	0	4,403	1,789	0	2,614	0
Bridges	1,075	0	1,075	0	0	1,075	0	0	1,075	0
Footpaths and cycleways	195	0	195	0	0	195	0	0	195	0
Drainage	98	0	98	0	0	98	0	0	98	0
Other infrastructure	1,071	250	571	0	250	1,071	0	0	1,071	0
Total Infrastructure	6,842	250	6,342	0	250	6,842	1,789	0	5,053	0
Total Capital Works Expenditure	9,744	250	9,244	0	250	9,744	1,789	0	7,955	0

2025/26	Asset Expenditure Types					Funding Sources				
	Total \$'000	New \$'000	Renewal \$'000	Expansion \$'000	Upgrade \$'000	Total \$'000	Grants \$'000	Contributions \$'000	Council Cash \$'000	Borrowings \$'000
Property										
Land	0	0	0	0	0	0	0	0	0	0
Land improvements	0	0	0	0	0	0	0	0	0	0
Total Land	0	0	0	0	0	0	0	0	0	0
Buildings	856	0	856	0	0	856	0	0	856	0
Total Buildings	856	0	856	0	0	856	0	0	856	0
Total Property	856	0	856	0	0	856	0	0	856	0
Plant and Equipment										
Plant, machinery and equipment	1,754	0	1,754	0	0	0	0	0	1,754	0
Fixtures, fittings and furniture	0	0	0	0	0	0	0	0	0	0
Computers and telecommunications	422	0	422	0	0	0	0	0	422	0
Total Plant and Equipment	2,176	0	2,176	0	0	0	0	0	2,176	0
Infrastructure										
Roads	4,601	0	4,601	0	0	4,601	1,834	0	2,767	0
Bridges	1,123	0	1,123	0	0	1,123	0	0	1,123	0
Footpaths and cycleways	204	0	204	0	0	204	0	0	204	0
Drainage	103	0	103	0	0	103	0	0	103	0
Other infrastructure	1,097	250	597	0	250	1,097	0	0	1,097	0
Total Infrastructure	7,128	250	6,628	0	250	7,128	1,834	0	5,294	0
Total Capital Works Expenditure	10,160	250	9,660	0	250	10,160	1,834	0	8,326	0

5. Financial performance indicators

The following table highlights Council's current and projected performance across a range of key financial performance indicators. These indicators provide a useful analysis of Council's financial position and performance and should be interpreted in the context of the organisation's objectives.

The financial performance indicators below are the prescribed financial performance indicators contained in Part 3 of Schedule 3 of the Local Government (Planning and Reporting) Regulations 2020. Results against these indicators will be reported in Council's Performance Statement included in the Annual Report.

Indicator	Measure	Notes	Actual	Forecast	Budget	Projections			Trend
			2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	+/-
Operating position									
Adjusted underlying result	Adjusted underlying surplus (deficit) / Adjusted underlying revenue	1	7.6%	-2.9%	-5.1%	-0.5%	0.5%	1.4%	+
Liquidity									
Working Capital	Current assets / current liabilities	2	189.7%	140.9%	148.3%	165.6%	180.1%	198.8%	+
Unrestricted cash	Unrestricted cash / current liabilities	3	93.1%	98.5%	102.3%	127.3%	141.7%	159.9%	+
Obligations									
Loans and borrowings	Interest bearing loans and borrowings / rate revenue	4	2.3%	1.8%	1.1%	0.7%	0.4%	0.0%	+
Loans and borrowings	Interest and principal repayments on interest bearing loans and borrowings / rate revenue		1.1%	0.8%	1.9%	0.4%	0.4%	0.4%	+
Indebtedness	Non-current liabilities / own source revenue		16.1%	14.3%	14.3%	13.7%	12.9%	12.5%	+
Asset renewal	Asset renewal and upgrade expense / Asset depreciation	5	97.6%	179.6%	107.9%	81.2%	84.0%	86.9%	+
Stability									
Rates concentration	Rate revenue / adjusted underlying revenue	6	53.8%	53.1%	63.9%	61.4%	61.6%	61.8%	o
Rates effort	Rate revenue / CIV of rateable properties in the municipality		0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	o
Efficiency									
Expenditure level	Total expenses/ no. of property assessments		\$3,501	\$4,059	\$3,521	\$3,562	\$3,584	\$3,609	o
Revenue level	Total rate revenue / no. of property assessments		\$1,828	\$1,859	\$1,894	\$1,931	\$2,208	\$2,261	o

Key to Forecast Trend:

- + Forecasts improvement in Council's financial performance/financial position indicator
- o Forecasts that Council's financial performance/financial position indicator will be steady
- Forecasts deterioration in Council's financial performance/financial position indicator

Notes to indicators**1. Adjusted underlying result**

This measure is an indicator of the sustainable operating result required to enable Council to generate enough cash from operations to fund the renewal of existing assets. The results are showing underlying results below breakeven in 2021/22 and 2022/23 with projected surpluses targeted to be achieved by 2023/24. The budgeted deficit indicates that Council is generating less revenue from sources it can control, increasing reliance on funding from external sources such as grant funding. This is not considered to be sustainable in the long term, however adjusted underlying deficits are sustainable in the short term, providing other indicators remain healthy.

Without important changes to Council's service offering and delivery models, future years will also present deficits and erode Council's ability to support the community in the future. Council is committed to address its financial sustainability over the long term to address these challenges.

2. Working Capital

This indicator is projected to increase over the subsequent 3 years following the Budget. Council recognises that rate capping has the compounding effect of reducing future rate revenue, which limits Council's ability to deliver increased services. Cash is forecast to exceed total restricted cash and other intended allocations identified in Reserves for specific future purposes in the short-term, as significant cash is allocated to complete carried forward projects. Council's ability to generate underlying surpluses in the medium to long-term will be critical to ensure that cash and working capital is not eroded over the long-term as Council allocates cash from identified Reserves for specific purposes.

3. Unrestricted Cash

This shows an increase in the available unrestricted cash. This is due to the improvement in cash and cash equivalents levels over the period. This trend is consistent and reflective of the adjusted underlying result and working capital.

4. Debt compared to rates

The decrease in indebtedness (non-current liabilities) mainly reflects a decrease in borrowings by \$216k in 2022/23. The repayment of the balance of an existing loan (\$596k) will be partly offset by new borrowings (2022/23: \$255k non-recurrent; 2023/24 \$129k non-recurrent) in June 2023 to spread the final payments of the existing loan over a further two years.

5. Asset renewal

This percentage indicates the extent of Council's renewal and upgrade compared to the depreciation charge (an indication of the decline in value of its existing capital assets). A percentage greater than 100 indicates Council is maintaining its existing assets, while a percentage less than 100 means its assets are deteriorating faster than they are being renewed and future capital expenditure will be required to renew assets.

The reduced asset renewal ratio in 2022/23 has primarily resulted from a depreciation increase in the bridges asset class resulting from a revaluation of assets with the 2021/22 forecast depreciation now \$2.09 million higher than the 2021/22 budget. Projections in the subsequent three years reflect Council's commitment to increasing investment in renewal of existing assets.

6. Rates concentration

This indicator reflects the trends in the underlying result over the projected period, showing Colac Otway Shire's reliance on rate revenues (as a proportion of total revenue) to fund Council's on-going services and a focus on reducing operational costs.

Fees & Charges

Colac Otway Shire Council

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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
Colac Otway Shire			
Corporate Services			
Financial Services			
Land Information Certificate			
Fee	\$27.40	\$27.40	0.00%
Governance			
Freedom of Information			
Per application	\$29.60	\$29.60	0.00%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Development & Community Services

Community Services - Older Persons Ability Support Service (OPASS)

OPASS

Veterans Home Care (1st hr)

Minimum service fee	\$5.00	\$5.00	0.00%
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Planning & Building

Bonds

Bond for Demolition or Removal of Building (Reg 323)

Bond for Demolition or Removal of Building (Reg 323) - per sqm of floor area; OR - cost of works, whichever is the lesser	\$100.00	\$100.00	0.00%
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Bond for Re-erection of Building (Reg 323)

Bond for Re-erection of Building (Reg 323) - Fee; OR - cost of works	\$10,000.00	\$10,000.00	0.00%
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Building Control Charges

Property Information Certificate

Property information Application	\$47.20	\$47.90	1.48%
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Lodgement fees

Class 1 & 10	\$121.90	\$123.70	1.48%
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Building Permit Application Fee

Statutory charge on building permits

Building permit levy (cost of building over \$10,000)			0.128%
			Last year fee 0.128%

Report and Consent Fees

Demolition fee (s. 29A)

Fee	\$85.10	\$86.40	1.53%
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Attachment 10.7.2 2022-23 Statutory Fees & Charges Schedule

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
Report & Consent Application			
Report & Consent Application	\$290.40	\$294.70	1.48%
Planning Fees & Charges – Other			
Application for Certification of subdivision under Subdivision Act			
Application for Certification of subdivision under Subdivision Act; plus	\$174.80	\$177.40	1.49%
Application for Certification of subdivision under Subdivision Act - cost per lot	\$20.00	\$20.00	0.00%
Required alteration of plan	\$111.10	\$112.70	1.44%
Application for Plan of Consolidation			
Fee	\$174.80	\$177.40	1.49%
Application for Recertification of Plan of Subdivision			
Fee	\$140.70	\$142.80	1.49%
Engineering Plan prepared by Council			
Fee			3.50%
			Last year fee 3.50%
Satisfaction Matters			
Satisfaction matters as specified by planning scheme	\$325.80	\$330.70	1.50%
Supervision of Works			
Fee			2.50%
			Last year fee 2.50%
Section 173 Agreements			
Amendment to an existing agreement	\$659.00	\$668.80	1.49%
Removal of an existing agreement	\$659.00	\$668.80	1.49%
Certificates of compliance			
Fee	\$325.80	\$330.70	1.50%
Permit for use of land			
Application where only the land use is changed.	\$1,318.10	\$1,337.70	1.49%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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To develop land or to use and develop land for a single dwelling per lot or to undertake development ancillary to the use of the land for a single dwelling per lot if the estimated cost of development included in the application is:

Excluding VicSmart applications

\$100,000 to \$500,000	\$1,288.50	\$1,307.60	1.48%
\$10,000 or less	\$199.90	\$202.90	1.50%
\$10,000 - \$100,000	\$629.40	\$638.80	1.49%
\$500,000 - \$1,000,000	\$1,392.10	\$1,412.80	1.49%
\$1,000,000 - \$2,000,000	\$1,495.80	\$1,518.00	1.48%

NEW FEE Vic smart applications

Single dwelling

\$10,000 or less	\$199.90	\$202.90	1.50%
More than \$10,000	\$429.50	\$435.90	1.49%
Subdivision or consolidation	\$199.90	\$202.90	1.50%

To develop land (other than for a single dwelling per lot) if the estimated cost of development included in the application is:

Less than \$100,000	\$1,147.80	\$1,164.80	1.48%
\$100,000 - \$1,000,000	\$1,547.60	\$1,570.60	1.49%
\$1,000,000 - \$5,000,000	\$3,413.70	\$3,464.40	1.49%
\$5,000,000 - \$15,000,000	\$8,700.90	\$8,830.10	1.48%
\$15,000,001 - \$50,000,000	\$25,658.30	\$26,039.50	1.49%
More than \$50,000,000	\$57,670.10	\$58,526.80	1.49%
To subdivide an existing building	\$1,318.10	\$1,337.70	1.49%
To subdivide land into two lots	\$1,318.10	\$1,337.70	1.49%
To effect a realignment of a common boundary between lots or to consolidate two or more lots	\$1,318.10	\$1,337.70	1.49%
All other subdivisions per 100 lots created	\$1,318.10	\$1,337.70	1.49%
An application to remove a restriction (within the meaning of the Subdivision Act 1988) in the circumstances described in Section 47(2) of the Planning and Environment Act 1987	\$1,318.10	\$1,337.70	1.49%
An application to create, vary or remove a restriction within the meaning of the Subdivision Act 1988 or to create or remove a right-of-way.	\$1,318.10	\$1,337.70	1.49%
To create, vary or remove an easement other than a right of way, or to vary or remove a condition in the nature of an easement other than a right of way in a Crown.	\$1,318.10	\$1,337.70	1.49%
A permit not otherwise provided for in the Fee regulations	\$1,318.10	\$1,337.70	1.49%

(b) Amendments to Permits – Set by Statute

1

Change of use only	\$1,318.10	\$1,337.70	1.49%
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Attachment 10.7.2 2022-23 Statutory Fees & Charges Schedule

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
2			
To amend a permit other than a single dwelling to change the statement of what the permit allows or to change any or all of the conditions which apply to the permit	\$1,318.10	\$1,337.70	1.49%
3			
Single dwelling (\$10,000 or less)	\$199.90	\$202.90	1.50%
4			
Single dwelling (\$10,000 - \$100,000)	\$629.40	\$638.80	1.49%
Single dwelling (\$100,000 - \$500,000)	\$1,288.50	\$1,307.60	1.48%
Single dwelling (\$500,000 - \$2,000,000)	\$1,392.10	\$1,412.80	1.49%
5			
VicSmart - \$10,000 or less	\$199.90	\$202.90	1.50%
VicSmart - development more than \$10,000	\$429.50	\$435.90	1.49%
VicSmart - subdivision or consolidation	\$199.90	\$202.90	1.50%
6			
Other developments (less than \$100,000)	\$1,147.80	\$1,164.80	1.48%
8			
Other developments (\$100,00 - \$1,000,000)			\$1,570.60
			Last year fee \$1,547.60
Other developments (\$1,000,000 - \$50,000,000)	\$3,413.70	\$3,464.40	1.49%
9			
Amendment to a permit not otherwise provided for in the fee regulation	\$1,318.10	\$1,337.70	1.49%
Subdivision - common boundary realignment, consolidation of two or more lots, existing buildings and two lot subdivisions (other than VicSmart)	\$1,318.10	\$1,337.70	1.49%
Subdivision (other than VicSmart, two lot subdivisions and boundary realignments)	\$1,318.10	\$1,337.70	1.49%
Creation, variation and removal of restrictions, easements and rights of way	\$1,318.10	\$1,337.70	1.49%

(c) Planning Scheme Amendment Fees – Set by Statute

i.			
Considering a request for an Amendment	\$3,050.90	\$3,096.20	1.48%
ii.			
For considering up to 10 submissions	\$15,121.00	\$15,345.60	1.49%
For considering 11-20 submissions	\$30,212.40	\$30,661.20	1.49%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
ii. [continued]			
For considering in excess of 20 submissions	\$40,386.90	\$40,986.80	1.49%
iii.			
Adoption of Amendment by Responsible Authority	\$481.30	\$488.50	1.50%
iv.			
Consideration of a request to approve an Amendment (by the Minister for Planning)	\$481.30	\$488.50	1.50%
Public Health			
Prescribed Accommodation			
Caravan Parks per site			
Fee	\$15.30	\$15.30	0.00%
Public Health - Septic Tanks			
Additional inspections			
additional hours for OWMS approval per hour	\$90.60	\$92.85	2.48%
Septic tank alterations			
Minor Alterations	\$551.70	\$551.70	0.00%
Septic tanks system			
Construct, install or alter	\$723.90	\$723.90	0.00%
Septic tank amend a permit			
Amend a permit	\$153.70	\$153.70	0.00%
Transfer a septic tank permit			
Fee	\$147.10	\$147.10	0.00%
Renew a septic tank permit			
Fee	\$123.10	\$123.10	0.00%
Septic tank exemption			
Fee	\$217.30	\$217.30	0.00%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Environment & Infrastructure Services

Infrastructure Development

Check Engineering Plans

These fees apply to developments/subdivisions that do not require the construction of new Council roads.

Fee			0.75%
			Last year fee n/a

Checking of Engineering Plans

Fee			0.75%
			Last year fee 0.75%

Fee for Legal Point of Discharge Report

As per Section 36(4) Building Regulations 2018

Fee (9.77 units)	\$144.69	\$146.84	1.49%
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Supervision of Sub-division Works

% of estimated cost of constructing works proposed			2.50%
			Last year fee 2.50%

Local Road (speed at any time is greater than 50 kph)

Minor Works

Cost per fee unit

Conducted on any part of the roadway, shoulder or pathway (9.3 units)	\$137.73	\$139.80	1.50%
Not conducted on any part of the roadway, shoulder or pathway (6 units)	\$88.86	\$90.19	1.50%

Works on Roads (works other than minor works)

Cost per fee unit

Conducted on any part of the roadway, shoulder or pathway (43.1 units)	\$638.31	\$647.88	1.50%
Not conducted on any part of the roadway, shoulder or pathway (23.5 units)	\$348.04	\$353.21	1.49%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Local Road (speed at any time is not more than 50kph)

Minor Works

Cost per fee unit

Conducted on any part of the roadway, shoulder or pathway (9.3 units)	\$137.73	\$139.78	1.49%
Not conducted on any part of the roadway, shoulder or pathway (6 units)	\$88.86	\$90.18	1.49%

Works on Roads (works other than minor works)

Cost per fee unit

Conducted on any part of the roadway, shoulder or pathway (23.5 units)	\$348.04	\$353.21	1.49%
Not conducted on any part of the roadway, should or pathway (6 units)	\$88.86	\$90.18	1.49%

Environment & Community Safety

Fire Prevention

Local Law Infringement fee – burning of offensive material (2 penalty units)

Infringement fee - burning of offensive material (2 penalty units)	\$200.00	\$200.00	0.00%
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Statutory Penalty fee – Failing to comply with fire prevention notice (10 penalty units)

Infringement fee - failing to comply with fire prevention notice (10 penalty units)	\$1,585.70	\$1,585.70	0.00%
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Local Laws

Local Law No 2

Alcohol infringement fee (2 penalty unit)	\$200.00	\$200.00	0.00%
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Parking

Statutory Car parking fines

Car parking fines (.6 Statutory penalty Unit - max)	\$96.00	\$109.00	13.54%
Car parking fines (1 Statutory penalty Unit)	\$161.19	\$161.19	0.00%

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Fees & Charges

Colac Otway Shire Council

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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Colac Otway Shire

Corporate Services

Financial Services

Replacement Rate Notice

Fee	\$27.00	\$27.50	1.85%
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Payment Dishonour Fee (All Other)

Admin Fee	\$26.00	\$26.50	1.92%
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Payment Dishonour Fee (Direct Debit)

Admin Fee	\$11.00	\$11.00	0.00%
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Governance

Printing and Photocopying

A3 sheet	\$1.00	\$1.00	0.00%
A4 sheet	\$0.50	\$0.50	0.00%
Coloured copy – A3 sheet	\$2.50	\$2.50	0.00%
Coloured copy – A4 sheet	\$1.50	\$1.50	0.00%

Record Search Fee

Discovery Fee - Per Hour	\$65.00	\$65.00	0.00%
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Annual Report

Cost per copy	\$20.00	\$20.00	0.00%
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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Development & Community Services

Bluewater Fitness Centre

Aquatic – Daily Charges

Combo Swim Spa Sauna Stadium (SSSS)

Adult	\$13.00	\$13.30	2.31%
Concession	\$10.40	\$10.70	2.88%

Pool or spa or steam room or stadium

Adult	\$7.30	\$7.40	1.37%
Child	\$5.00	\$5.20	4.00%
Concession	\$5.90	\$5.90	0.00%
Family	\$22.00	\$22.30	1.36%
Parent/Toddler	\$5.90	\$6.00	1.69%
School Group	\$5.00	\$5.20	4.00%

Aqua Membership (Aquatics Only)

Adult

12 months	\$635.00	\$627.40	-1.20%
Direct Debit	\$25.00	\$25.40	1.60%

Child

12 months	\$441.00	\$440.00	-0.23%
Direct Debit	\$17.40	\$17.80	2.30%

Concession

12 months	\$505.00	\$501.40	-0.71%
Direct Debit	\$20.00	\$20.50	2.50%

Family

12 months	\$920.00	\$941.00	2.28%
Direct Debit	\$37.50	\$38.10	1.60%

Childcare

Member - BWFC

10 Multi Visit Pass (Visit per Hour)	\$63.00	\$67.00	6.35%
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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Member - BWFC [continued]

30 Multi Visit Pass (Visit per Hour)	\$178.50	\$191.70	7.39%
Member - Additional Child (per hr)	\$6.30	\$6.75	7.14%
Child 1 hr (per hour)	\$7.00	\$7.10	1.43%

Non-member - BWFC

Non Member - Additional Child (per hr)	\$12.25	\$13.10	6.94%
Non Member 10 Multi Visit Pass (Visit per Hour)	\$129.20	\$131.00	1.39%
Non Member 30 Multi Visit Pass (Visit per Hour)	\$367.20	\$372.00	1.31%
Child 1 hr	\$13.60	\$13.80	1.47%

Health Club & Group Fitness**Casual**

Fitness Assessment (45 min)	\$62.00	\$63.00	1.61%
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Casual Entry

Adult	\$15.80	\$17.00	7.59%
Concession	\$12.70	\$13.70	7.87%

Group Fitness Casual Entry

Adult	\$15.80	\$16.00	1.27%
Concession	\$13.00	\$13.00	0.00%
Group Entry (Schools)	\$8.10	\$11.20	38.27%
Senior Programs	\$7.90	\$8.00	1.27%

Personal Training

1 session group training	\$80.00	\$84.00	5.00%
1 session personal training (45 min)	\$59.00	\$70.00	18.64%
10 ticket group training	\$685.00	\$756.00	10.36%
10 ticket personal training	\$499.00	\$630.00	26.25%
5 ticket group training	\$372.00	\$399.00	7.26%
5 ticket personal training	\$272.00	\$332.50	22.24%

Platinum Membership (Full Centre)**Youth and Student Membership (14-21 or Student card holder)**

12 months	\$615.00	\$659.55	7.24%
Direct Debit (Fortnightly)	\$24.50	\$26.70	8.98%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
Off-Peak Full Facility Access (8.30am-4.30pm)			
12 months	\$680.00	\$706.00	3.82%
Direct Debit	\$27.00	\$28.60	5.93%
Adult			
12 months	\$900.00	\$943.00	4.78%
Direct Debit	\$36.50	\$38.20	4.66%
Concession			
12 months	\$765.00	\$755.00	-1.31%
Direct Debit	\$30.50	\$30.50	0.00%
Family			
12 months	\$1,350.00	\$1,415.35	4.84%
Direct Debit	\$55.00	\$57.30	4.18%
Gold Membership (Gym Only)			
Adult			
12 months	\$820.00	\$840.00	2.44%
Direct Debit	\$33.50	\$34.00	1.49%
Concession			
12 months	\$685.00	\$680.00	-0.73%
Direct Debit	\$27.00	\$27.50	1.85%
Family			
12 months	\$1,270.00	\$1,330.00	4.72%
Direct Debit	\$50.00	\$54.00	8.00%
Membership Fee			
Direct Debit Joining Fee			
Adult	\$51.00	\$53.50	4.90%
Concession	\$43.00	\$42.80	-0.47%
Multipass			
Adult			
10 Ticket Group Fitness	\$151.00	\$152.00	0.66%

Attachment 10.7.3 2022-23 Council Fees & Charges Schedule

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Adult [continued]

30 Ticket Group Fitness	\$429.00	\$432.00	0.70%
10 Ticket Gym	\$151.00	\$161.50	6.95%
10 Ticket Aqua	\$70.00	\$70.30	0.43%
30 Ticket Gym	\$429.00	\$459.00	6.99%
30 Ticket Aqua	\$196.00	\$199.80	1.94%

Concession

10 Ticket Group Fitness	\$121.00	\$123.50	2.07%
30 Ticket Group Fitness	\$343.00	\$351.00	2.33%
10 Ticket Aqua	\$56.00	\$56.10	0.18%
10 Ticket Gym	\$121.00	\$129.20	6.78%
30 Ticket Gym	\$343.00	\$367.20	7.06%
30 Ticket Aqua	\$157.00	\$159.30	1.46%

Other Charges**Instructor hire/hr aquatic or dry**

Instructor Hire	\$68.00	\$70.00	2.94%
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Party

Birthday Part Invitations	\$0.45	\$0.50	11.11%
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Swim School**30 min Private Lesson**

30 Min Group SS 2 on 1 (per person)	\$37.00	\$40.60	9.73%
30 Min Group SS 3 on 1 (per person)	\$26.50	\$35.50	33.96%
30 Min Group SS 4 on 1 (per person)	\$21.00	\$30.50	45.24%
Swim School	\$50.00	\$50.75	1.50%

30 min group lesson

Swim School - Concession	\$13.35	\$14.00	4.87%
Swim School - Paid in Full (per lesson)	\$15.70	\$16.60	5.73%
Swim School Intensive Program	\$66.00	\$80.00	21.21%
Swim School	\$16.20	\$17.50	8.02%

Schools Swim & Survive Program Entry

Program Entry	\$4.70	\$4.80	2.13%
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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Venue Hire

Pool Hire

Lane hire/hr (during normal operating hrs)	\$27.00	\$36.00	33.33%
Whole pool full day 4+ hrs (during normal operating hours)	\$585.00	\$620.00	5.98%
Program Pool Hire - half pool per hr	\$38.50	\$40.00	3.90%
Program Pool Hire - full pool per hr	\$64.00	\$66.00	3.13%

Commercial Room Hire

Program Room Single	\$42.00	\$43.50	3.57%
Program Room Double	\$63.00	\$65.00	3.17%
Meeting Room	\$42.00	\$43.50	3.57%

Community Room Hire

Program Room Single	\$28.50	\$29.50	3.51%
Program Room Double	\$43.00	\$44.50	3.49%
Meeting Room	\$28.50	\$29.50	3.51%

Stadium Hire

All day hire	\$715.00	\$740.00	3.50%
Off Peak court hire/hr	\$43.00	\$44.50	3.49%
Peak court hire/hr	\$51.00	\$52.50	2.94%

Community Services - Family Day Care

Family Day Care Administration Levy

Educators Levy

Carers Levy per week	\$12.00	\$12.20	1.67%
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Per family per week

Child's hourly rate for a family per week	\$1.75	\$1.90	8.57%
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Family Day Care Charges

8am to 6pm Monday to Friday

Per hour per child - Lower Limit	\$8.70	\$8.90	2.30%
Per hour per child - Upper Limit	\$9.20	\$9.40	2.17%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
Before 8 am and after 6 pm			
Mon - Fri (per hour per child) - Lower Limit	\$9.70	\$9.90	2.06%
Mon - Fri (per hour per child) - Upper Limit	\$10.10	\$10.30	1.98%
Saturday, Sunday and Public Holidays			
Per hour per child - Lower Limit	\$9.70	\$9.90	2.06%
Per hour per child - Upper Limit	\$10.10	\$10.30	1.98%
Meals (per meal)			
Breakfast	\$3.90	\$4.20	7.69%
Evening Meal	\$6.50	\$6.65	2.31%
Lunch	\$4.95	\$5.25	6.06%
Snack	\$1.80	\$2.00	11.11%
Trips			
Fee	\$5.15	\$5.30	2.91%
Community Services - Older Persons Ability Support Service (OPASS)			
OPASS			
Domestic Assistance			
Per Hour - Lower Limit	\$4.90	\$5.00	2.04%
Per Hour - Upper Limit	\$47.97	\$48.07	0.21%
Overnight Respite (per night)			
Respite Care	\$40.00	\$40.50	1.25%
Personal Care			
Per Hour - Lower Limit	\$4.90	\$5.00	2.04%
Per Hour - Upper Limit	\$48.00	\$48.10	0.21%
Property Maintenance			
Per hr plus cost of materials - Lower Limit	\$16.50	\$17.00	3.03%
Per hr plus cost of materials - Upper Limit	\$71.00	\$72.00	1.41%
Respite Care			
Per Hour - Lower Limit	\$4.90	\$4.95	1.02%
Per Hour - Upper Limit	\$48.00	\$48.00	0.00%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Community Transport

Birregurra/Forrest/Beeac/Warrion

One way	\$9.20	\$9.30	1.09%
Return	\$17.60	\$17.70	0.57%

Colac

Return	\$10.30	\$10.40	0.97%
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Colac Otway Shire - Apollo Bay, Lavers Hill

Return	\$33.00	\$33.10	0.30%
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Colac to Geelong or Ballarat

One way - single passenger	\$22.50	\$22.60	0.44%
One way - two or more passengers	\$17.50	\$17.60	0.57%
Return	\$33.00	\$33.00	0.00%

Colac to Melbourne

Return	\$58.00	\$59.00	1.72%
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Colac to Warrnambool

Return	\$33.00	\$33.10	0.30%
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Community Bus Transport for Group Activities

Community Bus Transport for Group Activities	\$6.10	\$6.20	1.64%
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Contracted Services

Contracted Services

Rate per kilometre	\$1.20	\$1.20	0.00%
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Domestic Assistance

Per hour

7:30am to 7:30pm - Sat./Sun./Public Holiday	\$93.00	\$94.00	1.08%
7:30am to 7:30pm Mon. to Fri.	\$52.00	\$53.00	1.92%

Personal Care

Per hour

7:30am to 7:30pm - Sat./Sun./Public Holiday	\$93.00	\$94.00	1.08%
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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Personal Care [continued]

7:30am to 7:30pm Mon. to Fri.	\$52.00	\$53.00	1.92%
7:30pm to 7:30am Mon. to Fri.	\$93.00	\$94.00	1.08%

Respite Care

Per hour

7:30am to 7:30pm Sat./Sun./Public Holiday	\$93.00	\$94.00	1.08%
7:30am to 7:30pm Mon. to Fri.	\$52.00	\$53.00	1.92%
7:30pm to 7:30am Mon. to Fri.	\$93.00	\$94.00	1.08%

Meals to Agency clients

Per hour plus cost of materials

All meals

Per meal - Lower Limit	\$10.70	\$10.70	0.00%
Per meal - Upper Limit	\$22.00	\$22.00	0.00%

Delivered meals

Per meal - Lower Limit	\$10.70	\$10.70	0.00%
Per meal - Upper Limit	\$22.00	\$22.00	0.00%

COPACC**Marketing**

A1 Poster print & display	\$35.00	\$36.00	2.86%
A4 Poster Distribution around town/surrounding towns	\$40.00	\$41.00	2.50%
DL Flyer Distribution to Database as part of Newsletter	\$100.00	\$102.00	2.00%
Facebook Banner for 10 days prior to show/event	\$30.00	\$30.50	1.67%
Facebook Post (with boost)		\$10 plus boosted amount	
		Last year fee	
		\$10 plus boosted amount	
Facebook Post (without boost)	\$10.00	\$10.00	0.00%
Half screen advertisement on foyer big screen (rolling coverage)		\$15 / week	
		Last year fee	
		\$15 / week	
Listing on Arts Atlas Geelong & Southwest		\$15 each or both for \$25	
		Last year fee	
		\$15 each or both for \$25	
Metal Sign	\$110.00	\$112.00	1.82%
Number of signs to be displayed			

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Marketing [continued]

Newspaper ad			n/a Last year fee n/a
We refer all clients directly to the Colac Herald for advertising rates and opportunities.			
Standalone EDM	\$60.00	\$61.00	1.67%

Auditorium 1 - 4 Hour Minimum Hire

Commercial Hire

4 Hour Hire	\$1,067.00	\$1,083.50	1.55%
8 Hour Hire	\$1,579.00	\$1,603.00	1.52%
Additional Hour	\$141.00	\$144.00	2.13%
Hourly penalty	\$0.00	\$0.00	0.00%

Community From Colac Otway

4 Hour Hire	\$774.00	\$786.00	1.55%
8 Hour Hire	\$1,154.00	\$1,172.00	1.56%
Additional Hour	\$113.00	\$115.00	1.77%

Catering

Tablecloth Hire - COPACC Black - per cloth	\$12.00	\$12.50	4.17%
Tea, Coffee & Mints - All Day - per head	\$3.80	\$4.00	5.26%
Juice - Apple/Orange per Jug	\$6.90	\$7.00	1.45%

Civic Hall

Commercial Hire

4 Hour Hire	\$512.00	\$520.00	1.56%
8 Hour Hire	\$790.00	\$802.00	1.52%
Additional Hour	\$93.00	\$95.00	2.15%

Community From Colac Otway

4 Hour Hire	\$424.00	\$431.00	1.65%
8 Hour Hire	\$661.00	\$671.00	1.51%
Additional Hour	\$82.00	\$84.00	2.44%

Equipment Hire

Civic Hall 5 x 2 x 350mm skirted stage			\$50 / event Last year fee \$50 / event
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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Equipment Hire [continued]

Civic Hall presenter package/day	\$170.00	\$173.00	1.76%
Civic Hall presenter package/week	\$300.00	\$304.50	1.50%
Presenter technology pack			\$20 / day
			Last year fee \$20 / day
Projector Hire Epson 7.5K - Civic Hall - per day	\$115.00	\$117.00	1.74%
Projector Hire Epson 7.5K - Civic Hall – per week	\$261.00	\$265.00	1.53%
Projector Hire - Epson 11K - Auditorium - per day	\$214.00	\$218.00	1.87%
Projector Hire - Epson 11K - Auditorium - per week	\$535.00	\$545.00	1.87%
Projector Hire - Meeting Rooms per unit (per day)	\$30.00	\$30.50	1.67%
Haze Machine - Daily	\$43.00	\$44.00	2.33%
Haze Machine - Weekly	\$107.00	\$109.00	1.87%
Mirror Ball	\$85.00	\$87.00	2.35%
PA System - Advanced	\$273.00	\$277.00	1.47%
PA System - Basic	\$113.00	\$115.00	1.77%
PA System - Meeting Room (Fixed)	\$29.00	\$29.50	1.72%
Portable Stage - Flat Stage	\$225.00	\$229.00	1.78%
Wireless Microphone - per additional day	\$29.00	\$30.00	3.45%
Wireless Microphone - per day	\$55.00	\$56.00	1.82%

Green Room Hourly Rate

Commercial Hire

After Hours	\$72.00	\$73.00	1.39%
Between 8:30am & 5pm	\$44.00	\$45.00	2.27%

Community From Colac Otway

After Hours	\$61.00	\$62.00	1.64%
Between 8:30am & 5pm	\$31.00	\$32.00	3.23%

Kitchen Hourly Rate

Commercial Hire

After Hours & Weekends	\$73.00	\$74.00	1.37%
Between 8:30am & 5pm	\$57.00	\$58.00	1.75%

Community From Colac Otway

After Hours & Weekends	\$64.00	\$65.00	1.56%
Between 8:30am & 5pm	\$32.00	\$33.00	3.13%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Labour Charges

Hourly Rate

Public Holiday Surcharge (Staffing)	Additional 25% on standard rates		
	Last year fee Additional 25% on standard rates		
Event staff - First 8 Hours (per hour)	\$69.00	\$70.00	1.45%
Event staff - Additional Hour (per hour)	\$91.00	\$93.00	2.20%
Technical staff - First 8 Hours (per hour)	\$69.00	\$70.00	1.45%
Technical staff - Additional Hour (per hour)	\$91.00	\$93.00	2.20%

Meeting Room/s Hourly Rate

Commercial Hire

Double Room (After Hours)	\$96.00	\$98.00	2.08%
Double Room (Between 8:30am & 5pm)	\$73.00	\$74.00	1.37%
Single Room (After Hours)	\$73.00	\$74.00	1.37%
Single Room (Between 8:30am & 5pm)	\$50.00	\$51.00	2.00%

Community From Colac Otway

Double Room (After Hours)	\$84.00	\$85.00	1.19%
Double Room (Between 8:30am & 5pm)	\$62.00	\$63.00	1.61%
Single Room (After Hours)	\$62.00	\$63.00	1.61%
Single Room (Between 8:30am & 5pm)	\$39.00	\$40.00	2.56%

Other Charges

Commercial & Community Hire

Admin Fee	\$193.00	\$196.00	1.55%
Grand Piano	\$110.00	\$112.00	1.82%
Major Cleaning	\$231.00	\$235.00	1.73%
Minor Cleaning	\$172.00	\$175.00	1.74%
Piano Tuning	\$279.00	\$284.00	1.79%
Test & Tag Services - per item	\$11.00	\$11.20	1.82%

Community From Colac Otway

Admin Fee	\$0.00	\$0.00	0.00%
Major Cleaning	\$0.00	\$0.00	0.00%
Minor Cleaning	\$0.00	\$0.00	0.00%
Piano Tuning	\$0.00	\$0.00	0.00%
Test & Tag Services - per item	\$0.00	\$0.00	0.00%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Public Gallery Exhibition & Display Hire Charges

Exhibition

Exhibition - % Commission			10.00%
			Last year fee 10.00%

Public Gallery Hourly Rate For Meeting & Convention

Commercial Hire

After Hours	\$73.00	\$74.00	1.37%
Between 8:30am & 5pm	\$50.00	\$51.00	2.00%

Community From Colac Otway

After Hours	\$61.00	\$62.00	1.64%
Between 8:30am & 5pm	\$39.00	\$40.00	2.56%

Rehearsal Room Hourly Rate

Commercial Hire

After Hours	\$73.00	\$74.00	1.37%
Between 8:30am & 5pm	\$50.00	\$51.00	2.00%

Community From Colac Otway

After Hours	\$62.00	\$63.00	1.61%
Between 8:30am & 5pm	\$39.00	\$40.00	2.56%

Economic Development & Events

Aerodrome Landing Fees

Apollo Bay

Per landing	\$11.00	\$11.00	0.00%
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Colac

Per landing	\$11.00	\$11.00	0.00%
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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
Colac Livestock Selling Centre			
Agents (with leased office space) special sale			
Fee	\$200.00	\$200.00	0.00%
Agents (with leased office space) weekly fee			
Fee	\$200.00	\$200.00	0.00%
Agents (without office space) per sale fee			
Fee	\$500.00	\$500.00	0.00%
All horses			
Fee	\$17.60	\$17.60	0.00%
All other cattle			
Fee	\$13.50	\$13.50	0.00%
Annual licence and rental			
Fee	\$2,377.60	\$2,377.60	0.00%
Bobby calves			
Fee	\$5.90	\$5.90	0.00%
Bulls flat rate			
Fee	\$18.60	\$18.60	0.00%
Cows and calves weigh fee			
Weigh Fee per Animal	\$4.10	\$4.10	0.00%
Dairy cattle			
Fee	\$13.50	\$13.50	0.00%
Pigs			
Fee	\$3.50	\$3.50	0.00%
Private weigh			
Fee	\$5.90	\$5.90	0.00%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
Sheep and lambs			
Fee	\$2.20	\$2.20	0.00%
Stud cattle			
Fee	\$18.60	\$18.60	0.00%
Weighed cattle			
Fee	\$13.50	\$13.50	0.00%
Other miscellaneous fees			
Truck wash per minute	\$1.10	\$1.10	0.00%
Small bale of Hay	\$10.00	\$10.00	0.00%
Facility hire	\$440.00	\$440.00	0.00%
Adjustment for cattle per day per beast	\$4.00	\$4.00	0.00%
Events			
Event in a public place	\$200.00	\$205.00	2.50%
Event trailer hire - Commercial	\$330.00	\$330.00	0.00%
Event trailer hire - not-for-profit	\$110.00	\$110.00	0.00%
Planning & Building			
Building Control Charges			
Application for Place of Public Entertainment (PoPE) Permit or Temporary Structure			
PoPE Single Event			
Application for Place of Public Entertainment (PoPE) Permit <500 persons	\$281.00	\$289.00	2.85%
Application for Place of Public Entertainment (PoPE) Permit 500-2000 persons	\$585.00	\$600.00	2.56%
Application for Place of Public Entertainment (PoPE) Permit >2000 persons	\$890.00	\$915.00	2.81%
PoPE Multi year event (In addition to single event fee for additional years)			
Application for Place of Public Entertainment (PoPE) Permit <500 persons, additional per year fee	\$153.00	\$157.00	2.61%
Application for Place of Public Entertainment (PoPE) Permit 500-2000 persons, additional per year fee	\$203.00	\$209.00	2.96%
Application for Place of Public Entertainment (PoPE) Permit >2000 persons, additional per year fee	\$254.00	\$261.00	2.76%
Application for Siting of Temporary Structure associated with PoPE (In addition to PoPE fee)			
Application for Place of Public Entertainment (PoPE) Permit & Temporary Structure Siting Permit per structure	\$82.00	\$85.00	3.66%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Application for PoPE & Siting of Temporary Structure Multi year Event max 5 year (In addition to single event fee)

Application for Place of Public Entertainment (PoPE) Permit & Temporary Structure Siting Permit per structure <500 persons, additional per year fee	\$153.00	\$157.00	2.61%
Application for Place of Public Entertainment (PoPE) Permit & Temporary Structure Siting Permit per structure 500-2000 persons	\$203.00	\$209.00	2.96%
Application for Place of Public Entertainment (PoPE) Permit & Temporary Structure Siting Permit per structure >2000 persons	\$254.00	\$261.00	2.76%

Application for Siting of Temporary Structure not associated with a PoPE

Application for Temporary Structure Siting Permit - Single Event per structure	\$153.00	\$157.00	2.61%
Application for Temporary Structure Siting Permit - Single Event, plus per multi year event per structure	\$102.00	\$105.00	2.94%

Late Application for PoPE or Siting of Temporary Structure

Application for Place of Public Entertainment (PoPE) or Temporary Structure Siting Permit made less than 21 days from the scheduled event (in additional to application fee)	\$520.00	\$535.00	2.88%
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Information charges

Building plans, plan search	\$115.00	\$118.00	2.61%
Building plans/plan search (archival search)	\$230.00	\$236.00	2.61%

Registration of Swimming Pool

Application for Registration	\$31.84	\$32.30	1.44%
Information Search	\$47.24	\$47.90	1.40%
Lodgement of Certificate - Pool Barrier Compliant	\$20.44	\$20.70	1.27%
Lodgement of Certificate - Pool Barrier Non-Compliant	\$385.06	\$390.70	1.46%
Swimming Pool/Spa Compliance Audit for Land Owner	\$695.00	\$712.80	2.56%

Building Permit Amendments

Permit Amendments	\$208.00	\$214.00	2.88%
Extensions of Time	\$208.00	\$214.00	2.88%

Building Permit Application Fee

All other classes of Occupancy 2-9 inclusive (construction and/or demolition)

Does not exceed \$5,000	\$945.00	\$970.00	2.65%
Does not exceed \$10,000	\$1,330.00	\$1,365.00	2.63%
Does not exceed \$20,000	\$2,010.00	\$2,065.00	2.74%
Does not exceed \$50,000	\$2,900.00	\$2,975.00	2.59%
Does not exceed \$100,000	\$4,500.00	\$4,615.00	2.56%
Does not exceed \$200,000	\$5,760.00	\$5,910.00	2.60%
Does not exceed \$500,000	\$7,140.00	\$7,320.00	2.52%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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All other classes of Occupancy 2-9 inclusive (construction and/or demolition) [continued]

Does not exceed \$600,000	\$8,560.00	\$8,780.00	2.57%
Does not exceed \$700,000	\$9,990.00	\$10,240.00	2.50%
Does not exceed \$800,000	\$9,970.00	\$10,220.00	2.51%
Does not exceed \$900,000	\$12,860.00	\$13,190.00	2.57%
Does not exceed \$1,000,000	\$13,120.00	\$13,450.00	2.52%
Does not exceed \$1,500,000	\$19,560.00	\$20,050.00	2.51%
Does not exceed \$2,000,000	\$23,940.00	\$24,540.00	2.51%
Does exceed \$2,000,000	\$29,000.00	\$29,730.00	2.52%

Domestic – class 1a Dwellings (construction and demolition), where the value of building work:

Does not exceed \$5,000	\$735.00	\$755.00	2.72%
Does not exceed \$10,000	\$1,000.00	\$1,025.00	2.50%
Does not exceed \$15,000	\$1,370.00	\$1,405.00	2.55%
Does not exceed \$25,000	\$1,690.00	\$1,735.00	2.66%
Does not exceed \$50,000	\$2,650.00	\$2,720.00	2.64%
Does not exceed \$75,000	\$3,070.00	\$3,150.00	2.61%
Does not exceed \$100,000	\$3,710.00	\$3,805.00	2.56%
Does not exceed \$150,000	\$3,960.00	\$4,060.00	2.53%
Does not exceed \$200,000	\$4,850.00	\$4,975.00	2.58%
Does not exceed \$250,000	\$5,230.00	\$5,370.00	2.68%
Does not exceed \$300,000	\$5,760.00	\$5,910.00	2.60%
Does exceed \$300,000	\$6,800.00	\$6,980.00	2.65%

Minor Works - Class 10a, 10b & 1ai: Garages, carports, pool/spas & fence where value of work:

Less than \$5000	\$735.00	\$755.00	2.72%
Between \$5,000 to \$10,000	\$1,000.00	\$1,025.00	2.50%
Between \$10,001 to \$20,000	\$1,640.00	\$1,685.00	2.74%
More than \$20,000	\$1,890.00	\$1,940.00	2.65%
Minor works - Class 10b: Safety Barrier (without pool/spa) & Alterations to Safety Barrier.	\$525.00	\$540.00	2.86%

Inspections

Additional Inspection (charged where additional inspections are required)

Additional Inspection (Domestic) - within 20km radius of Colac	\$240.00	\$246.00	2.50%
Additional Inspection (Commercial)	\$299.00	\$307.00	2.68%
Additional Travel per km (in addition to additional inspection fee) - more than 20km from Colac	\$1.20	\$1.25	4.17%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Essential Safety Measures Assessments

Essential Safety Measures Determination

Fee	\$695.00	\$715.00	2.88%
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Report and Consent Fees

Report & Consent Application

Report & Consent Application - Charge per notice sent to adjoining properties	\$25.00	\$25.00	0.00%
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Planning Fees & Charges – Other

Advertising

Advertising notice sent to individual property owners per letter	\$8.00	\$8.20	2.50%
Advertising sign erected on site	\$345.00	\$354.00	2.61%

Application for approval of amended plans under secondary consent

Fee	\$187.00	\$192.00	2.67%
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Extension of time to planning permits

1st Extension of time to planning permits	\$107.00	\$121.00	13.08%
2nd Extension of time to planning permits	\$160.00	\$181.00	13.13%
Each additional extension of time to planning permits	\$214.00	\$242.00	13.08%

Property Enquiry

Does not require extensive research	\$115.00	\$0.00	-100.00%
Extensive research	\$230.00	\$0.00	-100.00%

Section 173 Agreements

Written consent to vary something registered on title.	\$650.00	\$735.00	13.08%
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Public Health

Health Protection Administration (Registration Fees)

CLASS 1 Food Premises

Class 1 - Not For Profit Renewal or New	\$323.00	\$332.00	2.79%
Class 1 Renewal or New	\$567.00	\$609.00	7.41%
Class 1 Change of Ownership	\$283.50	\$304.00	7.23%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
CLASS 2 Food Premises			
Class 2 Major Renewal or New	\$890.00	\$1,053.00	18.31%
Class 2 Major Transfer of Registration	\$445.00	\$530.00	19.10%
Class 2 Not for Profit Renewal or New	\$266.00	\$273.00	2.63%
Class 2 Not for Profit Transfer of Registration	\$133.00	\$137.00	3.01%
Class 2 General Renewal or New	\$454.00	\$500.00	10.13%
Class 2 General Change of Ownership	\$227.00	\$250.00	10.13%
CLASS 3 Food Premises			
Class 3 General Renewal or New	\$262.00	\$299.00	14.12%
Class 3 General Transfer of Registration	\$131.00	\$150.00	14.50%
Class 3 Not for Profit Renewal or New	\$164.00	\$169.00	3.05%
Class 3 Not for Profit Change of Ownership	\$82.00	\$85.00	3.66%
Additional Temporary/Mobile Food Registration			
Class 2 Streatrader Additional Component	\$128.00	\$132.00	3.13%
Class 3 Streatrader Additional Component	\$72.00	\$74.00	2.78%
Community Group Support			
Class 2 or 3 - Not For Profit - Community Service Club	\$50.00	\$51.00	2.00%
Class 2 or 3 less than 3 Months Not For Profit (once per year)	\$0.00	\$0.00	0.00%
Personal Appearance Services			
Beauty Therapies			
Beauty Therapy/Ear Piercing (Med Risk) Renewal or New	\$162.00	\$165.00	1.85%
Beauty Therapy/Ear Piercing (Med Risk) Transfer of Registration	\$81.00	\$82.00	1.23%
Hairdressers			
Hairdresser/Makeup (Low Risk) New - One Off Reg Fee	\$213.00	\$213.00	0.00%
Skin Penetration (Tattooists, body piercing)			
Tattooist/Body Piercing (High Risk) Renewal or New	\$215.00	\$221.00	2.79%
Tattooist/Body Piercing (High Risk) Transfer of Registration	\$107.50	\$110.00	2.33%
Miscellaneous			
Conveyance Enquiries for regulated businesses			
Pre Purchasing Inspection	\$235.00	\$241.00	2.55%

Attachment 10.7.3 2022-23 Council Fees & Charges Schedule

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
Water Sampling			
Professional service fee	\$150.00	\$154.00	2.67%
Actual testing fee			Actual cost
			Last year fee Actual cost
Immunisation			
Immunsiation Service Fee Flu Vaccine	\$25.50	\$26.50	3.92%
Replacement Certificate			
Fee	\$42.50	\$44.00	3.53%
Express Service			
Within 5 days	\$213.00	\$219.00	2.82%
Professional Service			
Additional compliance inspection	\$150.00	\$154.00	2.67%
Food Safety Program Template	\$84.00	\$87.00	3.57%
Historic document Search fee	\$230.00	\$236.00	2.61%
Historic Document Search Fee (Basic)	\$115.00	\$118.00	2.61%
Additional hour	\$55.00	\$57.00	3.64%
Prescribed Accommodation			
6 to 10 persons			
Precribed Accomodation up to 10 Renewal or New	\$271.00	\$314.00	15.87%
Precribed Accomodation up to 10 Transfer of Registration	\$135.50	\$157.00	15.87%
11 to 20 persons			
Precribed Accomodation 10 -20 persons Rewewal or New	\$366.00	\$414.00	13.11%
Precribed Accomodation 11-20 persons Transfer of Registration	\$183.00	\$207.00	13.11%
20+ persons			
Prescribed Accomodation 20+ persons Rewewal or New	\$448.00	\$507.00	13.17%
Prescribed Accomodation 20+ persons Transfer of Registration	\$224.00	\$254.00	13.39%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Environment & Infrastructure Services

Infrastructure Development

Asset Protection Permit Fee

Permit Fee	\$158.00	\$158.00	0.00%
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Check Engineering Plans

These fees apply to developments/subdivisions that do not require the construction of new Council roads.

2 lot development	\$152.25	\$156.00	2.46%
3 to 5 lot development	\$253.75	\$260.00	2.46%
6 to 12 lot development	\$406.00	\$416.00	2.46%
13 to 19 lot development	\$558.25	\$572.00	2.46%
20 to 30 lot development	\$710.50	\$728.00	2.46%
31+ lot development	\$913.50	\$936.00	2.46%
Apartment, motel, hotel building (per 10 units)	\$253.75	\$260.00	2.46%
Small commercial developments (<500m2 + floor area)	\$253.75	\$260.00	2.46%
Medium commercial developments (500-2,000m2 + floor area)	\$558.25	\$572.00	2.46%
Large commercial developments (2,001m2 + floor area)	\$964.25	\$988.00	2.46%
1 industrial/factory/warehouse buildings/lots	\$152.25	\$156.00	2.46%
2-5 industrial/factory/warehouse buildings/lots	\$406.00	\$416.00	2.46%
6+ industrial/factory/warehouse buildings/lots	\$608.99	\$624.00	2.46%

Design Fee

In house	10.00%	Last year fee 10.00%
External design - Supervision fee	2.5%	Last year fee 20.00%
External design work	At Cost	Last year fee At Cost

Special Charge Scheme

Contract administration	2.50%	Last year fee 2.50%
Scheme administration	3.00%	Last year fee 3.00%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Standpipe water fee

Per kilolitre	\$6.00	\$6.00	0.00%
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Environment & Community Safety

Animal Control

Registration

All other (refer Sch 2 of Domestic Animal Act 1994)	\$45.00	\$45.00	0.00%
Cat registration - full	\$120.00	\$120.00	0.00%
Cat registration - micro chipped and de-sexed	\$22.00	\$22.00	0.00%
Cat registration - micro chipped only	\$38.00	\$38.00	0.00%
Dog registration - full	\$140.00	\$140.00	0.00%
Dog registration - micro chipped and de-sexed	\$30.00	\$30.00	0.00%
Dog registration - micro chipped only	\$44.00	\$44.00	0.00%
Pensioner discount of registration fee			50.00%
			Last year fee 50.00%
Working farm dog	\$28.00	\$28.00	0.00%
Declared Dangerous & Menacing Dogs	\$150.00	\$150.00	0.00%
Pet Shop - Breeding/Boarding Facility Audit Fee	\$240.00	\$240.00	0.00%

Pound Release Fees

Cats - Initial impoundment plus	\$46.00	\$46.00	0.00%
Cats - per head per day	\$10.00	\$10.00	0.00%
Cattle/horses - Initial impoundment plus	\$100.00	\$100.00	0.00%
Cattle/horses - per head per day	\$18.00	\$18.00	0.00%
Dogs - Initial impoundment plus	\$70.00	\$70.00	0.00%
Dogs - per head per day	\$20.00	\$20.00	0.00%
Sheep/pigs - Initial impoundment plus	\$46.00	\$46.00	0.00%
Sheep/pigs - per head per day	\$14.00	\$14.00	0.00%
All other - Initial impoundment plus	\$35.00	\$35.00	0.00%
All other - per head per day	\$14.00	\$14.00	0.00%

Events

Other

Wedding on Council controlled/managed land	\$90.00	\$90.00	0.00%
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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Fire Prevention

Administrative fee block slashing

Fee (plus cost of slashing)	\$180.00	\$180.00	0.00%
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Local Laws

Local Law No 1

Alcohol permit	\$180.00	\$180.00	0.00%
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Local Law No 2

Goods for sale per m2	\$75.00	\$75.00	0.00%
Signs (A frame) - Charitable Organisations	\$75.00	\$75.00	0.00%
Signs (A frame) - Other	\$150.00	\$150.00	0.00%
Street party/festival per event	\$220.00	\$220.00	0.00%
Tables and chairs - 1st table and 4 chairs	\$140.00	\$140.00	0.00%
Tables and chairs - then per seat thereafter	\$42.00	\$42.00	0.00%
Using Council land - Permit /admin fee	\$67.00	\$67.00	0.00%
Plus Cost Per Week			
Using Council land - Cost per week	\$37.00	\$37.00	0.00%
Vegetation	\$105.00	\$105.00	0.00%

Other

Abandoned or derelict vehicles

Pickup fee	\$290.00	\$290.00	0.00%
Plus Transport and Storage Costs			
Transport and storage costs			At Cost Last year fee At Cost

All other permits

Spruiking & Busking, Weddings, Door Knocks and Temporary Dwellings Permit	\$95.00	\$95.00	0.00%
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Circus

Fee	\$170.00	\$200.00	17.65%
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Impoundment Fee

Fee	\$160.00	\$160.00	0.00%
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Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Public protection (hording permit)

Application fee	\$40.00	\$40.00	0.00%
Plus Per m2 fee			
Per m2 fee	\$20.00	\$20.00	0.00%
Work Zone Parking Permit (per bay per week)	\$47.00	\$47.00	0.00%

Parking

All day parking permit (Payable in 6 monthly blocks - Johnstone's Carpark only)

Per week	\$25.00	\$25.00	0.00%
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Car parking fines

Fine	\$80.00	\$80.00	0.00%
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Apollo Bay Market

Apollo Bay Community Saturday Market 1/2 Day permit (per annum)	\$40.00	\$50.00	25.00%
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Waste Management

Waste Management Additional Service Charge/Bin

360 Litre Recycle additional bin	\$105.00	\$108.60	3.43%
Additional Glass Bin 120 Litre	\$52.00	\$53.80	3.46%
240 litre garbage additional service charge/bin	\$322.00	\$333.00	3.42%
240 litre organic additional service charge/bin	\$112.00	\$115.00	2.68%
240 litre recycle additional service charge/bin	\$90.00	\$93.00	3.33%
Upgrade to 240 litre Garbage Bin	\$135.00	\$139.00	2.96%
Upgrade to 360 litre Recycling bin	\$20.00	\$20.50	2.50%

All waste receipt sites

240L Comingled Recycling (Charging from 1 January 2022)	\$4.00	\$4.00	0.00%
Car bodies	\$0.00	\$0.00	0.00%
Chemical drums (each)	\$1.20	\$1.25	4.17%
Commercial fully co-mingled recyclables (per m3)	\$45.00	\$45.00	0.00%
Commercial fully co-mingled recyclables (per tonne)	\$75.00	\$77.00	2.67%
Mattresses each	\$26.50	\$30.00	13.21%
Putrescibles (incl mixed rubbish) per m3	\$45.00	\$46.50	3.33%
Putrescibles (incl mixed rubbish) 1st 240 litre bin or less	\$10.00	\$10.30	3.00%
Putrescibles (incl mixed rubbish) 2nd 240 litre bin	\$0.00	\$0.00	0.00%
Putrescibles (incl mixed rubbish) per tonne	\$220.00	\$227.70	3.50%
Tree pruning's (per m3)	\$50.00	\$51.00	2.00%
Tree pruning's (per tonne)	\$120.00	\$124.00	3.33%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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All waste receival sites [continued]

TV & Monitors	\$0.00	\$0.00	0.00%
Car tyre	\$9.00	\$9.50	5.56%
Car tyre on rim	\$15.00	\$15.50	3.33%
Commercial batteries each (more than 2)	\$7.00	\$7.00	0.00%
Light truck tyre	\$17.00	\$18.00	5.88%
Tractor tyre 1 - 2m	\$215.00	\$222.15	3.33%
Tractor tyre up to 1m	\$102.00	\$106.00	3.92%
Truck tyre	\$46.00	\$47.54	3.35%
10 tickets up to 240L, Waste, Co-mingled or Mix of Both	\$80.00	\$82.00	2.50%
25 tickets up to 240L, Waste, Co-mingled or Mix of Both	\$169.00	\$174.00	2.96%

Kerbside Bin Fees

Bin change over fee (all bins)	\$32.00	\$33.00	3.13%
Lost or stolen bins – 120/240 litre	\$60.00	\$62.00	3.33%

Other

Tourist Bags (red and yellow) per pair	\$10.00	\$10.00	0.00%
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Apollo Bay Harbour**Marina Fees**

Marina Berth - Annual Fee >18M	\$3,235.00	\$3,335.00	3.09%
Marina Berth - Annual Fee 12-15M	\$2,956.98	\$3,045.70	3.00%
Marina Berth - Annual Fee 15.01-18M	\$3,100.00	\$3,195.00	3.06%
Waiting List Application Fee	\$256.00	\$256.00	0.00%
Marina Berth - Annual <12M	\$2,745.00	\$2,830.00	3.10%
Short Term Berth (Per Day) - <15	\$42.00	\$42.90	2.14%
Short Term Berth (Per Day) - 15 to 20m	\$52.00	\$53.55	2.98%
Short Term Berth (Per Day) - 20 to 25m	\$64.00	\$65.95	3.05%
Short Term Berth (Per Day) - 25 to 30m	\$80.00	\$83.00	3.75%
Short Term Berth (Per Day) - >30m	\$147.00	\$147.00	0.00%
Marina Key Replacement	\$52.00	\$52.00	0.00%
Swing Mooring - Annual Fee	\$540.00	\$556.00	2.96%
Swing Mooring - Establishment	\$360.00	\$370.70	2.97%

Slipway Fees**Slipping Fees**

Slipping Fee - 15.1 to 20m	\$640.00	\$660.00	3.13%
Slipping Fee <10m	\$218.00	\$225.00	3.21%
Slipping Fee >20m	\$1,090.00	\$1,125.00	3.21%

Name	Year 21/22 Fee (incl. GST)	Year 22/23 Fee (incl. GST)	Increase %
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Slipping Fees [continued]

Slipping Fee 10.1 to 15m	\$310.00	\$320.00	3.23%
Slipping Fee 15.1 to 20m	\$640.00	\$660.00	3.13%

Slip Yard Occupancy (Per Day)

Slip Yard Occupancy (Per Day) - <10m	\$55.00	\$57.00	3.64%
Slip Yard Occupancy (Per Day) - >20m	\$288.00	\$297.00	3.13%
Slip Yard Occupancy (Per Day) - 10.1 to 15m	\$104.00	\$108.00	3.85%
Slip Yard Occupancy (Per Day) - 15.1 to 20m	\$240.00	\$248.00	3.33%
Slipyard Occupancy (Day Rate) >20m	\$288.00	\$297.00	3.13%

Ancillary Services**Business Hours**

Crane Truck with Operator and Dogman per hour	\$213.00	\$220.00	3.29%
Crew (Additional, Attend V/L or Mooring) per hour	\$65.00	\$67.00	3.08%
Hire "Barrum" Inc Coxswain per hour	\$213.00	\$220.00	3.29%
Hire "Urchin" inc. Master and Deckhand per hour	\$530.00	\$550.00	3.77%
Pressure Cleaner Hire per hour	\$37.50	\$39.00	4.00%

After Hours (3hr Min)

Crane Truck with Operator and Dogman per hour	\$478.00	\$493.00	3.14%
Crew (Additional, Attend V/L or Mooring) per hour	\$128.00	\$132.00	3.13%
Hire "Barrum" inc Coxswain per hour	\$478.00	\$493.00	3.14%
Hire "Urchin" Inc Master and Deckhand per hour	\$800.00	\$825.00	3.13%

Item: 10.8

Domestic Wastewater Management Plan Review - Endorse for Exhibition

OFFICER	James McDonald
GENERAL MANAGER	Ian Seuren
DIVISION	Development and Community Services
ATTACHMENTS	<ol style="list-style-type: none">1. DWMP Review 2021 - Operational Document for Public Exhibition [10.8.1 - 110 pages]2. DWMP Review 2021 - Technical Document for Public Exhibition [10.8.2 - 204 pages]

1. PURPOSE

To present a review of the 2015 Domestic Wastewater Management Plan (DWMP) for Council to consider placing on public exhibition seeking feedback from the community.

2. EXECUTIVE SUMMARY

Council adopted a Domestic Wastewater Management Plan (DWMP) in 2015. It provides guidance for Council in its management of on-site wastewater treatment and disposal across the Shire and has resulted in an audit program conducted over the past three years to better understand the state of wastewater systems in our declared water catchments. A review has been conducted in accordance with statutory requirements by Whitehead and Associates, the author of the 2015 report. The DWMP has been updated to reflect current legislation and changes that have occurred since 2015 and is informed by the audit program conducted by Council. It is recommended that Council place the draft on public exhibition to seek submissions from the community and key stakeholders before it is finalised for adoption.

3. RECOMMENDATION

That Council:

1. *Notes the review of the 2015 Domestic Wastewater Management Plan and actions that have been taken by Council to manage on-site wastewater management since the 2015 plan.*

2. **Endorses the draft Domestic Wastewater Management Plan Review 2022 (as at Attachment 1) for the purpose of public consultation.**
3. **Determines that the public consultation period shall be no less than eight weeks from public notice.**
4. **Considers any submissions received prior to adoption of the final Domestic Wastewater Management Plan Review 2022 at a future Council meeting.**

4. KEY INFORMATION

Council's DWMP sets out how Council manages the risk to public health and the environment from effluent that is discharged from onsite wastewater management systems (OWMS). The framework for managing OWMS is specified as part of the State Environmental Protection Policy Waters of Victoria Clause 29 which requires the implementation and review of Council's DWMP. Compliance with the SEPP also enables Council to continue development in declared water supply catchments.

This review will ensure there is continued strategic direction for managing OWMS. The review also sets out a new approach for having a prioritised auditing program in our declared water supply catchments.

The DWMP gives guidance to those preparing Land Capability Assessments, provides a risk assessment tool for planning and development in unsewered areas and assists with the permit and application process for septic tank systems under the *Environment Protection Act 2017* and *Environment Protection Regulations 2021*.

The review process was facilitated by Whitehead and Associates who developed the original plan in 2015 with Barwon Water and Wannon Water actively involved in the review process. This review focused on its 2015 action plan and what was achieved. It has also identified changes to regulatory controls and the future direction Council needs to take in order to satisfy the requirements of the water authorities.

Key changes to the DWMP which have been incorporated through this review include:

1. Recent legislative and policy changes

On 1 July 2018, the new *Environment Protection Act 2017* (the Act) came into force with the General Environment Duty (GED) taking affect with a prevention of harm approach. This was followed by the *Environment Protection Regulations 2021*. This means that Council under the Act must consider a precautionary and proportionate approach to managing the risks from OWMS and when it comes to enforcement, consider what is reasonably practicable in terms of the controls needed for harm reduction. It is now an offence for failing to prevent harm from reasonably foreseeable risks.

The reviewed plan references the new *Environment Regulations 2021* which sets out a more detailed or prescriptive assessment and permit approval process (S28h – see below) for OWMS, whilst also giving Councils additional tools to achieve compliance.

Both the new Act and Regulations shape our OWMS compliance and enforcement operating procedure.

2. Updated Risk Assessment Framework (RAF), updating the individual constraints for lots, updating the Sensitivity Rating Mapping (Figure 3) and revising the Locality Reports.

Where the sensitivity rating of a parcel or lot is thought to be incorrect from either observation or from Land Capability Assessment information, or where there have been new lots created as part of planning changes, the RAF approved data and the final compiled lot constraints data sheets were updated. The data compiles the sensitivity rating for each site based on a risk assessment methodology and site constraints (soil type, slope, useable lot space, climate, overlays ES03). This sensitivity rating provides direction on the nature and complexity of information to be submitted to Council with planning permit applications and Permit to Install applications made to the Health Protection Unit.

3. Revised Council priorities and projects.

Alignment has been achieved with the 2021-25 Council Plan vision where there is a focus on the environment and sustainability, and also a strong connection to the pillar valuing our natural and built environment.

The revised DWMP has incorporated reference to the priority of Forrest being supported for sewer reticulation given the challenges that have been identified over the past four years. Complaints have ranged from odour to offsite discharge. There are inadequate wastewater systems and constraints to economic development due to small allotments being incapable of containing treated wastewater. It is noted that Barwon Water are conducting a review of small towns across the region to identify townships with priority for sewer implementation over time, and that Forrest is a priority in this work.

4. Reviewed Council's Domestic Wastewater Management (DWM) procedures and processes including the evaluation of DWM system trends.

Since November 2015 (when Council's original plan was developed) to June 2021 there have been 486 applications processed (approximately 70 per year). For the 8,886 lots that are unsewered, there are approximately 3,884 OWMS records on file. It is expected that the number is not a true reflection on the total number of wastewater systems in the municipality as records were only required post 1970 and due to discrepancies in data management upon amalgamation.

The Health Protection team have developed amended standard operating procedures for undertaking audits of properties with wastewater systems and have adjusted their processes to accord with requirements under the new legislation.

5. Changes to technical data or recent advances in technology and management practices

The silo or climate data has been updated which reflects more accurate rainfall and evaporation rates in certain localities (e.g. Beech Forrest), and sizing tables used to assist in calculating treatment system size for Lavers Hill have been updated. This improves the accuracy when sizing land application areas for systems. Management practices that have changed are included as part of the Environment Protection Regulatory changes.

6. Update to the 2015 Action Plan.

The largest part of this work was reviewing the 2015 action plan which listed 18 items for implementation. The 2021 operational plan action plan now lists 12 action items as some of the 2015

items have been condensed, others removed and the majority carried over. The key action items that changed were:

Action Plan Item (1) - policies and procedures

Generic procedures have been in place for issuing permits and certificates and referral responses to planning permit applications but with the recent change in legislation we have now produced a standard operating procedure (SOP) to ensure our approach is in line with the EPA toolkit for Onsite Wastewater Management (OWM) published last year. As we continue to roll out Councils compliance program, we will review the effectiveness of these new tools.

Action Plan Item (7) Implement the Risk-based Compliance Monitoring Program

Significant resources have been invested in having a full time Domestic Wastewater Management Officer assigned to complete audits of higher sensitive sites or those wastewater systems in areas of concern. Our focus was to audit those systems in the Declared Water Supply Catchment (DWSC) namely Beech Forrest, Lavers Hill, Gellibrand, Kawarren, Barwon Downs, Forrest and Carlise River. The officer was assigned this role from November 2018 to September 2021.

To date 516 audits have been completed, 364 in the DWSC. 71% of the audits were assessed as compliant, with 12% classified as significantly non-compliant within the declared water supply catchments.

The compliance rating applied as part of the audit process is a broad-based screening tool. It is noted that whilst systems have been assessed as 'compliant' many of them would not meet the current EPA Code of Practice standards. Actions taken to address non-compliance were taken in some instances, with education always being provided to owners as part of the process. It is acknowledged that the bushfire response for Wye River & Separation Creek in 2016/17 and COVID have affected Council's ability to fulfil all audits in the water catchments and more comprehensively address non-compliance. Our new standard operating procedure will enable Council to better manage these identified failing systems.

In the new action plan, the priority to Implement the Risk-based Compliance Monitoring Program item has now been included under item 6 Septic Tank DWM system permit Conditions and Compliance. It is proposed that some audit and compliance activity continue, albeit at a far reduced scale going forward. It is critical that Council commits to this activity to meet its obligations to the water authorities which would not support Council's DWMP review without a level of commitment to continuing this work. It has been agreed that Council continues with a reduced audit program post 1 July committing a resource to one day per week. The focus will be addressing those significantly failing systems or where complaints are received in declared water supply catchments.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

This review is being undertaken in accordance with Clause 29 of State Environmental Protection Policy Waters of Victoria that states Councils must develop and implement a domestic wastewater management plan. The governance approach that Council will follow will be in accordance with the Environment Protection Authority of Victoria compliance and enforcement guidance.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

The relevant laws that apply to onsite wastewater are contained within the *Local Government Act 2020*, *Environment Protection Act 2017*, *Water Act 1989*, *Planning and Environment Act 1987*, State

Environmental Protection Policy Waters of Victoria 2018, Catchment and *Land Protection Act 1994* and Victorian Building Regulations 2018.

The Ministerial Guideline 1 - '*Planning Permit Applications in Open Potable Water Supply Catchment Areas*' (DSE 2012) state that in order for the density requirements to be relaxed for dwellings in water catchments to less than 1 dwelling per 40 hectares the Water Corporations must be satisfied that Council has prepared, adopted and is implementing its DWMP in accordance with DWMP requirements.

Environmental and Sustainability Implications (s(9)(2)(c) *LGA 2020*)

Sound on-site treatment and management of wastewater in rural areas is critical to avoiding well-known health impacts from pathogens and viruses found in effluent. This review will improve environmental and sustainable outcomes for all unsewered localities through improved wastewater quality and management of the receiving environments. The audit program in our declared catchments should further protect the quality of our community's drinking water supply.

Community Engagement (s56 *LGA 2020* and *Council's Community Engagement Policy*)

It is proposed that the draft DWMP be placed on public exhibition for eight weeks, which will allow sufficient time for interested land holders and the general community to read the technical documentation and make submissions. It is proposed to hold some drop in information sessions in various locations during the exhibition period for officers to explain the plan and seek feedback.

Public Transparency (s58 *LGA 2020*)

The Amendment will be exhibited in accordance with the relevant legislation. All information pertaining to the DWMP is fully accessible to the public and any interested parties, namely Land Capability Assessors, the Water Authorities and members of the community.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 2 - Valuing the Natural and Built Environment

Objective 3: Protect and enhance the natural environment

The current Council Plans has a focus on the environment and sustainability. The DWMP has a strong connection to the pillar valuing our natural and built environment. The DWMP places a significant value on the natural environment as the plan lists action that are needed to be taken and the controls required to maintain and protect Colac Otway Shires pristine environment.

Financial Management (s101 *Local Government Act 2020*)

There is a cost associated with the implementation of the DWMP. Onsite wastewater applications fees and charges are set as a statutory fee and the fees generated from the applications do not cover the time and resources needed to fulfil all of the DWMP activities. The action plan contained in the review is based on an assumption that Council will only be able to carry out a limited ongoing audit and compliance program (approximately 1 officer day per week of existing resource) to meet the Water Authority requirements due to competing priorities in the Council budget.

Service Performance (s106 *Local Government Act 2020*)

As noted above, the action plan included in the draft DWMP Review would limit the impact of on-going auditing and compliance work by officers to one day per week. It is considered this could be undertaken without significant impact on the service provided by the Health protection Unit.

Risk Assessment

The draft DWMP includes a thorough assessment of on-site wastewater risks and establishes an action plan that aims to manage these risks in an affordable manner for Council.

Communication/Implementation

Should Council support the recommendation, officers will make arrangements to commence public exhibition of the document. It will be advertised in a number of local publications and via social media to maximise awareness of the opportunity.

Human Rights Charter

There are no proposals in the draft DWMP Review which would compromise human rights principles.

Officer General or Material Interest

No officer declared an interest under the Local Government Act 2020 in the preparation of this report.

Options

Option 1 – Exhibit the draft DWMP

This option is recommended by officers as significant work has gone into reviewing the 2015 plan and ensuring that the document reflects current day circumstances and priorities. Officers have scaled back the commitment to on-site wastewater system audits to reflect the limited financial capacity for staff to undertake this activity and have worked with the water authorities Barwon Water and Wannon Water to ensure collaboration during its preparation. It is recommended that public feedback be sought to ensure that any community concerns can be addressed in the final document.

Option 2 – Adopt the DWMP without public review

This option is not recommended by officers. Whilst the DWMP review does not propose any wide scale changes that would adversely affect the community, it is important that members of the public have an opportunity to provide input before it is finalised. This is consistent with the governance principles of the *Local Government Act 2020*.

Option 3 – Not proceed with the process, or require further work to occur on the document

This option is not recommended by officers as it is critical that Council maintain a current and up to date DWMP under its statutory responsibilities. It is also important in maintaining flexibility for water authorities to support development occurring in our water catchments. The document has already undergone a comprehensive technical review.



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Colac Otway Shire Council

Domestic Wastewater Management Plan

Operational Plan

REVISED 2015 PLAN

December 2021

Prepared for: Colac Otway Shire Council

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Document Control Sheet

Document and Project Details					
Document Title:	Colac Otway Shire Council Domestic Wastewater Management Plan – Operational Plan				
Author:	Jasmin Kable				
Project Manager:	Mark Saunders				
Date of Issue:	20/12/2021				
Job Reference:	1307 COS Review DWMP_Operational Document_011.docx				
Synopsis:	<p>This Operational Plan has been developed to accompany the Technical Document (revised 2015), which together forms the Domestic Wastewater Management Plan (DWMP), to identify domestic wastewater management (DWM) issues within the Shire and recommend management actions to ensure potential risks are appropriately managed. A key component of the DWMP is a domestic wastewater management risk assessment and mapping that has been completed for the Shire. This assessment identifies prioritised districts that are in need of improved domestic wastewater management practices. The DWMP also provides technical guidance and a strategy for community education. A framework for the regulation of domestic wastewater management system performance is also provided.</p>				
Client Details					
Client:	Colac Otway Shire Council				
Primary Contact:	James McDonald, Health Protection Coordinator Telephone (03) 5232 9558				
Document Distribution					
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004	05/05/15	Revised DRAFT	1e	-	-
005	10/06/15	Draft FINAL	1e		
006	02/07/15	FINAL	1e		
007	14/07/15	FINAL	1e		
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Checked by: Mark Saunders			Issued by: Jasmin Kable		

Disclaimer

The information contained in this report is based on independent research undertaken by Whitehead & Associates Environmental Consultants Pty Ltd (W&A). To our knowledge, it does not contain any false, misleading or incomplete information. Recommendations are based on an appraisal of the site conditions subject to the limited scope and resources available for this project, and follow relevant industry standards. The work performed by W&A included a limited system audit and site and soil investigation in addition to a desktop review, and the conclusions made in this report are based on the information gained and the assumptions as outlined. Under no circumstances can it be considered that these results represent the actual conditions throughout the entire Shire due to the regional scale of this study.

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Document Certification

This Domestic Wastewater Management Plan has been prepared following the standards and guidelines set out in the following documents, where applicable:

- EPA Victoria (2016) 891.4 Code of Practice – *Onsite Wastewater Management*;
- Department of Sustainability and Environment (2012) *Planning permit applications in open, potable water supply catchment areas*;
- *Environment Protection Act 2017* and *Environment Protection Regulations 2021*;
- EPA ‘*Regulating onsite wastewater management systems: local government toolkit*’ (publication 1974: 2021);
- Municipal Association of Victoria (2014) *Victoria Land Capability Assessment Framework*, 2nd Ed; and
- AS/NZS 1547:2012 *On-site Domestic Wastewater Management* (Standards Australia / Standards New Zealand, 2012).

To our knowledge, it does not contain any false, misleading or incomplete information. Recommendations are based on an honest appraisal of the sites’ opportunities and constraints, subject to the limited scope and resources available for this project.

Supporting Author

Supporting technical contribution for this document was provided by Dr. Robert Van de Graaff (Van de Graaff and Associates). Dr. Van de Graaff undertook detailed (field) soil investigation and has provided primary soil data and interpretation which has been utilised in the development of the methodology outlined in this document.

Executive Summary

Colac Otway Shire Council (COS, the 'Council' or 'Shire') has developed a Domestic Wastewater Management Plan (DWMP) to assist with the efficient and effective management of domestic wastewater within the Shire in a way which will minimise the potential risk posed by domestic effluent upon public health, the physical environment and local receiving environments. COS is committed to the monitoring and management of on-site domestic wastewater management (DWM) systems within the Shire.

Under the provisions of the State Environment Protection Policy (Waters of Victoria) (SEPP), local Councils need to develop a DWMP in conjunction with relevant Water Corporations and the community. This DWMP has been prepared to ensure COS meets the requirements of the Minister for Water's Guideline 1 - Planning Permit Applications in Open, Potable Water Supply Catchment Areas (DSE, November 2012) for DWM; to ensure existing and future development does not compromise the Declared Water Supply Catchments (DWSCs, otherwise known as drinking water catchments) and to assist in maintaining a sustainable environment

The DWMP has been prepared to recognise, respond to and link with Council policies and Plans, current legislation and regulations and the relevant direction of State Regulatory Authorities. The DWMP also addresses recent changes in Codes of Practice, Australian Standards and guidelines relating to DWM, and recent advances in technology and management practices.

The 2015 DWMP was revised in 2021 to address the following components:

- Incorporate recent legislative and policy changes relating to DWM;
- Refine the Risk Assessment Framework process in light of feedback after the first period (2015-2021) of real-use application;
- Update the individual constraints for the cadastral changes since 2015;
- Update the final Sensitivity Rating map (Figure 3);
- Incorporate revised Council priorities and projects;
- Review Council DWM procedures and processes; including the evaluation of DWM system trends;
- Incorporate any required changes with respect to technical data or recent advances in technology and management practices;
- Revise the Locality reports; and
- Update the Action Plan.

The DWMP describes the current situation relating to DWM in the Shire and identifies a range of actions Council seeks to implement. The DWMP is comprised of two documents; this Operational Plan, which contains the Action Plan, and legislative controls Council will put in place for the management of domestic wastewater in the Shire; and a Technical Document, which details the derivation of methodology for the Constraint Mapping, Sensitivity Analysis and the individual Locality Reports.

A number of key issues for DWM in COS have been identified:

- There are a number of sensitive catchments (DWSCs) within the Shire and the protection of these areas is important for the supply of potable water, maintenance of public health and the environment;
- Within the DWSCs, development is currently restricted to 1 dwelling per 40 hectares; the implementation of the DWMP by Council will enable Water Corporations to appropriately relax this restriction and assess development at a higher density within these catchments, on a case by case basis;
- Failing DWM systems have the potential to pollute the environment;

- There are a number of significant constraints, e.g. challenging soils, proximity to water bodies and existing small lots, which limit the effectiveness of DWM systems in some parts of the Shire. To enable improvements to be made in areas where existing DWM systems have historically proved problematic, Council needs to develop strategies to assist DWM system owners to upgrade or replace systems where appropriate;
- Soil assessments undertaken as part of the Land Capability Assessments (LCA) are not consistent with locality data for the region;
- Council has had issues with the quality of some LCA reports in the past, this has since improved and the relationships with LCA assessor has strengthened.
- Additional limitations have been applied by Water Corporations in respect to planning permit applications within DWSCs, setting requirements above and beyond the EPA Code of Practice, Australian Standard and DWMP;
- DWM designs should be undertaken to include all nominal rooms that can be separated by a door; this includes studies;
- Ongoing trend for split wastewater treatment with greywater treatment and irrigation;
- Physical environments (including climate patterns) may limit the effectiveness of DWM systems within the Shire and therefore many systems may require a high level of design and management to ensure each DWM system is sustainable; and
- To ensure that DWM systems associated with new development can operate in a sustainable manner, a high level of design and management is required and Council needs to develop policies and procedures to allow development to proceed in a manner which appropriately protects public health and the environment.

The fundamental purpose of any DWMP is the identification and management of the risk from DWM systems to public and environmental health. A comprehensive 6-staged Risk Assessment Framework (RAF) was developed with the aim of quantitatively and qualitatively assessing the consequences of unsewered development. The stages are outlined as follows:

- Stage 1: Data Collection - background information, legislation/regulatory/planning controls, and data collection and pre-processing.
- Stage 2: Data Analysis - development of individual constraint and informative maps for parameters that significantly impact on the degree of sensitivity of any given lot on sustainable DWM.
- Stage 3: Sensitivity Analysis - weighted analysis of individual constraints which determines the final consolidated sensitivity of the unsewered lots within the Shire, based on an algorithm that takes into account the inter-relationships between the individual constraints.
- Stages 4 & 5: Procedural - Review requirements for development assessment under Planning Scheme and administrative controls and the management of existing DWM systems.
- Stage 6: Cumulative Risk Analysis - optional component that prepares a semi-quantitative assessment of risk (Cumulative Impact) in a delineated Area-of-Concern (AOC) by comparing the probability of DWM system failure with the lots ability to contain DWM on-site (Sensitivity).

Taken together, all stages of the Risk Assessment Framework have substantial value as a development assessment tool and provide defensible identification and justification for prioritisation of existing management issues within the Shire. The RAF aims to provide Council with a reasoned and justified tool to prioritise resourcing, oversight and management for DWM systems within the Shire.

The DWMP has collated a substantial amount of information on existing DWM systems and the various environmental and built constraints that substantially impact on DWM outcomes. This information is presented as a series of constraint and thematic (informative and overlay) maps developed using Geographic Information Systems (GIS) which illustrate the significance of each element (slope, soil suitability, proximity to surface water and groundwater, etc.) to DWM within both the Shire as a whole and the targeted localities and associated towns/settlements. Individual constraints have been considered in the light of current standards for DWM as outlined in the Victorian Environment Protection Authority (EPA) current Code of Practice, Australian Standards and other commonly applied industry standards. For unsewered lots, each constraint is considered on the basis of information supplied by Council or relevant State Government agencies. DWM Sensitivity is described as Low, Moderate, High or Very High depending on the degree of sensitivity the lot presents to DWM.

This information will assist Council to prioritise actions including programmed inspections, education of owners and occupants, the need for and level of land capability assessment and reporting required to support proposals for new DWM systems, and will provide guidance in identifying minimum standards of DWM servicing and appropriate technologies. It will also provide Council with guidance by defining areas where centralised wastewater servicing is most required.

The DWMP presents a prioritised Action Plan for the Shire with proposed timeframes for completion of the various tasks. The Action Plan provides actions which will be implemented to improve the effectiveness of DWM within COS, to protect public and environmental health and to ensure that future development within the Shire is sustainable and protects the sensitive waterways and potable drinking water catchments. The DWMP will also provide a valuable tool for the assessment of planning applications within drinking water catchment areas, all unsewered localities and associated towns/settlements, and direction for owners on the requirements that will need to be met. The 2015 DWMP Action Plan was revised as part of the 2021 DWMP revision. A separate document was produced reviewing the Action Plan, including how each Action has been met and recommendations for further action. The revised Action Plan has been incorporated into the DWMP within Section 13.

The Operational Plan is supported by a more detailed Technical Document which outlines the basis on which the constraint mapping has been developed, presents the individual constraint and thematic maps for both the Shire and individual localities and towns/settlements, and presents minimum DWM treatment system and land application area sizing requirements for compliant sustainable DWM systems..

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Acronyms

AEP	Annual Exceedance Probability
ARI	Annual Recurrence Interval
AHD	Australian Height Datum
AO	Authorised Officer under Environmental Protection Act Division 5 Part IXB (1970)
AOC	Areas of Concern
AWTS	Aerated Wastewater Treatment System
CMA	Catchment Management Authority
COS	Colac Otway Shire Council
DEM	Digital Elevation Model
DEPI	Department of Environment and Primary Industries (now known as DELWP)
DELWP	Department of Environment, Land, Water and Planning
DIR	Design Irrigation Rate
DLR	Design Loading Rate
DSE	Department of Sustainability and the Environment (former)
DSM	Decentralised Sewage Model
DWM	Domestic Wastewater Management
DWMP	Domestic Wastewater Management Plan
DWSC	Declared Water Supply Catchments
EPA	Environment Protection Authority
GED	General Environmental Duty
GIS	Geographic Information System
GMA	Groundwater Management Area
HPO	Health Protection Officer
LAA	Land Application Area
LCA	Land Capability Assessment
LGA	Local Government Area
LRA	Land Resource Assessment
MAV	Municipal Association of Victoria
PIC	Plumbing Industry Commission
SEPP	State Environment Protection Policy
SWG	Stakeholder Working Group
VCAT	Victorian Civil and Administrative Tribunal
VVG	Visualising Victoria's Groundwater (Project)
WC	Water Corporation(s)
WMIS	The Victorian Water Measurement Information System
WSPAs	Water Supply Protection Area(s)

1 Introduction

1.1 Overview and Objectives

Colac Otway Shire Council (COS, 'the Shire' or 'Council') has a geographic area of approximately 3,433km² and a population of approximately 21,662 in 2021 (Council Plan, 2021-25). There are approximately 2,850 on-site Domestic Wastewater Management (DWM) systems that Council has record of within the Shire. In addition, there are unsewered commercial (non-domestic) lots, such as cafes, pubs and dairy farms in the Shire, which are regulated by the EPA and Council. This Domestic Wastewater Management Plan (DWMP) covers the management of DWM systems within the Shire. Figure 1 identifies the unsewered areas of COS that forms the basis for this document.

Wastewater management in COS is undertaken to protect human and environmental health. The Shire is characterised by towns, rural residential development, farming (including forestry), national parks and state forests, and coastline; and includes large areas designated as Declared Water Supply Catchments (DWSCs) (around 30% of the Shire). The protection of surface waters, groundwater and human health are all requirements of the *Environment Protection Act 2017* (as amended). Under the provisions of this Act and other legislative guidelines, Councils are required to prepare a DWMP. This DWMP is a revision of the first DWMP created in 2007.

This DWMP has been developed in accordance with the legislation and policies outlined in Section 3, and in particular:

- *Environmental Protection Act, 2017* (as amended);
- Ministerial Guidelines for *Planning Permit Applications in Open, Potable Water Supply Catchments*, (DSE, 2012); and
- State Environmental Protection Policy (SEPP) (Waters) 2018.

The DWMP addresses the various aspects of wastewater, including treatment, land application, and the cumulative impacts in DWSCs. This plan also covers the regulation of DWM systems, including; permits to install, permits to use, permits to upgrade and ongoing monitoring of DWM system performance.

This Operational Plan forms the major component of the DWMP and outlines how COS will manage DWM systems and work with system designers, installers, owners and maintainers to minimise risk to public and environmental health. This document is supported by a Technical Document that provides detail on the regulatory framework for DWM and the methodology used to generate constraint mapping and corresponding Sensitivity Analysis of the Shire and individual Locality Reports.

The key objectives of this DWMP are to:

- Provide strategic direction for the development and management of wastewater throughout COS;
- Develop and implement a prioritised audit program of DWM systems within declared water supply catchments (DWSCs);
- Provide guidance to, and the minimum standards for, those preparing Land Capability Assessments within COS for existing and new developments;
- Develop a risk-based decision tool to provide guidance on the development potential of unsewered localities (including the more densely populated 'towns' and 'settlements') within and outside of the DWSCs, with regards to environmental and public health risks from DWM systems;
- Clarify the circumstances in which dwellings can be constructed within DWSCs at a higher density than 1 per 40 hectares;
- Provide greater certainty for landowners about the development potential of their land;

- Provide guidance on appropriate maintenance, modifications and upgrades for under-performing and failing systems throughout the Shire;
- Provide guidance on what types of wastewater treatment and land application systems are appropriate (and inappropriate) for the physical constraints of unsewered localities;
- Provide guidance on appropriate education for DWM system owners and residents of unsewered properties;
- Provide clear direction for the assessment of new and modified DWM system applications and their ongoing compliance with legislative requirements; and
- Specify actions to achieve these objectives to ensure the DWMP delivers demonstrable results.

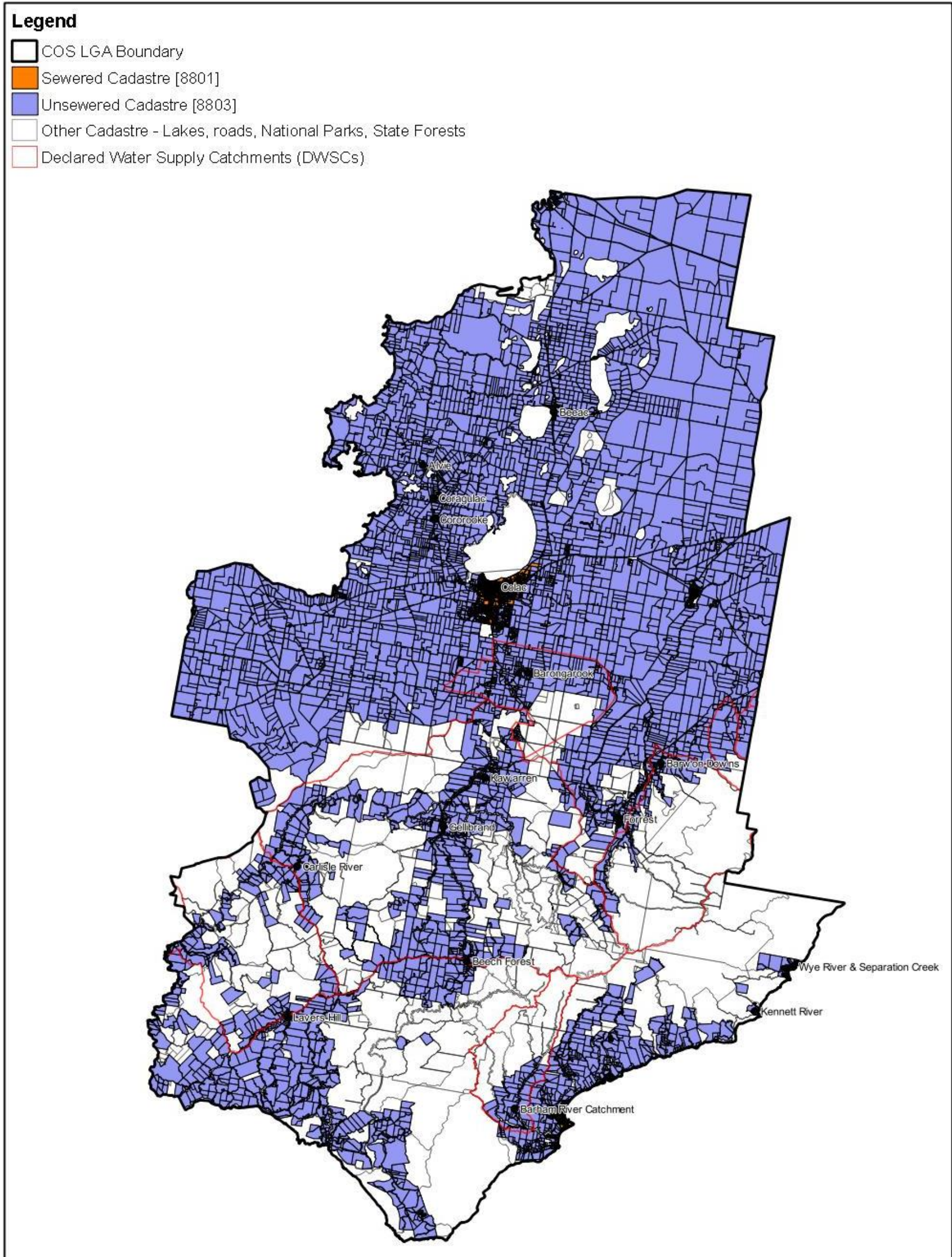
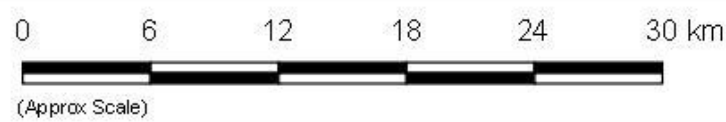


Figure 1: Sewered vs Unsewered Lots - Shire

Colac Otway Shire DWMP Review



Revision	3
Drawn	JK
Approved	MS

1.2 Development of the DWMP

All Councils within Victoria are required to prepare a municipal DWMP. A DWMP is a planning and management document that provides a mechanism for the development, implementation and review of programs to protect public health, the local environment and local amenity. The DWMP establishes Council's policy on and commitment to sustainable ongoing wastewater management and its programs for compliance and enforcement. The DWMP establishes processes to ensure early and comprehensive consideration of DWM in the planning cycle and Council's responsibility for the monitoring and compliance of systems.

The DWMP assists landowners and Council staff to understand the requirements for development within the Shire in respect of DWM. With the information provided by the DWMP Council staff will be able to assist landowners and developers to determine the level of assessment that is required for a proposed development. The detailed risk-based assessments of unsewered localities and towns/settlements included in the DWMP equips Council staff to assess existing and proposed DWM systems within the Shire, with the overarching objective of improving wastewater management into the future. Council staff will also be able to assess the capacity of land to manage wastewater for future development using the risk assessment framework.

A Stakeholder Working Group (SWG) was established to oversee development of the 2015 Plan, comprising officers from Council, Barwon Water, Wannon Water, Southern Rural Water, EPA, the Department of Environment, Land, Water and Planning (DELWP) and Corangamite Catchment Management Authority (CCMA).. This group helped determine the priority regions and issues with regards to DWM within COS, and to establish the methodology of the risk assessment framework. Further engagement occurred between Council, Wannon Water and Barwon Water during the 2021 review of the plan.

The field investigations undertaken by Consultant staff involved an audit of a representative sample of approximately 10% of existing on-site wastewater management systems and soil investigations in towns/settlements selected by the Stakeholder Working Group. The purpose of the investigations was to:

- confirm the nature and extent of the environmental and public health impacts associated with the existing wastewater management within the towns/settlements;
- identify the areas that may not need improvement if domestic wastewater management systems are operating effectively; and
- guide the Land Capability Assessment process to determine the capability of vacant lands within and around the towns/settlements, in terms of their suitability for sustainable on-site land application of effluent.

Summaries of the field assessment results are included in the Locality Reports included in Appendix B of the Technical Report.

Feedback from the community was sought via via community drop-in sessions across the Shire and other methods including surveys and written submissions. The concerns and suggestions most commonly raised during the community consultation process were as follows:

- Uncertainty about planning processes and time delays for obtaining development approvals, particularly for new development on small lots in the DWSCs.
- Uncertainty about Council and Water Corporations' requirements for new and upgraded DWMs, particularly within the DWSCs.
- Questioning the fairness of owners having to forgo potential lot development or sales opportunities for small or non-compliant lots in the DWSCs (i.e. regulatory controls and expectations change between buying and developing or selling).
- The view that large, rural properties do not pose a threat to drinking water quality and should be allowed to utilise primary treatment DWM systems.

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

- Clarification of the Lot Sensitivity rating for individual properties and the associated LCA requirements;
- Uncertainty regarding the nature and intent of 'compliance monitoring' programs, in particular how under-performing systems will be addressed;
- Questions regarding possible solutions (and associated costs) for DWM system combinations on the Otway Ridge;
- Concerns regarding the applicability of the DWMP to 'other' land use activities (i.e. agriculture);
- Concerns about the performance and accountability of non-domestic (commercial) systems on the local environment and how the DWMP will address those; and
- Questions about possible funding measures/support for improving DWM, particularly in older homes with lower disposable incomes.

Additionally, a targeted workshop was held with LCA assessors which focussed on describing and demonstrating the Risk Assessment Framework (RAF) methodology, particularly the derivation of individual Lot Sensitivity ratings. Practitioners were also briefed on the new (minimum) requirements for LCAs (site and soil investigation and DWM design). All feedback received during the public exhibition period was reviewed and either incorporated into, or used to inform the DWMP, where appropriate.

1.2.1 Guidelines – Planning Permit Applications in Open, Potable Water Supply Catchment Areas (DSE, 2012)

These Guidelines outline the requirements for development in declared water supply catchment areas (DWSC), where a planning permit is required to use land for a dwelling or to subdivide land, or to develop land pursuant to a schedule to the Environmental Significance Overlay that has a catchment or water quality protection as an object.

Guideline 1 requires that the density of dwellings should be no greater than one dwelling per 40 hectares and each lot created in a subdivision should be at least 40 hectares in area. The dwelling density is established by calculating the number of dwellings within a one kilometre radius of the site of the proposed dwelling. The density requirement of Guideline 1 does not apply where:

- Category 1: A permit is not required (i.e. outside of the DWSC/Environmental Significance Overlay);
- Category 2: If the dwelling is connected to reticulated sewerage;
- Category 3: If the development is consistent with a Catchment Policy that has been prepared for the catchment and endorsed by the relevant Water Corporation following consultation with relevant stakeholders; and
- Category 4: The Water Corporation is satisfied that Council has prepared, adopted and is implementing a DWMP in accordance with DWMP requirements.

The preparation and implementation of this DWMP and Action Plan allows COS to demonstrate that it has fulfilled the requirements of Ministerial Guideline 1. Once the Category 4 criterion is met, the Water Corporations have the ability to consider applications that would result in a higher density of development than would otherwise be permitted by Guideline 1 (currently constrained to a density of 1 in 40 ha). In order to relax this density requirement, all conditions of Guideline 1, as listed below, are to be met:

- The minimum lot size area specified in the zone for subdivision is met in respect of each lot (for subdivision applications only);
- The Water Corporation is satisfied that the Council has prepared, adopted and is implementing a DWMP in accordance with the DWMP requirements; and
- The proposal does not present an unacceptable risk to the catchment having regard to:
 - a. the proximity and connectivity of the proposal site to a waterway or a potable water supply source (including reservoir);
 - b. the slope of the land;
 - c. the quality of the soil;
 - d. the existing lot and dwelling pattern in the vicinity of the site;
 - e. the existing condition of the catchment and evidence of unacceptable water quality impacts;
 - f. the link between the proposal and the use of the land for a productive agricultural purpose;
 - g. any site remediation and/or improvement works that form part of the application; and
 - h. the intensity or size of the development or use proposed and the amount of run-off that is likely to be generated.

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Items a-c are addressed through the Sensitivity Analysis as detailed in Section 4 of this DWMP. Items d-e may be addressed through the Cumulative Impact Assessment component of the RAF (Stage 6) or other methods as determined by the Council or Water Corporation. The remaining items (f-h) will be dealt with under other respective planning controls.

The preparation, adoption and implementation of a DWMP is required for the relaxation of Guideline 1. Many of the items for compliance with Guideline 1 will form part of the Operational Plan of this DWMP. These actions are identified in the DWMP and will result in the adoption of the DWMP by Council, and endorsement by the relevant stakeholders.

Table 1 outlines how this will be achieved.

For the DWMP to be considered for endorsement by the Water Corporations, COS is also required to demonstrate that suitable resourcing for implementation, including monitoring, enforcement, review and auditing, is available.

A working group comprising Council and Water Corporation delegates was formed in 2015 to discuss DWM system applications, ensure that requests for information remain uniform, and to help ensure the implementation of this plan. This group aims to meet 2-3 times per year.

Table 1: Guideline 1 Requirements

Action	Details	Completed within this DWMP	Comments/Reference
The DWMP must be prepared or reviewed in consultation with all relevant stakeholders.	Other local governments with which catchments are shared	Yes	Liaison with abutting Councils will be undertaken during the public exhibition period. Detailed in Section 1.2 of the Operational Plan.
	EPA	Yes	A representative from the EPA was a part of the original working group for the 2015 Plan. All documentation relating to the preparation of the DWMP was provided to the EPA, which was also invited to comment on all drafts developed. Detailed in Section 1.2 of the Operational Plan.
	Local Water Corporations	Yes	This DWMP was prepared and progressively reviewed by a working group that included representatives from Barwon Water, Wannon Water, Southern Rural Water and the Corangamite Catchment Management Authority. All documentation relating to the preparation of the DWMP was provided to the Water Corporations, which were also invited to comment on all drafts developed. Detailed in Section 1.2 of the Operational Plan.
The DWMP must comprise a strategy including timelines and priorities to:	Prevent discharge of wastewater beyond lot boundaries	Yes	Assessment of DWM sensitivity and assessment protocols to ensure best possible DWM system is installed. Section 6 outlines the responsibilities of lot owner's, LCA assessors and Council with regards to effective DWM system design, installation and maintenance. Continual education of the community as per Action 9. All lots will follow the LCA procedure outlined in Section 4.2 of the Operational Plan for their given Sensitivity Rating.
	Prevent individual and cumulative impacts on groundwater and surface water beneficial uses	Yes	Assessment of DWM sensitivity and assessment protocols to ensure best possible DWM system is installed. Particular considerations to slope, soil, useable lot area and climate have been addressed within the Sensitivity Analysis. Section 4 of the Operational Plan details the methodology and results of the Sensitivity Analysis for each lot within the Shire as well as providing a tool to assess the cumulative impact of DWM systems within particular areas of concern, i.e. within a sub-catchment (Stage 6).
The DWMP must provide for:	Effective monitoring of the condition of DWM systems, including compliance with permit conditions	Yes	Ongoing. Improvement of data management system to allow for effective management of existing permits and conditions. A dedicated DWM officer was employed by Council for a three (3) year period 2018-2021, completing a targeted auditing program within six (6) localities. As part of the new requirements of the <i>Environment Protection Act 2017</i> (as amended), owners and occupiers of the land on which a DWM system is located have an obligation to take reasonable steps to maintain the DWM system in good working order, including notifying Council of any failure to meet the Permit to Use conditions and undertake rectification steps. Council will continue to meet the required inspections for the issuing of Permits under this <i>Act</i> and undertake responsive inspections of DWM systems.

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

Action	Details	Completed within this DWMP	Comments/Reference
	The results of monitoring provided to stakeholders	Yes	Ongoing – biannually. Report shall include summary of new permits issued, systems inspected, and results of any recommended upgrade works or compliance requirements. Detailed in Actions 6 and 12a.
	Enforce action where non-compliance is identified	Yes	Ongoing – Council have also received a delegation of functions and powers from the EPA to allow councils to take action under the GED of the <i>Environment Protection Act 2017</i> (as amended). Council has found that DWM system compliance and improvements in performance can be achieved without taking enforcement action in the majority of cases; however, Section 8 outlines enforcement actions for ongoing poor performance of systems. Council also has escalation points available to address system under-performance, with responses commensurate to the risk posed by poorly performing systems (see Section 8.4.1).
	A process review and update of the DWMP every five (5) years	Yes 2020	Biannual progress review of the DWMP proposed with the Water Corporations. Detailed in Action 12c.
	Independent audit by an accredited auditor of the implementation of the DWMP, monitoring and enforcement every three (3) years	Pending - 2024	Audit to ensure that the work undertaken is done so in accordance with the DWMP. Detailed in Action 12b.
	The results of the audit is to be provided to all stakeholders as soon as possible after the audit	Pending- 2024	Results of the audit will be provided to all stakeholders for review after the audit.
	COS is required to demonstrate that suitable resourcing for implementation, including monitoring, enforcement, review and audit is in place	Yes	This is detailed in Section 7 of the DWMP and the Action Plan (Section 13).

1.3 Previous Reports and Plans

The 2015 DWMP was revised in 2021 to address the following components:

1. Incorporate recent legislative and policy changes relating to DWM;
2. Refine the Risk Assessment Framework process in light of feedback after the first period (2015-2021) of real-use application;
3. Update the individual constraints for the cadastral changes since 2015;
4. Update the final Sensitivity Rating map (Figure 3);
5. Incorporate revised Council priorities and projects;
6. Review Council DWM procedures and processes; including the evaluation of DWM system trends;
7. Incorporate any required changes with respect to technical data or recent advances in technology and management practices;
8. Revise the Locality reports; and
9. Update the Action Plan.

1.4 Implementation and Review

The effectiveness of the DWMP and the compliance inspections will depend on the ability of Council to implement the Action Plan (Section 13).

Staff must be trained in onsite wastewater assessment and be familiar with plumbing requirements to ensure compliance with repair and/or upgrade orders that can be made for systems under the program. Follow-up visits to properties to ensure compliance are likely to be required.

The effectiveness of the DWMP will be measured by a monitoring and reporting process. Further to the requirements in the SEPP and *Environment Protection Act 2017*, Council will monitor and report biannually to the Water Corporations (Refer Section 13) on a range of performance indicators listed in this DWMP, including but not limited to:

- the number of complaints about poorly functioning DWM systems;
- the number of system inspections for each risk category;
- the number of systems needing rectification (following inspection);
- the number of systems rectified;
- the number of systems still needing rectification; and
- the assessment of the results of surface and/or groundwater quality monitoring in respect to DWM and its potential impacts on water quality;

This reporting will not only indicate the progress of Operational Plan implementation, but it will also provide an indication of the effectiveness of the actions to improve environmental and public health and cumulative DWM risk across the Shire.

The DWMP must be audited every three years (Refer Section 13) so as to ensure the DWMP is being implemented appropriately. Resource funding and time allocation must be made by Council to undertake this review.

2 Overview of Domestic Wastewater Management

2.1 What is Wastewater?

Wastewater is water-borne waste material and includes all normal wastes from residences, as well as many forms of waste matter from other establishments. Domestic wastewater is derived from household waste streams: kitchen; bathroom (basin, bath and shower); laundry and toilet. Industrial and commercial wastewater varies widely in character and often requires specialised treatment processes as it may contain substances that are harmful to the biological processes utilised for treatment processes. Domestic wastewater is commonly described in these three forms:

- Blackwater – “water grossly contaminated with human excreta” e.g. toilet water, composting toilet leachate;
- Greywater – “water that is contaminated by but does not contain human excreta” e.g. kitchen, bath and laundry water. Also referred to as ‘sullage’; and
- Combined – “a combination of both black and grey water.”

Domestic wastewater quality can vary greatly due to numerous factors; however, Table 2 outlines typical values for domestic wastewater quality parameters.

Table 2: Typical Domestic Wastewater and Septic Effluent Quality¹

Parameter (mg/L)	Untreated Wastewater	Septic Effluent
Biological Oxygen Demand (BOD ₅)	150-300	100-200
Total Suspended Solids (TSS)	150-300	20-100
Ammonium (NH ⁴⁺)	~10	~40
Organic Nitrogen	~30	~15
Ammonia (NO ³⁻)	4-13	<1
Ortho Phosphate	6-10	10-15
Organic Phosphorus	4-15	<4

2.2 The Historical Context

Historically the management of domestic wastewater systems, throughout Victoria, has been difficult. Local Councils are the regulatory authority for DWM and have generally been limited by time and financial support from implementing effective DWMPs. Many Councils throughout Victoria (and Australia) have previously provided very limited programs for DWM, focusing on an approval scheme for new systems and a basic system monitoring program, as time permits. There are limited cost recovery options for Councils to monitor increasingly complex and larger numbers of systems as the peri-urban areas experience rapid growth throughout Victoria. There is increasing pressure on all Councils within Victoria to improve DWM so that existing and future development does not impact on public health and the environment.

2.3 Wastewater Treatment

Wastewater is typically managed in urban environments in a community sewerage system, with treatment at a centralised wastewater treatment plant with disposal via discharge to waterways or land application. In areas where a centralised sewerage system cannot be provided,

¹ Information collated from a range of sources including AS1546.1:2008, AS1547:2012, EPA Publication 760 (2002), NRMCC (2006) and NSW DLG (1998). Note all concentrations are highly variable.

wastewater is managed on-site at each individual lot. On-site domestic wastewater is managed by a variety of treatment systems, including but not limited to:

- Septic Tanks;
- Aerated Wastewater Treatment Systems;
- Aerobic Biological Filter Systems (Wet Composting, Vermiculture);
- Membrane Filtration;
- Ozonation;
- Reed Beds;
- Sand Filters;
- Textile (fabric) Filters;
- Trickling Aerobic Filters; and
- Greywater Treatment Systems.

Appendix A provides detailed information about treatment systems. Following treatment, the effluent is then either dispersed or reused within the boundaries of the lot. The type of dispersal or reuse system depends on the type of treatment system and the quality of effluent (primary or secondary).

Current best-practice is for effluent to be treated to a secondary standard or better, particularly within the DWSCs. Any variations to this must be provided with detailed evidence and explanations to demonstrate its suitability. Most systems apply effluent within the soil profile in a dedicated area on the lot (often referred to as the Land Application Area or the dispersal area). Highly treated and disinfected greywater can be used internally for toilet flushing and cold water supply to the laundry; however such systems are not common due to relatively high costs. Further details on land application systems are provided below.

2.4 Land Application of Treated Effluent

There are a range of effluent dispersal or reuse systems that apply effluent to the soil profile. Systems that are suitable for primary-treated effluent (from septic tanks and wet composting systems) include:

- Conventional Absorption Trenches and Beds;
- Evapotranspiration-Absorption (ETA) Trenches and Beds;
- Modified ETA Trenches and Beds – such as ‘Wick Trenches’ and modified pipe systems;
- Wisconsin or Sand Mounds; and
- Low Pressure Effluent Distribution (LPED).

Systems that are suitable for secondary-treated and disinfected effluent (from accredited secondary treatment systems only) include:

- All of the above systems suitable for primary effluent (although less commonly used);
- Surface spray or drip irrigation;
- Covered surface drip irrigation; and
- Subsurface drip irrigation.

Appendix A provides detailed information about land application systems.

2.5 Environmental & Health Risks of Domestic Wastewater Management

Domestic wastewater can be highly variable in quantity and quality, which can impact on the performance of DWM treatment systems. Primary treatment in septic tank systems relies on the anaerobic breakdown of organic matter by microbes and the settling of solids. Shock loads or biocide use within the home can impact on the ability of these microbes to treat the wastewater and solids passing through the first treatment stage, resulting in poor quality of effluent being discharged to the environment.

DWM system failures are most often a result of poor system design, poor installation practices, inadequate maintenance and sometimes insufficient land area, all of which contribute to potential public and environmental health impacts. These are discussed below.

2.5.1 Human Health

The principal groups of organisms found in natural waters and wastewater include: bacteria, fungi, protozoa, rotifers, algae and viruses. Not all of these pose potential human and public health risks. Organisms with the potential to pose health risks to humans are known as “pathogenic” organisms and may be classified into three broad categories:

1. **Bacteria** – domestic wastewater contains a wide variety and concentration of pathogenic and non-pathogenic bacteria. There are many waterborne infectious diseases e.g. typhoid and cholera. Infectious doses of disease causing bacteria in wastewater can lead to illness. Testing for pathogens is difficult and expensive, therefore indicator bacteria from the intestinal tract of uninfected humans and warm blooded animals is used; for example coliform bacteria such as *Escherichia coli* are used as an indicator of potential pathogenic/faecal contamination in water.
2. **Parasites** – (Protozoa and Helminths). The two dominant protozoan parasites of concern in the treatment of wastewater are:
 - *Cryptosporidium*; and
 - *Giardia*.

These are both resistant to standard disinfection methods and pose considerable risk to susceptible members of the community (children, elderly and immune-compromised). Helminths or intestinal worms, e.g. tapeworms and roundworms, are also commonly found in wastewater. These release millions of environmentally resilient eggs throughout their lifespan.

3. **Viruses** – contamination of domestic wastewater by viruses may lead to major outbreaks, such as Hepatitis A (referred to as infectious hepatitis), which is the most dominant waterborne virus. Polio Virus is also transmitted in wastewater. Viruses can cause widespread illness in epidemic patterns. Viruses are more common and diverse than bacteria in the aquatic environment.

The ability of pathogens to survive in the environment varies substantially, depending on environmental conditions and the type and life-stage of the organism. Some organisms produce highly resilient spores which can persist in unfavourable conditions for long time periods and can be transported large distances in water and groundwater.

Furthermore, nitrogen in the form of nitrate is highly mobile in the soil/water environment and can also be a potential public health risk if exposure is high (however this has not been identified as a particular risk for the relatively low-density towns of regional Australia).

Exposure to any of the above, via direct or indirect contact with wastewater, poses a human health risk.

2.5.2 Environmental

Nutrients, along with trace quantities of other elements, are essential for biological growth. Phosphorus (P) and Nitrogen (N) are the principal nutrients of concern with regard to DWM systems and are present in a range of compounds in raw wastewater and treated effluent. In excess, phosphate and nitrate encourage vigorous growth of algae and aquatic plants in surface water systems, which can lead to ecological disruptions and reduced water quality. Poor quality raw supply water is more difficult and costly to treat for drinking water purposes, compared to water taken from catchments where pollution inputs are reduced.

2.5.3 Social

The poor management of DWM systems has potential financial implications where it may adversely impact on drinking water supplies by contamination. Where DWM systems cause pollution from effluent discharges to waterways, there is a requirement for a higher level of treatment of drinking water prior to distribution. Where failing DWM systems cause odours or discharge into adjoining properties, there is an adverse impact on public amenity and these may cause a nuisance. There are financial implications for owners who have a failing DWM system and are required to complete upgrade works. New systems can be expensive and some owners may not have the finances to undertake works immediately, resulting in continuing system failures.

2.5.4 Summary

Table 3 below summarises the risks common to all DWM systems (treatment and land application components). The operation of a large number of DWM systems within a catchment may have long term negative and cumulative impacts on that particular area and on downstream water bodies. However, where systems are correctly designed, installed and managed (including upgrades to existing systems where necessary), the risks of cumulative impacts to the downstream environment are substantially reduced. As such, the sustainable density of DWM systems is higher when systems are operating optimally, compared to when a proportion (or all) systems are underperforming or failing in some way.

Table 3: Health and Environmental Risks of DWM Systems

Risk	Typical Cause	Potential Impacts
Ineffective regulation	Lack of staff/ time	Environmental, Health and Social
Off-site discharge	Failing/ poorly managed/ damaged/ unapproved treatment and/or land application system(s)/ previous approved practices for off-site discharges	Environmental, Health and Social
Disinfection failure	No disinfection (chlorine)/ poor upstream treatment	Health
Failure of treatment system	Lack of maintenance/ poor installation/ age of system	Environmental, Health and Social
Surcharge from land application area	Peak loads/ overload of system/ failure of land application system / undersized or poorly designed system	Environmental, Health and Social
Failure of land application system	Clogging layer in trenches or beds/ broken pipes/ inappropriate hydraulics	Environmental, Health and Social
Human contact with effluent	Poor OH&S in maintenance/ inappropriate disposal methods	Health and Social

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Risk	Typical Cause	Potential Impacts
Owner ignorance	Lack of knowledge of system	Environmental, Health and Social
Damage to land application system	Access by vehicles or stock/ inappropriate boundaries	Health and Social
Odour	Inadequate treatment in systems/ mechanical fault	Social
Groundwater contamination	Effluent dispersal area overloaded (undersized and/or failing)	Environmental, Health and Social
Surface water contamination	Surface runoff of effluent in area with reduced setback distance buffers/ recharge from contaminated GW	Environmental, Health and Social
Human or animal disease outbreak	Direct or indirect pathogen exposure due to any of above causes	Health and Social
Degradation of soils	Undersized or failing land application system/ usually high strength effluent	Environmental and Social
Increased algae growth	Excess nitrate and phosphate in surface waters	Environmental, Health and Social
Degradation of native vegetation	Excess nitrate and phosphate in soils and/ or surface waters	Environmental and Social

3 Legislation and Policies

3.1 Council's Plans and Policies

The DWMP has been developed to fit with other Council Policies and Plans through actions identified in the Action Plan. The following lists the various Council Plans which have been included in the DWMP review, which are discussed further within the Technical Document.

- Council Plan 2021 – 2025;
- Municipal Public Health and Wellbeing Plan 2021 – 2025;
- Colac Otway Planning Scheme;
- Environmental Strategy 2010 – 2018;
- Environment Action Plan 2013 – 2015;
- Rural Living Strategy 2011; and
- Council Budget.

3.2 Legislation

A summary of the legislation and their stipulated requirements relevant to the regulation of DWM systems are detailed in the Technical Document. The relevant legislation includes:

- *Local Government Act 2020*;
- *Environment Protection Act 2017 (as amended)*;
- *Water Act 1989*;
- *Safe Drinking Water Act 2003* and Regulation 2005;
- *Planning and Environment Act 1987*;
- *Public Health and Wellbeing Act 2008*;
- State Environmental Protection Policy (Waters) 2018;
- *Catchment and Land Protection Act 1994*; and
- Victorian Building Regulations 2018.

3.3 Regulatory and Legislated Authorities

DWM involves, to varying degrees, a number of regulatory agencies:

- Council (Colac Otway Shire Council);
- Environment Protection Authority Victoria (EPA);
- Plumbing Industry Commission (PIC);
- Municipal Association of Victoria (MAV);
- Water Corporations: Barwon Water, Wannon Water, and Southern Rural Water;
- Department of Environment, Land, Water and Planning (DELWP); and
- Corangamite Catchment Management Authority.

3.5 Administrative Authorities

VCAT is a tribunal which deals with civil disputes, administrative decisions and appeals that are heard before Judge or Tribunal member. It provides a dispute resolution service for both government and individuals within Victoria.

In cases throughout Victoria, VCAT has questioned the quality of LCAs for DWM, particularly where a site is located within a potable water supply catchment. VCAT has also questioned the rigour of some Council's evaluation of these LCAs and how the minimum development guideline of 1 dwelling per 40 hectares should be applied in the DWSCs (ref. 'Guidelines – Planning Permit Applications in Open, Potable Water Supply Catchment Areas' – DSE, 2012).

3.6 Standards and Guidelines

The design, operation and management of DWM systems are supported by a number of standards and guidelines:

- EPA Code of Practice – Onsite Wastewater Management, Publication 891.4 (2016);
- Land Capability Assessment – Onsite Wastewater Management, Publication 746.1 (2003);
- AS/NZS 1547:2012 Onsite Domestic Wastewater Management;
- AS/NZS 1546.1-4 Onsite Domestic Wastewater Treatment Units;
- AS/NZS 3500.1-4:2021 Plumbing and Drainage;
- Guidelines for Development in Flood Affected Areas (DELWP, 2019);
- Auditor General of Victoria (2006) Protecting our environment and community from failing septic tanks; and
- Guidelines – Planning Permit Applications in Open, Potable Water Supply Catchment Areas (DSE, 2012).

4 Risk Assessment Framework

Risk Assessment is practiced by individuals and organisations all of the time. However, with the evolving complexity of society, a need for formal Risk Assessment has arisen since the 1950's. This began with studies of food safety and was progressively adopted in the fields of public health and environmental impact. Formal risk assessment has proven to be an effective way of making decisions in situations involving considerable complexity and uncertainty.

Formal recognition of the value, intent and application of risk assessment is provided in the international standard for formal risk management and associated guidelines (Standards Australia, 2009; IEC/ISO, 2009). AS/NZS ISO 31000:2009 (Risk Management) defines risk as the "effect of uncertainty on objectives", where an effect is a (+/-) deviation from the expected and objectives can apply to differing aspects (e.g. environmental goals) or at differing scales (e.g. strategic). In more general terms, Risk is often expressed in terms of the 'consequences' of an event or action and the associated 'likelihood' of that event/action occurring.

The fundamental purpose of any DWMP is the identification and management of risk from DWM systems to public and environmental health. A means of addressing the DWM issues raised by the unsewered towns/settlements, both within and outside of DWSCs, is to prepare a Risk Assessment tool that scientifically measures possible impacts of DWM systems on public and environmental health. A comprehensive 6-staged Risk Assessment model (Framework) (RAF) has been developed for this DWMP to assist Council in analysing risk at variable scales (Shire-wide to individual lot).

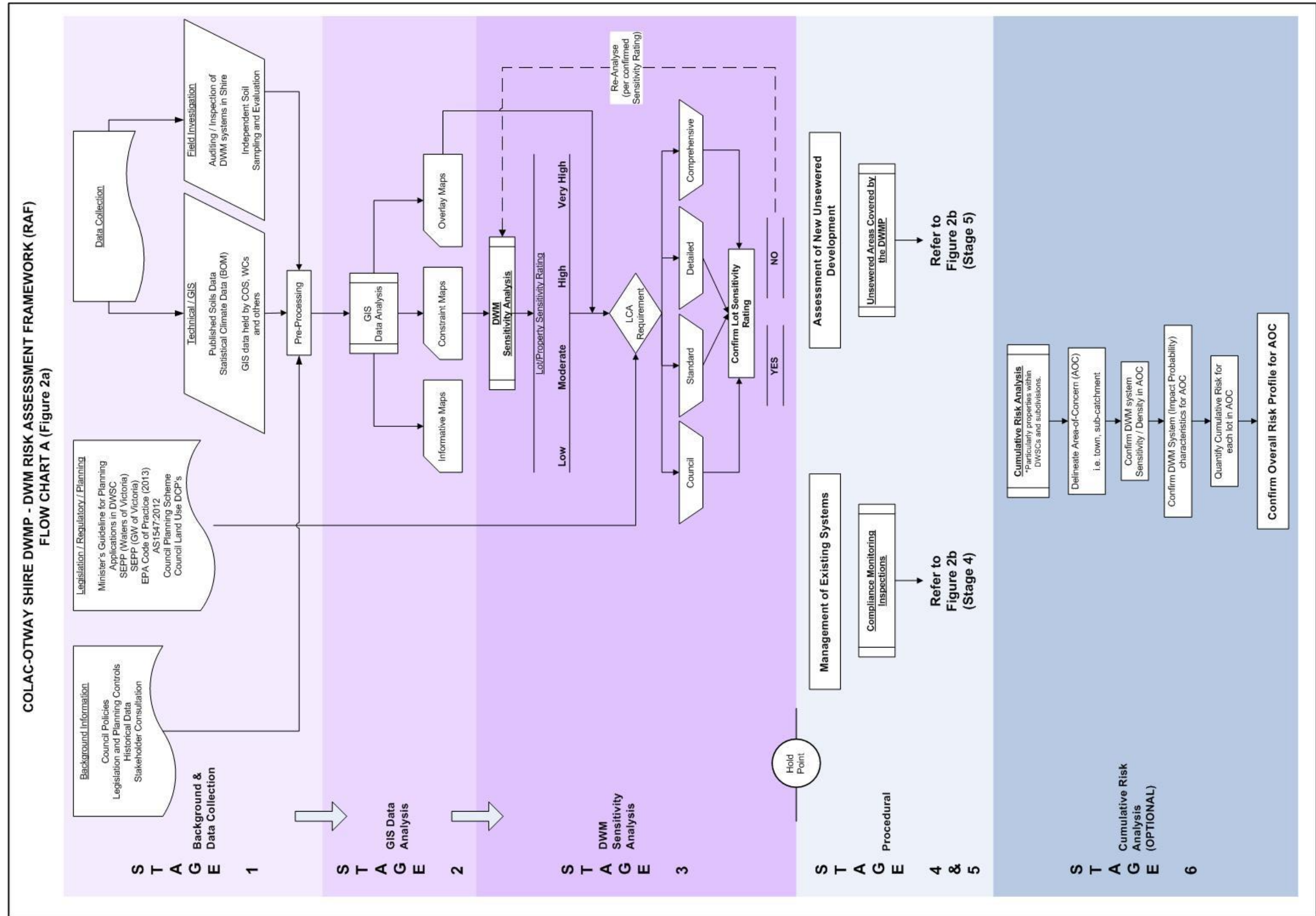
Together, all stages of the Risk Assessment have substantial value as a development assessment tool and provide a defensible identification and justification for prioritisation of existing management issues within the localities and towns/settlements. It incorporates tools that assess the bio-geophysical capability for DWM in existing unsewered localities and towns/settlements, recently developed unsewered subdivisions and undeveloped unsewered land. It will be primarily used:

- To determine the level of technical investigation to be undertaken as part of a development application in an unsewered area;
- To identify existing priority unsewered localities and towns/settlements that require more detailed investigations to determine needs (i.e. improvement actions or plans);
- As a guide to develop a monitoring strategy for existing DWM systems in the Shire; and
- As a guide to Council for strategic planning of future unsewered development.

The overall Risk Assessment aims to provide Council with a reasoned and justified tool to prioritise future development, and to implement monitoring and upgrading of DWM systems within the Shire by highlighting regions with elevated DWM risk profiles (e.g. towns/settlements with a large numbers of small lots and older DWM systems). Consideration of both individual (lot) and cumulative (regional) DWM risk provides a versatile tool for:

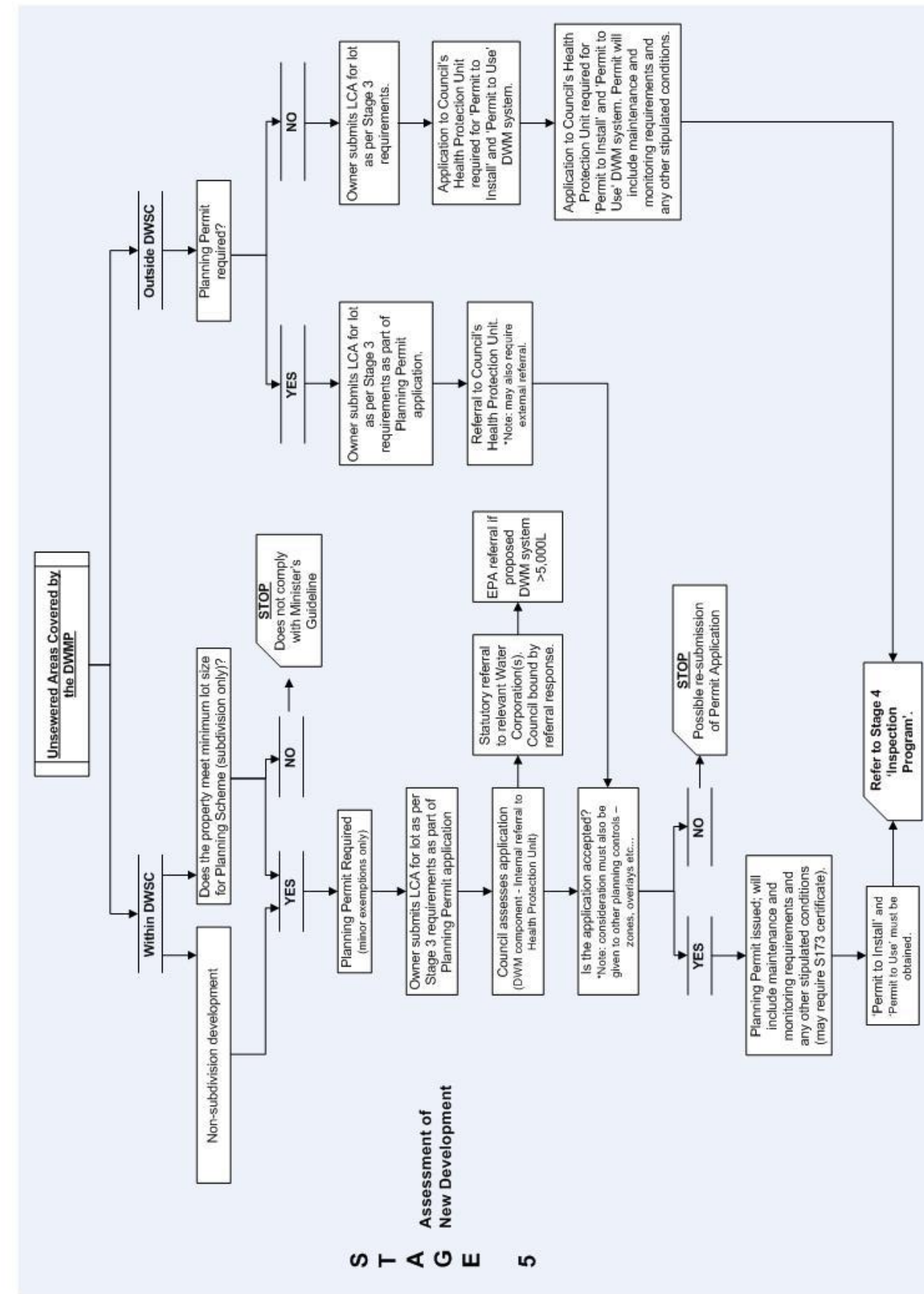
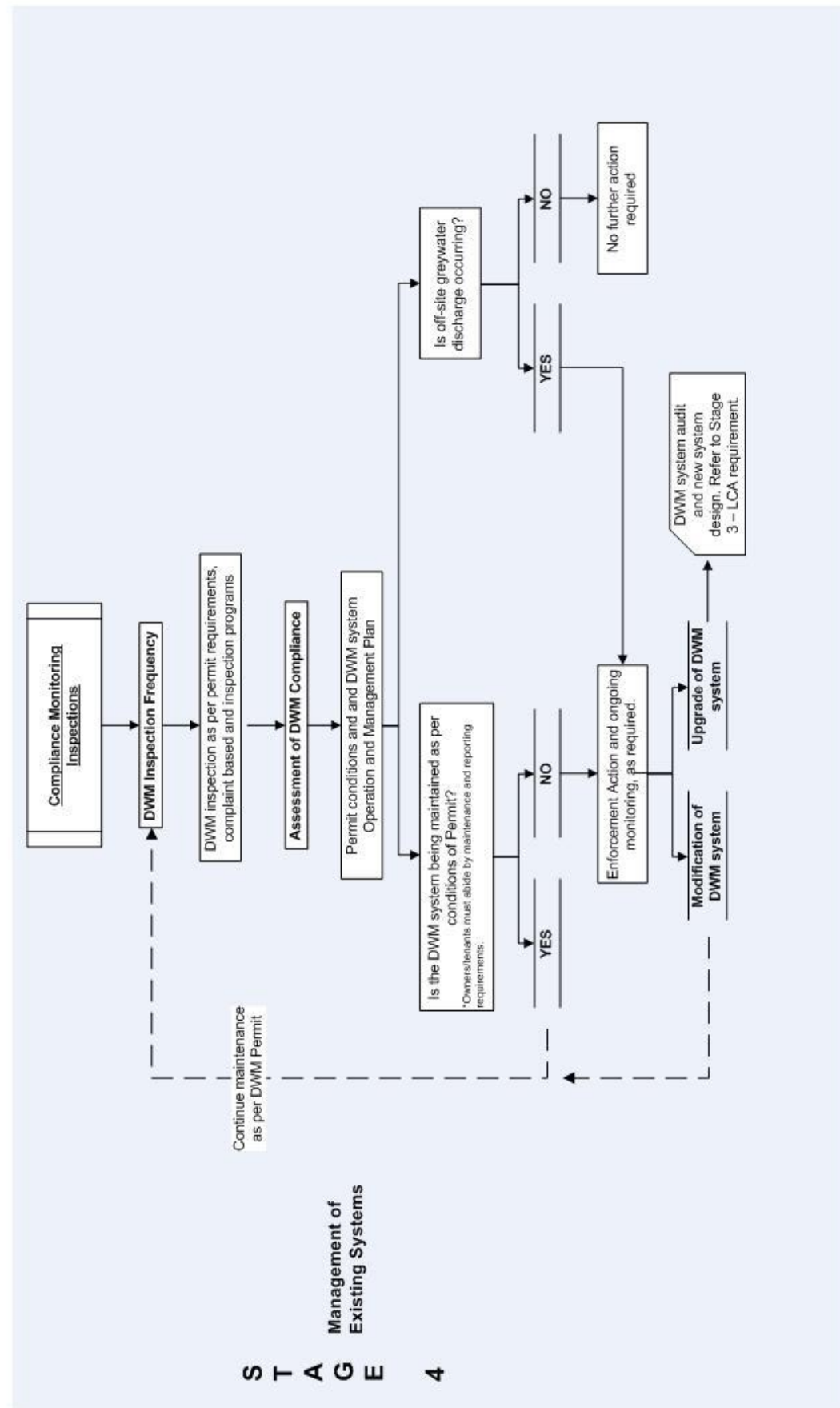
- a) examining changes from an accepted 'baseline' condition (i.e. water quality or environmental indicators).
- b) preparing cost/benefit analyses for upgrade/improvement options (i.e. DWM vs. sewerage).
- c) comparing alternate land use/development scenarios (i.e. development density).

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Whitehead & Associates Environmental Consultants

COLAC-OTWAY SHIRE DWMP - DWM RISK ASSESSMENT FRAMEWORK (RAF)
FLOW CHART B (Figure 2b)



4.1 DWM Sensitivity Analysis (Stage 3)

4.1.1 Methodology and Rationale

The primary objective of the DWMP is to assess all ‘unsewered’ ‘developable’ lots within COS to determine their suitability to sustainably manage domestic wastewater on-site in compliance with legislative (i.e. SEPPs) and regulatory (i.e. Code) requirements. The inter-relationship of a wide range of individual constraints and variables affect the specific land capability and associated limitations for sustainable on-site DWM. Understanding this inter-relationship can be difficult, particularly in terms of assessing the relative contributions of individual constraints in a broad-scale evaluation.

The DWM Sensitivity Analysis involved assessing the cumulative effect of the individual constraints detailed in Section 6 of the Technical Document: soil suitability, slope, useable lot area, climate and location (i.e. whether or not a lot is located within a DWSC) for all of the unsewered lots within COS. Each lot was assigned a rating class for each of the individual constraints based on the criteria detailed in Section 6 of the Technical Document.

The following algorithm was developed using professional judgement and reviews of current literature. The algorithm generally follows the rationale developed for the Mansfield Domestic Wastewater Management Plan Pilot Project (Mansfield Shire Council, 2014); with adaptation by the Stakeholder Working Group (SWG) to reflect COS specific concerns. It details how the individual constraints were combined to determine the final Sensitivity Rating for each unsewered lot within COS:

$$((\text{Soil Suitability} + \text{Slope}) \times ((2 \times \text{Useable Lot Area}) + \text{Climate})) / 10$$

The algorithm incorporates the constraints imposed by landform and soil characteristics, as well as the local climate which will impact on the selection and sizing of DWM systems for any given location. The useable lot area refers to the physical constraints imposed by prescribed setbacks from sensitive features, such as surface waterways (permanent and intermittent); groundwater bores and flood prone land. The existing vegetation on a lot, as well as the proposed development footprint (i.e. building envelope and improvements), will also impact on the resultant useable lot area. If there is insufficient area remaining, the lot will be unable to sustainably manage the wastewater on-site and, hence, not comply with the requirements of the SEPP.

The final sensitivity value (number) derived from the algorithm for each lot was assessed to determine the appropriate ‘Sensitivity Rating’ ranges. Further information on the development of the Sensitivity Rating classification is provided in the Technical Document (Section 6.2.1). The following outlines the respective ranges and associated final Sensitivity Rating classes:

- Very High: > 5.5;
- High: $4 \leq x \leq 5.5$;
- Moderate: $2 \leq x \leq 4$; and
- Low: < 2.

Further, all lots were identified as being located within, or outside, a DWSC. This step was included to ensure that all lots located within a DWSC are subject to a LCA prior to development, as per Section 3.6 of the EPA Code of Practice 891.4 (2016). For example, for a ‘low’ Sensitivity Rating lot within a DWSC, the algorithm automatically increases the rating to ‘moderate’ to ensure that a LCA is undertaken, in accordance with the Code of Practice.

The criteria used to determine the Sensitivity Rating categories were based on previous constraint assessments for unsewered towns in Australia undertaken by W&A, and relevant Australian and Victorian guidelines for DWM. Table 4 provides a rationale for the interpretations that were used to derive the ratings, which is also discussed in Section 6.2.1 of the Technical Document.

The final Sensitivity Ratings give guidance towards the DWM requirements as stipulated by Council. For existing DWM systems, the level of sensitivity will commonly reflect the level of

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challenge that has been experienced in managing the system. This information will help guide owners and Council in the ongoing management of existing systems.

Table 4: Sensitivity Rating Descriptions

Very High	Constraints are present at a very high level and this significantly restricts opportunities for sustainable DWM. Traditional systems are 'typically' not appropriate and a detailed site and soil evaluation would be required to determine if DWM is achievable at all. If achievable, specialised, advanced treatment and land application systems may be required to overcome the constraint.
High	Constraints are present at a high level and this substantially restricts opportunities for sustainable DWM. Traditional systems (i.e. septic tanks and trenches) are 'typically' not appropriate and a detailed site and soil evaluation would be required to determine if they are supported. Otherwise, specialised, advanced treatment and land application systems may be required to overcome the constraint.
Moderate	Constraints are present at a moderate level and this limits the range of DWM options that are appropriate for the site. A detailed site and soil evaluation is required to identify the most appropriate DWM system and mitigation measures to be employed.
Low	Constraints are present at a low level and are unlikely to substantially limit opportunities for DWM. In most cases appropriately designed and managed conventional systems will be accepted.

The terms relate to the underlying level of sensitivity to DWM posed by the lot. These factors are used to direct management (planning) decisions and subsequently, the level or intensity of site-specific investigation (LCA) required.

4.1.2 Sensitivity Analysis Mapping

The final Sensitivity Rating for each individual unsewered lot within COS is shown in Figure 3 and Table 5, which detail the results of the Sensitivity Analysis for the Shire. The final Sensitivity Rating and final map for each of the targeted localities and associated towns/settlements are detailed in the respective Locality Reports in Appendix B of the Technical Document. The targeted localities were highlighted as priority regions of investigation by Council and the SWG. The localities considered in this DWMP are: Alvie, Barham River Catchment (Apollo Bay locality hinterland), Barongarook, Barwon Downs, Beeac, Beech Forest, Carlisle River, Coragulac, Cororooke, Forrest, Gellibrand, Kawarren, Kennett River, Separation Creek and Wye River. The towns represent the developed 'centre' of each locality and are predominantly zoned Township Zone. Barham River, Barongarook and Kawarren, which are within the Rural Living Zone and Rural Conservation Zone, are referred to as 'settlements'. The town/settlement boundaries were primarily based on the zoning boundaries.

The parcels within each town/settlement include both commercial and domestic DWM systems without distinction. Town/settlement boundaries may also, on occasion, transect a given parcel. In that instance the parcel is considered to be within the town/settlement boundary and its Sensitivity Rating will be applied to the entire parcel.

Council maintains a database of the calculated Sensitivity Ratings for all the unsewered properties within the Shire.

An owner can contact Council to obtain the data for the final Sensitivity Rating of their land. As per the Action Plan, Council have added the DWM Sensitivity Overlay to the interactive mapping interface available for all residents on the Council's website. The mapping can be accessed here:

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http://cos.cerdi.com.au/cos_map.php; with the layer located within the 'Planning- Domestic Wastewater' folder.

Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot. For example, some waterways such as surface farm dams may not be captured in the mapping which may impact the final Sensitivity Rating and Useable Land for effluent application on a given lot.

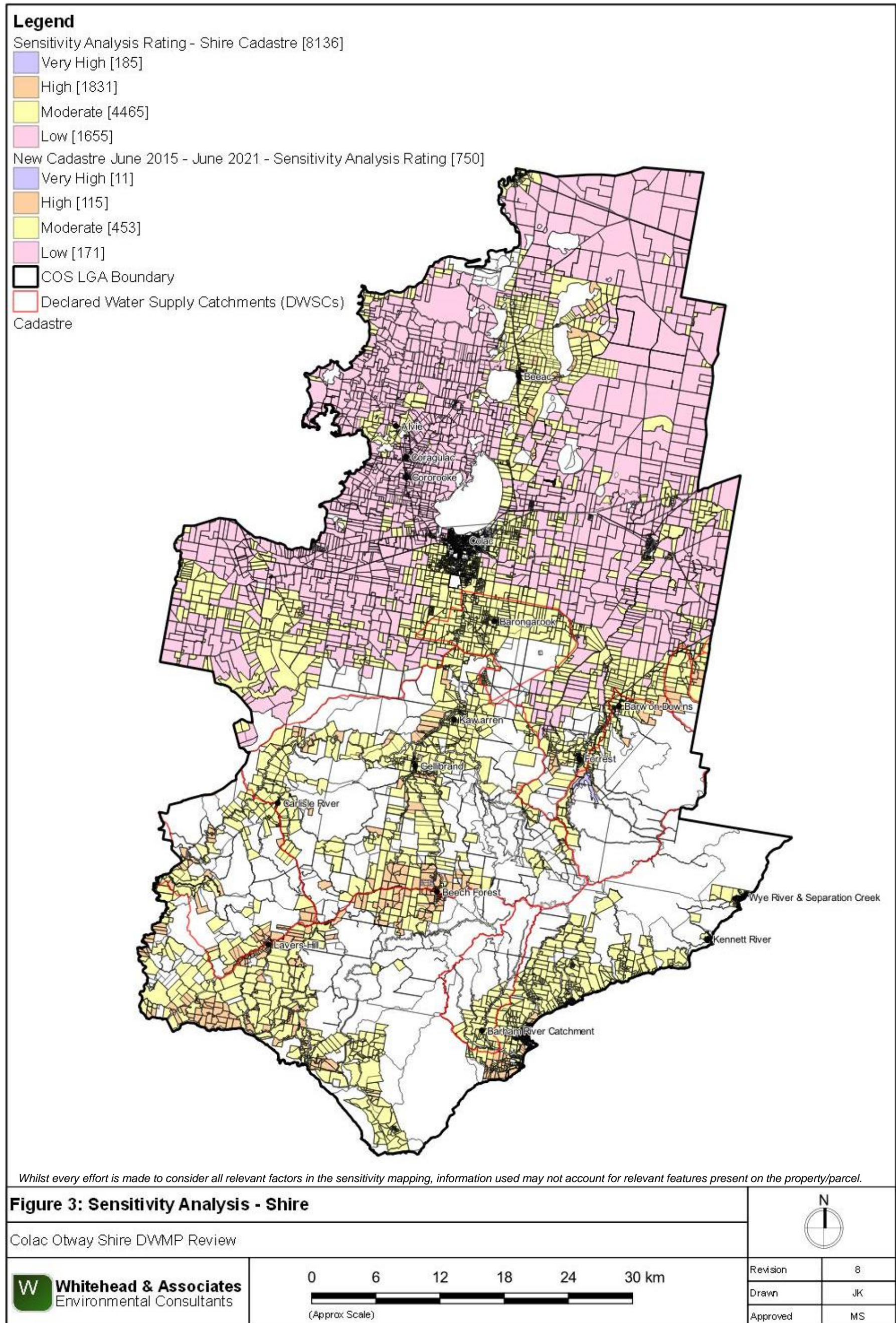
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Table 5: Final Sensitivity Rating Summary

	Total Lots ²	Total Number in Final Sensitivity Rating*			
		Very High	High	Moderate	Low
Shire (Overall)	8,136 (750)	185 (11)	1,831 (115)	4,465 (453)	1,655 (171)
Alvie Town (Locality)	33 (161)	0 (0)	3 (8)	22 (73)	8 (76)
Barham River (Apollo Bay) Settlement (Locality)	78 (392)	0 (12)	21 (146)	57 (234)	0 (0)
Barongarook Settlement (Locality)	101 (262)	0 (0)	2 (7)	99 (255)	0 (0)
Barwon Downs Town (Locality)	85 (260)	0 (1)	24 (57)	61 (201)	0 (1)
Beeac Town (Locality)	256 (642)	0 (0)	187 (241)	69 (355)	0 (46)
Beech Forest Town (Locality)	142 (332)	97 (119)	42 (153)	3 (60)	0 (0)
Carlisle River Town (Locality)	25 (246)	0 (0)	0 (38)	25 (205)	0 (3)
Coragulac Town (Locality)	73 (188)	0 (0)	0 (0)	43 (70)	30 (118)
Cororooke Town (Locality)	123 (285)	0 (0)	0 (0)	110 (146)	13 (139)
Forrest Town (Locality)	167 (349)	0 (9)	14 (43)	153 (284)	0 (13)
Gellibrand Town (Locality)	69 (265)	0 (2)	19 (61)	50 (202)	0 (0)
Kawarren Settlement (Locality)	72 (215)	0 (0)	12 (35)	60 (180)	0 (0)
Kennett River Town (Locality)	180 (183)	0 (0)	174 (175)	6 (8)	0 (0)
Lavers Hill Town (Locality)	84 (194)	29 (40)	53 (131)	0 (23)	0 (0)
Separation Creek Town (Locality)	117 (129)	0 (0)	105 (109)	13 (20)	0 (0)
Wye River Town (Locality)	373 (389)	0 (0)	360 (364)	13 (25)	0 (0)

² Shire (original (new since 2015)); townships (town (locality)).

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4.1.3 Evaluation of Final Sensitivity Analysis

The Sensitivity Analysis resulted in the lots throughout the majority of the Shire being assigned a Moderate Sensitivity Rating. The final Sensitivity Analysis map highlights the inherent relationship that results in only one or two individual constraints (e.g. soil suitability) generally affecting any given lot. This relationship is described further in the individual Locality Reports (Appendix B, Technical Document). Each locality and associated town/settlement has particular DWM constraints that need to be addressed.

The mapping identifies approximately:

- 20.6% of lots within the Shire with a Low Sensitivity Rating;
- 55.3% of lots with a Moderate Sensitivity Rating;
- 21.9% of lots with a High Sensitivity Rating; and
- 2.2% of lots with a Very High Sensitivity Rating.

The spatial distribution of the levels of sensitivity appears to be distinctly influenced by topographical features, such as the Otway Ranges. The northern half of the Shire appears to pose a lower sensitivity to sustainable DWM, whereas, the southern half of the Shire, including the coastline, generally poses a moderate sensitivity to sustainable DWM. Therefore, prioritisation should be towards the areas that pose a higher level of sensitivity.

According to the individual constraint maps as detailed in the Technical Document, the parameters contributing the greatest limitation to DWM within the Shire are soil suitability (which is often due to clayey soils derived from the basaltic parent rocks), slope, climate and useable lot area, (generally associated with surface waterways, particularly within the DWSCs in the Otway Ranges).

It is essential that the limitations of the data used to compile these maps are recognised when using the Sensitivity Analysis map. Whilst individual lots have been assigned a Sensitivity Rating, it is not sufficiently detailed to allow determination of individual system performance or land capability for individual lots. This is why the term Risk Assessment is used to describe the methodology and resultant outputs. An allotment categorised as having a Very High Sensitivity rating will not necessarily be totally unsuitable for on-site DWM or currently be experiencing poor system performance or system failure; however, it is likely to contain a number of significant limitations to the safe operation of on-site DWM systems assessed at a very broad scale.

Overall Sensitivity Ratings should be used to justify the requirement for more detailed individual lot LCAs, more rigorous assessment of development proposals and to target investment in the inspection and management of existing on-site DWM systems, rather than to define system performance or land capability.

Furthermore, the degree of risk depends on the type of effluent dispersal system and generated effluent quality (e.g. subsurface irrigation can be installed on slopes up to 15 – 20% in some cases, but this would be impractical for trenches). This relationship is detailed further in Section 6.2.5 of the Technical Document. Physical constraints can often be overcome or substantially mitigated by a range of measures (such as terracing, importing topsoil fill, installing stormwater diversions, removing vegetation or planting nutrient tolerant vegetation), thereby increasing the 'suitability' of the available area.

4.2 Land Capability Assessment (Stage 3)

A Land Capability Assessment (LCA) is required when submitting a Planning Permit application for a development or subdivision on a Moderate, High or Very High Risk lot (or for Low Risk lots within a DWSC), or when a Certificate to Install a DWM system is required.

A LCA must be conducted in accordance with the minimum standards outlined in the current EPA Code of Practice and *AS/NZS 1547:2012* and should be guided by the Victorian Model Land Capability Assessment Framework (MAV & DSE, 2006) (as amended). A LCA needs to demonstrate that the requirements of the SEPP will be met.

The Sensitivity Rating determined by the Sensitivity Analysis will act as the default LCA standard for lots as defined by this DWMP. Copies of the minimum requirements for assessment and reporting for each level of LCA are provided in Appendix C. It is important to note that there may be circumstances where the desktop sensitivity analysis results do not correlate perfectly with actual site conditions. In these circumstances, an increase or decrease in the Sensitivity Rating and LCA requirements may occur at the discretion of Council through completing a Site Inspection and Field Investigation. Therefore, the results of site-specific LCAs will constantly update the Sensitivity Analysis database held by Council, which will improve site understanding and validity of results. A Sensitivity Pro-forma Checklist, as shown below in Table 7 (also attached in Appendix B), can be used by the LCA assessor to accommodate any request to Council to alter the Sensitivity Rating of a lot.

It may be suitable for accredited LCA assessors to provide a clause within the contract warning clients of a potential fluctuation of requirements, and hence cost, that is dependent on Sensitivity Rating confirmation of the lot. The current EPA Code of Practice states that Council's Health Protection Officers (HPOs) or other Authorised Officers (AO) can determine what comprises a satisfactory LCA.

The MAV has developed a model LCA report and procedures to assist LCA assessors and regulators. As a minimum, LCAs should follow the 12-stage best practice model detailed within the current EPA Code of Practice and Victorian LCA Framework (MAV, 2014). The specific LCA requirements for the determined Sensitivity Ratings (Very High, High, Moderate and Low) are detailed below.

Table 6: Sensitivity Pro-forma Checklist Example

Parameter	Site specific input
PFI Identification Number ³	(e.g. 5763482)
Lot Address	(e.g. 57 Main Road)
Locality	(e.g. Barongarook)
Zoning and Overlay	(e.g. Township Zone)
Area (ha)	(e.g. 4ha)
Soil Texture	Soil Category as per AS/NZS 1547:2012 (e.g. Category 4 - Clay loam)
Soil Depth (m)	Depth to limiting layer (1.7m)
Soil Structure	Weak, moderate, strong, massive or apedal (e.g. weak)
Soil Limitations	(e.g. sodic and low fertility)
Permeability (Ksat) (m/day)	Indicative as per AS/NZS 1547:2012 or directly measured in-situ (e.g. 0.1m/day) using approved methodology (i.e. AS/NZS 1547:2012, Appendix G)
Slope (%)	Average slope (e.g. 4%)
Presence of Surface Waters	Distance to nearest surface waters
Useable Lot Area (ha)	Apply all relevant setback distances (e.g. 1.5ha)

With regards to DWM system selection and sizing, the permeability and corresponding 'design' loading rate for the most limiting soil horizon within 600mm from the base of the LAA must be used. This conservative approach ensures that the loading of wastewater on the soil can be supported for the entire soil profile to ensure that surface runoff and excessive deep drainage does not occur. The DWM systems should be sized either:

- as per the System Sizing Tables (Section 7 of the Technical Document) if permitted by this DWMP; or
- by site-specific design as detailed by the respective LCA requirements explained below.

4.2.1 Requirements for Low Sensitivity Lots

For Low Sensitivity Rating Lots, it is envisaged that a LCA will generally not be necessary, unless deemed so by Council staff. Council may request for a Soil Assessment to be provided in addition to a Site Plan on a case-by-case basis. Applications for Low Sensitivity lots can be assessed using the Sensitivity Pro-forma Checklist (Table 6 and Appendix B) and/or the 'Site Information Sheet' template in Appendix D of AS1547:2012 to confirm and record the site and soil characteristics. If available for the location, the proposed treatment and land application system combination can be selected from the System Selection (Appendix A) and Sizing Tables (Locality Reports in Appendix B of the Technical Document).

Council may visit the site to confirm site and soil details are as per the Pro-forma detail and that the proposed DWM treatment and land application system is appropriate for the site. If a Low Sensitivity Rating lot is located within a region of increased sensitivity or DWM constraint, Council staff may require, at their discretion, a Standard LCA Assessment and Report to be completed

³ Either parcel or property identifier.

(Table C1, Appendix C). This may include lots that are located in areas prone to landslip, high groundwater regions, Groundwater Water Supply Protection Areas (i.e. Warrion), or Groundwater Management Areas.

For Low Sensitivity Rating lots located within a DWSC, a LCA is mandatory as per Section 3.6 of the EPA Code of Practice 891.4 (2016); therefore, they are automatically required to complete a Standard LCA as detailed in Table C1, Appendix C.

For Moderate, High and Very High Sensitivity Rating lots, or other properties where Council has ordered that a LCA should be prepared, the following guidelines (or as amended) should be adhered to by the consultant preparing the LCA on behalf of the owner:

- EPA Code of Practice – On-site Wastewater Management, Publication 891.4 (2016);
- AS/NZS 1547:2012; and
- Municipal Association of Victoria – Model Land Capability Assessment Framework (2014).

4.2.2 Requirements for Moderate Sensitivity Lots

For Moderate Sensitivity Rating Lots, a Standard LCA is required (Appendix C, Table C1) which includes Site Inspection and Field Investigations. However, where appropriate, system design can be determined using the System Selection (Appendix A) and Sizing Tables (Section 7 and the Locality Reports in Appendix B of the Technical Document). For Moderate Sensitivity Rating lots located outside of a DWSC, Council may at its discretion not require an LCA to be completed and the procedure as per Low Sensitivity Rating lots to be followed.

A provision is made for Moderate Sensitivity Rating lots located within Climate Zone 4 (Otway Ridge region) that they must complete Section 6 ‘System Selection and Design’ as per the Detailed LCA procedure, as site-specific design is required for system sizing. This is to ensure that the sensitivity of the Otways and increased difficulty in DWM design due to high rainfall is taken into consideration.

4.2.3 Requirements for High Sensitivity Lots

For High Sensitivity Rating lots, a Detailed LCA is required (Appendix C, Table C2) which requires information in addition to the Standard LCA. The main requirement of a Detailed LCA is to undertake a monthly water balance for sizing the DWM system. More comprehensive soil testing is also required to assist with appropriate system selection and ensuring any necessary mitigation measures are implemented into the site management plan.

System Selection and Sizing Tables are not available for High Sensitivity Rating lots.

4.2.4 Requirements for Very High Sensitivity Lots

For Very High Sensitivity Rating lots, a Comprehensive LCA is required (Appendix C, Table C3) which understandably requires a higher level of assessment and reporting due to the inherent constraints and risks associated with sustainable DWM on the lot. A Comprehensive LCA requires in-situ permeability testing, soil chemical analysis, conservative monthly or daily water balance, an annual nutrient balance and a detailed site specific hydraulic design in addition to the standard LCA requirements. Council is implementing an in-situ permeability testing protocol that must be followed.

4.2.5 Generic LCA Requirements - Overlays

As detailed in Stage 1 of each LCA procedure (Appendix C), confirmation of any relevant sensitivity overlays (e.g. landslip) with Council is required. If any sensitivity is identified, this needs to be specifically addressed within the LCA. Discussion with Council is required to determine the necessary requirements to be met. If the site is located within an identified landslip region, then a geotechnical report (DWM relevant) will likely need to be completed; refer to Step 4 [pp.35] of the 12-step LCA procedure in the EPA Code of Practice 891.4 (2016) for detail.

If the site is located within a known shallow groundwater region, the depth to (permanent and shallow) groundwater will need to be determined and discussed within the LCA report.

Additional LCA requirements:

- All Low Sensitivity Rating lots within a DWSC are required as a minimum to do a Standard LCA as per the current EPA Code of Practice requirements;
- If the lot is applying for an alteration and located within a DWSC, OR the lot is located within a DWSC and does not generate an Environmental Significance Overlay (ESO) 3 trigger, than a minimum of 20/30 secondary treatment standard is required regardless of the Sensitivity Rating of the lot; and
- All lots located within Climate Zone 4, associated with the higher rainfall in the Otway Ridge (i.e. Lavers Hill, Fergusson and Beech Forest), are required to undertake site-specific design and cannot use the System Sizing Tables.

It should be noted that a LCA may indicate that it is not possible to design an appropriate DWM system for a given site and sometimes costs for construction may be prohibitive. However, the onus of justification rests with the LCA assessor who may demonstrate to Council/WC satisfaction that the risk from a proposed DWM system combination has been adequately addressed by design or management measures.

4.2.6 Subdivision LCA Requirements

It is very important that an LCA is performed early in the planning phase of land development before rezoning or subdivision as it achieves a more sustainable result, because areas with higher degrees of limitation can be appropriately zoned and subdivision layouts can make best use of the constraints and opportunities of the land. It is also a requirement under the Planning Scheme to be able to demonstrate that the land is suitable for the development of a dwelling prior to subdivision approval. Chapter 5 of the MAV Model Land Capability Assessment Framework (2014) broadly discusses LCAs for subdivisions.

Regardless of the scale of an LCA, the objective is the same, that is, the determination of a sustainable DWM strategy for **each** proposed lot to reduce potential impacts to the local receiving environments. Different management strategies may be required within the same subdivision due to varying constraints identified through the LCA across the site.

Only concept DWM system designs are necessary at this stage to determine the minimum size of the land application area. Options may be left as broad technology types suitable for the lots, with detailed system design required at the individual lot development stage.

The LCA requirements detailed within Section 4.2 are applicable to all scales of development planning and assessment. The Sensitivity Rating of the existing lot will direct the level of detail required for an LCA for a subdivision or rezoning of a lot.

4.3 Sensitivity Analysis Summary

The recognised limitations emphasise that the Sensitivity Analysis should only be used as a guide to distinguish regions within the Shire with relatively higher levels of sensitivity to DWM related public and/or environmental health outcomes. The results can be used to target more detailed investigations into suitability for on-site DWM. The Sensitivity Analysis maps help to target the main bio-physical DWM constraints associated with a specific lot which, with appropriate individual assessment and design, can potentially be mitigated or overcome.

Useable lot area, irrespective of total lot size, plays a key role in determining a lot's capacity for sustainable long-term on-site DWM and influences the selection of appropriate systems. As a general rule, the smaller the lot, the less land that will be available for effluent management after allowing for other development of the land. It is difficult to define the minimum lot size that would be required throughout the Shire to ensure long-term on-site DWM without further detailed study. This will vary depending on the physical constraints of the lot and the nature of the development as well as the type of treatment and land application system used.

The Minister for Water's Guideline 1 requires that the density of unsewered dwellings should be no greater than one dwelling per 40 hectares and each lot created in a subdivision should be at

least 40 hectares in area within DWSCs. In order to allow for consideration of a relaxation of this Guideline, a LCA needs to demonstrate that DWM is sustainable with no off-lot discharges and that the minimum zoning lot size requirements (for subdivisions only) in the Planning Scheme are met. Further assessment on sustainable lot densities within specific sub-catchments is required.

It is also evident that variability in constraint exists between the different unsewered localities within the Shire. Further detailed studies into the performance of existing on-site DWM systems within each of the targeted unsewered towns/settlements is recommended to verify the findings of this broad-scale assessment, to provide a more detailed study on maximum lot development density and hence minimum lot size in proposed development areas. This will aid Council in ensuring future development will not adversely impact environmental and public health.

4.4 Prioritisation of Investigation Areas

A key role of the DWMP and Action Plan is to guide the systematic investigation and management of unsewered development within the Shire. Investigation may include:

- Improving and expanding the existing Council DWM database through inspection of undocumented properties;
- Focussing compliance and monitoring activities in areas where risk to public and environmental health is greatest, i.e. highly sensitive lots within DWSCs;
- Developing a greater understanding of the risks of increasing unsewered development density within an Area-of-Concern, which may be described at various scales (i.e. town/settlement, off-take, catchment area etc.); and
- Guiding strategic planning initiatives to enhance environmental objectives (i.e. water quality targets) or to examine alternative wastewater servicing solutions for unsewered areas.

It is not feasible to deal with the requirements of the entire Shire simultaneously, so a process for ranking the priority of 'core' and 'non-core' Areas-of-Concern (AOCs) for investigation effort is required.

'Core' areas include the targeted towns/settlements (as agreed by the Stakeholder Working Group) and delineated sub-catchments within the DWSCs (following the methodology detailed in Section 7 in the Technical Document). 'Non-Core' areas comprise remaining areas within the Shire boundary (residual regions) which were assigned based on their geographic location (i.e. north or south). Prioritisation involved analysis at varying scales to address the variable goals of COS and the WCs.

Priority is based on the density of DWM sensitivity (Sensitivity Density) within each AOC. Sensitivity Density is reported as the aggregated DWM sensitivity (value) per unit area (km²). The methodology for calculating Sensitivity Density within each AOC is as follows:

- a) Delineate the AOC (i.e. town/settlement, sub-catchment or residual region);
- b) Confirm the number of unsewered lots within the AOC;
- c) Calculate the cumulative 'Sensitivity Value' for the investigation lots within the AOC (sum of all values);
- d) Calculate the cumulative area of the investigation lots within the AOC (sum of individual lot areas);
- e) Calculate the DWM Sensitivity Density for each AOC (cumulative DWM 'Sensitivity' value per unit area - km²); and
- f) Assign the priority ranking of each AOC based on the assigned sensitivity density value.

Lot priority is based on the 'DWM Sensitivity Density' of all unsewered lots within the delineated town/settlement boundaries. Sub-catchment priority reflects the 'DWM Sensitivity Density' for all unsewered lots within the designated sub-catchment, less the lots already included in the town/settlement analysis. This approach follows the intention of the *Guidelines for Planning*

Permits in Open Potable Water Supply Catchment Areas (DSE, 2012) where any development proposal must demonstrate that “the proposal does not present an unacceptable risk to the quality and quantity of water generated by the catchment [all land uses] having regard to the land capability assessments, land condition and management conditions of the site and catchment”. Lots that were located within more than one sub-catchment were included in both sub-catchments to ensure conservatism as it is unknown at a regional scale where the development, or potential, is located on the lot.

To complete the picture for the Shire, those areas within the LGA boundary that have not been accounted for in the town/settlement or sub-catchment priority analyses are included as residual regions. These areas are outside of the DWSC boundaries to the north and south of the Shire.

The prioritisation will assist in decision making and planning for future development within the AOCs. Additional detailed analysis and compliance regimes can then be developed with the aim of protecting the environment and public health, whilst allowing for development consistent with Council strategies and planning controls.

Table 7 outlines the results and rankings of the Prioritisation Analysis for each AOC in descending order based on cumulative sensitivity to DWM.

The priority ranking (by Sensitivity Density) will *inform* operational priority which also accommodates other factors in prioritising work, such as objectives in the Council Plan.

4.5 Management of Unsewered Development in COS

Stages 4 and 5 of the Risk Assessment Framework are ‘procedural’ steps for determining the management requirements for existing unsewered development or the need for further investigation and analysis for new development.

4.5.1 Management of Existing Systems (Stage 4)

Existing DWM systems in COS will be managed through the inspection program as described in Section 7 of this DWMP. Stage 4 (Figure 2b) outlines the procedural framework under which COS will prioritise, inspect and, if necessary, require/enforce management of DWM systems in the Shire.

4.5.2 Assessment of New Development (Stage 5)

Proposals for development exempt from planning permit requirements (e.g. dwelling in Township Zone that is not covered by any overlays) will proceed directly to the preparation of a LCA as per the requirements set out in Section 4.2 of this document.

Development and planning proposals for lots located within the DWSC must comply with the minimum lot size specified for the current zoning as per the Planning Scheme (subdivision only). If a lot does not achieve the minimum area, then it is deemed as non-compliant with the Minister for Water’s Guidelines. Assuming the proposal is compliant with minimum lot size criteria, COS or the WCs may consider proceeding to the (Stage 6) Cumulative Risk procedure to develop a baseline condition by which the proposal may be assessed.

Finally, irrespective of where or how development will proceed within COS, Council may consider examining the ‘Cumulative Risk’ of all unsewered development areas using the proposed methodology as part of a longer term goal for managing domestic wastewater systems in the Shire.

Table 7: Prioritisation Summary

Priority Ranking	Area of Concern (AOC)	Location/ Description	Unsewered Lots within AOC	Cumulative Sensitivity Rating	AOC area (km ²)	Sensitivity Density (per km ²)
Towns						
1	Kennett River	Outside DWSC	180	865	0.26	3,327
2	Wye River and Separation Creek	Outside DWSC	498	2,386	0.72	3,314
3	Beech Forest	Within DWSC; Sub-catchments E, V and outside	150	917	0.49	1,871
4	Beeac	Outside DWSC	269	1,008	0.63	1,600
5	Lavers Hill	Within DWSC; Sub-catchments T and outside	84	444	0.38	1,168
6	Cororooke	Outside DWSC	112	300	0.35	857
7	Forrest	Outside DWSC; Sub-catchment N (slightly)	167	522	0.72	725
8	Barwon Downs	Within DWSC; Sub-catchments K, L and outside	89	253	0.41	617
9	Gellibrand	Within DWSC; Sub-catchments E, V and U	71	250	0.45	556
10	Alvie	Outside DWSC	33	87	0.19	457
11	Coragulac	Outside DWSC	69	165	0.59	280
12	Carlisle River	Within DWSC; Sub-catchments W and G	26	70	0.27	258
13	Kawarren	Within DWSC; Sub-catchment U	72	225	2.01	112
14	Barongarook Settlement	Within DWSC; Sub-catchments Q and P	101	251	2.99	84
15	Barham River Catchment Settlement	Within DWSC; Sub-Catchments D and S	81	316	18.08	17
SUB-CATCHMENTS						
1	B - West Gellibrand River	Offtake	2	7.2	0.03	240
2	O - Gellibrand River	Discharge	115	362.2	43.67	98.7
3	W - to Carlisle River	Discharge	129	488.1	46.88	70.9
4	H - East Barwon Diversion Gates	Offtake	35	145	3.83	37.9
5	M - to King Creek	Discharge	19	66.8	2.84	23.5
6	F - Wyelangta Depot and North Arkins Creek	Offtake	16	62.6	2.76	22.7
7	N - to Barwon River West Branch	Discharge	58	256.4	12.47	20.6
8	L - to Callahan Creek North Branch	Discharge	31	97.2	5.06	19.2
9	K - to Dewings Creek (Wurdi Boluc Inlet Channel)	Discharge	44	134.7	9.61	14
10	E - Gellibrand Pump Station	Offtake	119	463.8	33.56	13.8
11	V - to Gellibrand River and Charleys Creek	Discharge	242	887.8	65.18	13.6
12	T - to Chappell Creek and Gellibrand River	Discharge	204	845.4	67.83	12.5
13	X - to Gellibrand River (near Sheeppark Creek)	Discharge	67	248.4	23.42	10.6
14	R - to Deans Creek	Discharge	43	107	10.7	10
15	I - Callahans Creek	Offtake	1	4.2	0.43	9.8
16	P - Boundary Creek	Discharge	171	386.7	40.18	9.6
17	G - North Otway River Raw WPS	Offtake	29	93.5	9.89	9.5
18	Q - to Barongarook Creek	Discharge	109	283.7	31.81	8.9
19	J - to Matthews Creek (to the north)	Discharge	57	151.6	24.27	6.2
20	D - Barham River Pump Station 2	Offtake	7	23.7	3.85	6.2
21	S - to Barham River West Branch	Discharge	7	24.4	4.33	5.6
22	U - to Love Creek	Discharge	228	690.6	60.31	1.5
23	A - Olangolah	Offtake	0	0	0	0
24	C - Barham River Pump Station 1	Offtake	0	0	0	0
Residual Regions						
1	Southern	Residual area outside DWSC	1,018	3,782	255.6	14.8
2	Northern	Residual area outside DWSC	4,049	8,780	1,597.50	5.5

4.6 Cumulative Impact Assessment of DWM

Cumulative Impact Assessment (CIA) is an indicative risk assessment tool used to provide guidance on potential risks associated with existing or proposed development in unsewered areas. It provides a means of quantifying risks and comparing them with identified benchmarks (i.e. baseline or pre-developed conditions) or performance targets (i.e. water quality indicators). The CIA looks at existing DWM systems within an area and determines the environmental and health impacts that could occur from changes in DWM management (i.e. compliance monitoring), increasing density of DWM systems (i.e. development) or other improvements (i.e. DWM system upgrades).

Example1: CIA would allow Council to test the benefits of implementing a targeted (DWM) improvement program in an AOC (e.g. town/settlement).

Following site inspection, Council would analyse the combined outcome of DWM sensitivity and (DWM) system combination for each lot in the AOC using the procedure described in Section 4.6 (below). The derived value combinations for each lot would then be inserted into a Cumulative Risk Analysis matrix (see Figure 5) to determine the underlying DWM 'Risk Profile' for the AOC.

Quantification of this 'baseline' dataset would then allow Council to examine the sensitivity of the 'cumulative risk' of the AOC to alternate improvement scenarios (i.e. householder education, increased monitoring effort, voluntary system upgrades etc.) and test the benefits of each approach using only desktop investigation tools.

The Minister for Water's Guidelines state that a DWMP must provide a strategy to prevent both individual and cumulative impacts on groundwater and surface water beneficial uses and to also prevent discharge of wastewater off-lot.

Further, the EPA Code of Practice (Section 1.6) states:

*"While this Code primarily refers to single allotments, the **cumulative impact of all wastewaters within a subdivision, a commercial precinct or a township should be taken into account when assessing the capability of a lot to absorb treated effluent without negatively impacting its surroundings.** This is particularly important in areas scheduled as open potable water supply catchments (DSE 2012).*

To minimise the cumulative impact of wastewater, effluent must be contained onsite within the boundaries of the allotment. This aims to prevent the transport of nutrients, pathogens and other pollutants to surface waters and to prevent any negative impacts on 'groundwater beneficial uses' within the catchment (Clause 32, SEPP WoV 2003).

*For existing **premises with an offsite discharge or a failing system on a small lot the wastewater management system should be upgraded** to contain as much of the effluent as possible on the allotment".*

There is no pro-forma methodology for completing CIA for DWM. It is possible to use extensive modelling of DWM system performance and catchment run-off and pollutant characteristics to estimate the potential human health and environmental impacts of multiple DWM systems. However, the level of detail and complexity can be varied to reflect the potential risk (a function of the likelihood and/or consequence of failure) a specific proposal poses to human and ecosystem health.

This DWMP proposes a semi-quantitative approach using the outcomes of the Sensitivity Analysis, (DWM) system detail and compliance/performance information to develop an adaptable DWM 'Cumulative Risk' analysis procedure.

The following sections detail a methodology to develop procedural and management systems within and throughout the DWMP implementation process that will allow for integration of strategic information (i.e. planning schemes or proposals), generated data (i.e. DWM Sensitivity Analysis) and collected data (e.g. water quality, system inspection information) into a usable risk assessment tool.

It is acknowledged that this type of procedure is “aspirational” in nature and should be considered an **OPTIONAL** component of the DWMP. However, this limitation should not detract from the consideration and value of such an undertaking. Risk Assessment is a two-dimensional analysis that reflects not only the consequence of an event or action (DWM Sensitivity Analysis), but also the likelihood of that event/action occurring. The proposed ‘Cumulative Risk’ procedure provides a flexible (semi-qualitative) approach to measuring the likelihood of an adverse (DWM-related) event in an AOC. This attribute is referred to as the ‘Impact Probability’ rating hereafter in this document.

4.6.1 Cumulative Risk Analysis (Stage 6)

The potential for DWM systems to result in consequential degradation of both surface water and groundwater resources depends on the nature of the discharge (i.e. surface or subsurface) and the capacity of the lot to assimilate the effluent and attenuate associated pollutants such as nitrogen, phosphorous and pathogens. System age, selection, sizing and design, as well as correct operation and maintenance, also contribute to the potential under-performance⁴ of a DWM system.

Programs need to be put in place to minimise DWM system under-performance and to rapidly identify and address events when they occur. The following methodology assesses the cumulative impact of DWM systems on environmental and public health by comparing the probability of DWM system under-performance with the ability to contain DWM on-site (Sensitivity Rating).

As part of Council’s compliance monitoring, detailed in Section 7, a database of DWM system information will be constantly updated and managed to assess the current situation and prioritise improvements or upgrades. From knowing details about a particular DWM system, the probability of under-performance can be estimated. Key DWM system attributes used to estimate the probability of system under-performance are:

- The treatment system (e.g. septic tank) and land application system (e.g. leach drain) combination in operation;
- The expected wastewater volume (loading) treated by the DWM system; and
- The system’s age and assumptions about the effluent quality proposed/likely to be produced.

The probability of under-performance of a DWM system is based on its degree of potential to cause environmental or public health impacts. Figure 4 (following) presents an ‘Impact Probability’ matrix based on the attributes previously described. The rating is presented on a scale of one to five representing recently constructed, heavily designed or highly managed systems (e.g. publicly managed community systems) at the lower end of the scale (1) through to ageing, outdated and un-managed systems (e.g. split black/grey water systems) at the other (5).

Example 2: A domestic all-waste system, such as an AWTS (with disinfection), discharging to an irrigation land application area. If the system was installed within the last 5 years it would be expected to hold a current EPA Certificate of Approval and be capable of reliably achieving secondary effluent quality standards. The land application area would be expected to have been designed, sized and located according to current best-practice procedure (i.e. EPA Code of Practice), with irrigation by way of subsurface or covered drip application. This system would be expected to be managed by contractual arrangement with a qualified system maintainer, with regular reporting to Council. The likely ‘Impact Probability’ rating for this system would be:

⁴ Identified deficiency (management, structural or operational) leading to actual or potential off-site discharge of untreated or poorly treated (DWM) effluent in such a manner or quantity that it may cause consequential impact to off-site environmental resources (water quality) or public health outcomes.

(2) Low-Moderate probability that hydraulic (surface/subsurface), organic and nutrient safeguards (design, performance, mitigation) may not be sufficient to prevent consequential impact to off-site environmental resources (water quality) or public health outcomes.

If the same system was >10 years old, the AWTS may no longer hold an EPA Certificate of Approval (or may no longer be manufacturer supported). The technology/design of the system may not be able to reliably achieve secondary effluent quality standards and may not include disinfection. The land application area would likely have been designed, sized and located according to outdated procedures, with irrigation by way of surface (i.e. sprinkler type) application. There is a reduced likelihood that this system would be managed by contractual arrangement with a qualified system maintainer. The likely 'Impact Probability' rating for this system would be:

(5) High probability that hydraulic (surface/subsurface), organic and nutrient safeguards (design, performance, mitigation) may not be sufficient to prevent consequential impact to off-site environmental resources (water quality) or public health outcomes.

The extent and resultant impact of DWM system under-performance varies greatly, and the consequences for water quality will depend primarily on the degree and spatial density of events in the AOC. Under some conditions, even when a DWM system under-performs, effluent will still be retained on-lot. However, in other circumstances, DWM system under-performance may be minor but may quickly enter a sensitive environment (e.g. creek) and cause detrimental effects.

Therefore, it is important to determine the particular sensitivity of each AOC. In some cases (i.e. highly developed or degraded areas) the 'tolerable' level of DWM system under-performance may be greater than expected in an AOC of greater resource value (i.e. DWSC). The tolerable under-performance level will vary between AOC's due to the wide range in environment dynamics, system combinations and sensitivities.

The key objective being determined by the SEPP requirements of "On-site domestic wastewater needs to be managed to prevent the transport of nutrients, pathogens and other pollutants to surface waters and to prevent any impacts on [water/groundwater] beneficial uses". Beneficial use being defined as "a use of the environment which is conducive to public benefit, welfare, safety, health or aesthetic enjoyment and which requires protection from the effects of waste discharges".

The beneficial uses relating to this DWMP, and also Colac Otway Shire generally (including DWSCs), include:

- water suitable for human consumption;
- water based recreation;
- water suitable for agriculture;
- aquatic ecosystems; and
- water suitable for the consumption of aquatic organisms (e.g. fish).

The *Policy Impact Assessment* (PIA) for the SEPP (WoV), prepared by the EPA (2003), describes how setting targets to measure the environmental quality of waterways should aim to drive continuous improvement (Section 6.4 Policy Purpose), stating that:

"This guidance helps [these] organisations understand what they need to do to improve environmental quality and protect beneficial uses. The goals provide some specific areas of focus for the next 10 years, to ensure that actions important to protect beneficial uses are implemented. This does not mean however that all environmental quality objectives need to be attained or actions fully implemented within that timeframe, but that progressive improvement is made towards their attainment. Therefore, actions in the attainment program need to be implemented in a priority-driven and practicable manner".

It is particularly important within DWSCs to ensure that the quality of the resources is maintained; therefore, the overall cumulative impact of DWM on a sub-catchment should be assessed to

ascertain particular risks and implement correct operational and management procedures to reduce any potential risks.

4.6.1.1 Pilot Study (Separation Creek)

To demonstrate the benefit and applicability of the CIA approach to DWM system management in COS, a small 'pilot' study was conducted for the Separation Creek town (AOC). Council holds a substantial database of DWM system records for the coastal towns of Wye River and Separation Creek and a number of other environmental and water quality investigations have been prepared for the area in recent years (e.g. SKM 2014). This analysis was conducted prior to the 2015 bushfires.

The Separation Creek (DWM) data set was analysed and interpreted to determine Impact Probability ratings for each of the 123 unsewered lots identified within the town boundary. Using the methodology described previously, these values were then correlated with the corresponding Sensitivity Ratings for each lot using a 'Cumulative Risk Analysis' matrix. A copy of the matrix prepared for the pilot study is provided as Figure 5.

As shown, the underlying **Risk Profile** for Separation Creek is 'High-Very High' based on existing information. Where available information on system type/age/performance has been limited, the analysis has taken a conservative 'worst-case' approach. The data set would be improved based on site-specific investigation and compliance monitoring as part of the DWMP implementation. Where '0' values are recorded, the lot has been identified as 'vacant'.

The pilot study has shown the use of the CIA procedure is a useful component of a holistic assessment of DWM risk within the Shire. Using the existing situation (baseline condition) as a starting point, Council is able to compare and contrast a range of options to address DWM impacts from the town. Changes from baseline condition can be confirmed by follow up investigations of environmental/water quality or other indicator targets (as defined).

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

System Combination			System Age			
			< 5years	5-10 years	> 10 years	Unknown
Domestic System - single-residential dwelling or equivalent (<2,000L/day)	Split	Split-waste system. Blackwater septic tank followed by subsurface disposal (trench or pipe). Greywater discharge typically to stormwater system (may include sand-filter treatment prior) or uncontrolled discharge.	4	5	5	5
	Primary	All-waste system (black/greywater). Treatment in septic tank, composting/vermiculture system (or similar) to primary effluent standard, followed by discharge to subsurface trench/bed or LPEd (below-ground application).	3	4	4.5	5
	Secondary	All-waste system (black/greywater). Treatment in AWTS, membrane and/or biological or media filter system to secondary effluent standard (including disinfection), followed by discharge to subsurface or surface land application.	2	3	4	4
	Tertiary	All-waste system (black/greywater). Treatment in secondary treatment system (as above) but demonstrably achieving advanced secondary effluent standard (including nutrient removal) suitable for high-quality uses (surface / subsurface landscape irrigation).	2	3	3.5	4
Commercial System - large scale (>2,000 L/day) systems managing combined wastewater from multiple dwellings or non-residential landuses	Primary	All-waste system (black/greywater). Treatment in single or multiple septic tank(s), composting/vermiculture system (or similar) to primary effluent standard, followed by discharge to subsurface trench/bed or LPEd (below-ground application).	3	4	5	5
	Secondary	All-waste system (black/greywater). Treatment in commercial AWTS, membrane and/or biological or media filter system to secondary effluent standard (including disinfection) followed by discharge to subsurface or surface land application.	2	3	4	5
	Tertiary	All-waste system (black/greywater). Treatment in secondary treatment system (as above) but demonstrably achieving advanced secondary effluent standard (including disinfection and/or nutrient removal) suitable for high-quality uses (surface / subsurface landscape irrigation).	2	3	3.5	4
Community System - reticulated sewer, STEP/STEG, low-pressure/vacuum sewer or similar	Variable	Decentralised collection/treatment/land application system(s) servicing multiple dwellings, properties and/or landuses. May include local collection/treatment (on-lot infrastructure) and remote land application options. Centralised management by Water Authority or contracted entity.	1	1	2	3

- 5 High probability that hydraulic (surface/subsurface), organic and nutrient safeguards (design, performance, mitigation) may not be sufficient to prevent consequential impact to off-site environmental resources (water quality) or public health outcomes.
- 4 Moderate-High probability that hydraulic (surface/subsurface), organic and nutrient safeguards (design, performance, mitigation) may not be sufficient to prevent consequential impact to off-site environmental resources (water quality) or public health outcomes.
- 3 Moderate probability that hydraulic (surface/subsurface), organic and nutrient safeguards (design, performance, mitigation) may not be sufficient to prevent consequential impact to off-site environmental resources (water quality) or public health outcomes.
- 2 Low-Moderate probability that hydraulic (surface/subsurface), organic and nutrient safeguards (design, performance, mitigation) may not be sufficient to prevent consequential impact to off-site environmental resources (water quality) or public health outcomes.
- 1 Low probability that hydraulic (surface/subsurface), organic and nutrient safeguards (design, performance, mitigation) may not be sufficient to prevent consequential impact to off-site environmental resources (water quality) or public health outcomes.

User Defined User' may interpret matrix based on individual site or system characteristics and present (decimal) value within assigned range (qualitative assessment).

Figure 4: DWM Impact Probability Matrix

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

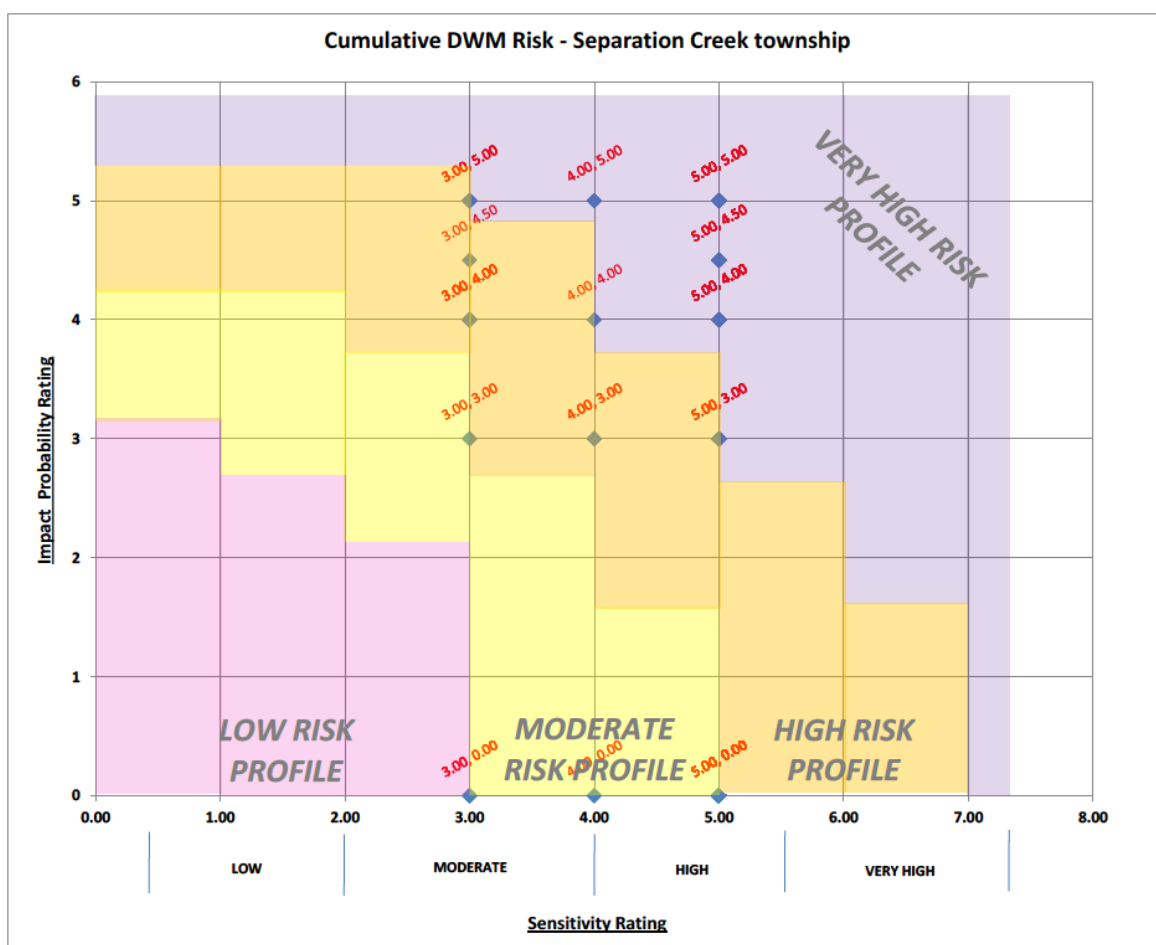


Figure 5: Cumulative Risk Analysis (Matrix)

4.7 Limitations of the Risk Assessment Framework

There are several limitations inherent in the methodology adopted to assess the variation in on-site domestic wastewater related sensitivity throughout the Shire. Briefly, these are due to:

- The use of broad-scale mapping and desktop analysis, with only limited field-truthing of physical attributes;
- A lack of digital data in some areas;
- The present level of scientific understanding and uncertainties relating to the physical and chemical processes and their implications for sustainable on-site DWM. Current best practice derived from wide experience in Australia, New Zealand and the United States was used in this assessment;
- The limited availability, quality and accuracy of attribute data; and
- Limitations in the method of assessing the inter-relationship and cumulative effect of individual attributes and constraints.

The recognised limitations emphasise that the Sensitivity Analysis mapping should only be used as a preliminary attempt to distinguish regions within the Shire with relatively higher levels of risk to public and/or environmental health and with the objective of determining preliminary priority for future wastewater servicing. The Sensitivity Analysis can be used to target more detailed investigations into suitability for on-site DWM as detailed in Section 4.5.2.

5 Development Planning and Assessment

Common issues associated with development planning and assessments include:

- Development pressure on small lots (typically <2,000m²) that were subdivided before the formal regulation of DWMs was introduced;
- Development pressure for new unsewered subdivisions on marginal land with limitations to DWM;
- Adoption of consistent and sustainable minimum lot size for new unsewered subdivisions;
- Establishing a minimum lot size that allows for the long-term repair and replacement of DWM system components;
- The enforcement of connection to existing sewerage systems for new subdivisions on the fringes of towns such as Colac and Apollo Bay;
- Meeting the Water Corporation requirements for development within DWSCs;
- Maintaining a consistent standard of installation and construction of DWM system components; and
- Ensuring on-site DWM system designs incorporate appropriate technologies for the site(s).

5.1 Assessment of DWM Proposals

Council's procedures for assessing DWM proposals are detailed in Sections 4, 6 and 7 of this Operational Plan. All DWM proposals must be submitted to Council with a 'Permit to Install' application form for the proposed treatment and land application systems. DWM proposals in Declared Water Supply Catchments (DWSCs) will be referred to the relevant Water Corporation (and other agencies, as required). The Action Plan (Action No. 1) includes a review and finalisation of Council procedures for the assessment of DWM proposals.

A LCA will not be necessary for Low Sensitivity lots located outside of DWSCs (as identified by the Sensitivity Analysis mapping), unless Council considers it is necessary due to site-specific factors. The minimum Sizing Tables (in the Locality Reports in Appendix B of the Technical Document) will be appropriate for Low and Moderate Risk lots outside of the DWSCs and not within Climate Zone 4 (unless otherwise determined by Council). LCAs and detailed designs will be required for all lots located within DWSCs and all High and Very High Sensitivity Rating lots (and any other lot as determined by Council).

Records of development and rezoning applications in unsewered localities provides useful data about development pressures across the Shire and can be used to inform strategic land use and development planning decisions in the unsewered towns/settlements and their surrounds. As per Action No. 7a of the Action Plan (Section 13), the Locality Reports in Appendix B of the Technical Document were reviewed in addition to system inspection data to inform planning decisions in unsewered towns. It is important to ensure that the broader planning processes and decisions take into consideration the DWMP and ongoing inspections and therefore all the Planning and EHO should be briefed on the requirements (Action No. 7b).

5.2 Development Potential in Unsewered Localities

The Colac Otway Shire Rural Living Strategy (2011) investigated existing localities for their future development potential. It identified 'moderate' development potential in Forrest, Beeac, Alvie, Cororooke (apart from Langdons Lane), and Coragulac (all of which are located outside of DWSCs). Detailed assessments and maps of each of these towns/settlements (which include the surrounding locality area) are provided in the Locality Reports in Appendix B of the Technical Document. The results of the Sensitivity Analysis mapping indicate that these localities are generally of Low to Moderate Sensitivity for DWM and therefore could support further expansion

with appropriate planning. Obviously other factors such as bushfire implications would also have to be considered.

The Rural Living Strategy (2011) identified Gellibrand, Lavers Hill and Beech Forest as having 'deferred' growth potential, dependent on water catchment constraints and bushfire hazard being satisfactorily addressed. Detailed assessments and maps of each of these localities (including the towns/settlements) are provided in the Locality Reports in Appendix B of the Technical Document. The results of the Sensitivity Analysis mapping indicate that of these three localities, Gellibrand has the most development potential, with a higher proportion of Low and Moderate Sensitivity lots across the broader locality area compared to Lavers Hill and Beech Forest. This is primarily due to higher rainfall and typically steeper slopes in Lavers Hill and Beech Forest compared to Gellibrand. However, where the long-term sustainability of proposed DWM systems can be supported by appropriately detailed LCA and DWM system design, expansion of these towns is not precluded by the Sensitivity Analysis mapping.

5.3 Minimum Lot Size for New Developments

The Sensitivity Analysis mapping will assist Council in planning for future development and determining minimum lot sizes for future subdivisions. The assessment of a site for DWM potential is important as it can assist in understanding the site's potential for development. Historically, wastewater management was overlooked in early planning stages and it has resulted in a number of subdivided parcels within towns and low density residential areas (i.e. settlements) being significantly undersized. Due to small lot size, these parcels have been given a High Sensitivity Rating in the Sensitivity Analysis and generally wastewater management on these parcels is constrained and potentially unsustainable. This does not automatically preclude them from development; however, appropriately detailed LCA and design will be required to the satisfaction of Council and other stakeholders, including the relevant Water Corporation (in accordance with the Sensitivity Rating). Where DWM is not supported on small lots, consolidation with adjacent undeveloped lots (where feasible) is the most likely pathway to allowing development proposals to be considered on the land subject to appropriate zoning of the lots in question, and approval by Council and other relevant stakeholders. Such approval will also take into account other planning controls relating to the land.

Where rezoning of land is being considered or Structure Plans are being developed, Council can use the Sensitivity Analysis to determine suitable development potential and density. The results of the Sensitivity Analysis mapping and DWM system inspections carried out in September 2014, support a general minimum lot size of 0.4ha (4,000m²), assuming that there is adequate 'useable' land for DWM, including a sustainable effluent dispersal or reuse system contained entirely within the lot boundary. This minimum lot size is a broad guideline only; detailed LCAs must be carried out for all subdivision and single-lot developments within all DWSCs. The EPA Code of Practice 891.4 (2016) recommends considering the feasibility of providing a reticulated sewerage system for the development of individual lots and for subdivision proposals that would result in allotments <1ha, which is a recommended risk threshold rather than minimum lot size.

Constrained properties, such as those with steep slopes, very shallow soils or in close proximity to surface waters or groundwater bores, will need to demonstrate that they have adequate available land for the sustainable application of treated effluent. 0.4ha may be too small in such instances; however, innovative building design and lot layout can mitigate constraints on previously undeveloped or redevelopment sites.

5.4 Stormwater Management

The field investigations in September 2014 identified stagnant stormwater in road drains in towns/settlements following wet weather, which was exacerbated by the inflow of greywater directly discharged from properties. Improvements to street drainage can be investigated on a needs basis for towns/settlements following the incremental upgrading and/or replacement of DWMs in towns/settlements. However, generally speaking, there is no urgency to upgrade street drains or improve street drainage while greywater connections to street drains persist.

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Where greywater is found to be discharging to stormwater drains during onsite system inspections, upgrade works will be required to the discretion of Council to redirect greywater to the onsite wastewater system and land application area under the *Environment Protection Act 2017* (as amended). The progressive upgrade of stormwater drains will improve stormwater drainage in the Shire and would require discussions between the relevant Council departments and fall under the Colac Stormwater Development Strategy (2019).

6 DWM System Design, Approval, Installation and Operation

This section broadly describes how planning and operation of DWM systems should be carried out by owners and occupiers of the land in unsewered localities of the Shire, with reference to the Sensitivity Analysis and Risk Assessment Framework described in detail in the Technical Document. The level of detail required to support a proposal for DWM on an unsewered lot is outlined in the relevant LCA procedure (Section 4.2), which reflects the lots Sensitivity Rating.

6.1 Council's Responsibilities

The amended *Environment Protection Act 2017* (supported by the *Regulations 2021*) is used to regulate DWM systems within Victoria. Council is responsible for issuing permits for new and altered DWM systems under the amended *Environment Protection Act 2017*. Council is also responsible for the management of all DWM systems within the Shire; this includes the inspection of existing systems and ensuring compliance with Council, EPA and legislative requirements (including the *Public Health and Wellbeing Act 2008*). Council will be utilising the new EPA '*Regulating onsite wastewater management systems: local government toolkit*' (publication 1974:2021) to assist them in regulating DWM systems within COS and adhering to the new Act. The flowchart for investigating DWM under the *Environment Protection Act 2017* and Regulations as detailed in Appendix 3 of the toolkit is replicated here as it gives a good overview of Council's directions in DWM.

The new legislation introduces the general environmental duty (GED), under which, anyone conducting an activity that poses a risk to human health and the environment is required to minimise those risks, so far as reasonably practicable. A delegation of functions and powers from EPA to Council under the new Act will allow for Council to support compliance and take required action under the GED.

The Regulations 2021, will provide criteria for Councils to consider when assessing permit applications, including suitability of the site, the DWM system, the proposed use, and the findings of any LCA. This provides Councils the flexibility and discretion to assess applications appropriately and provides transparency and consistency in decision making. Circumstances when a permit must be refused are also provided. Permits will be issued for a maximum five (5) years.

Council will update and prepare procedures (refer to the Action Plan in Section 13: Action No. 1) in line with the relevant requirements. The legal requirements of Council include (but are not limited to):

- Application for a 'Permit to Install/Alter' must be completed by the owner/builder/installer and submitted to Council for assessment;
- The system must comply with current Standards and the current EPA Code of Practice;
- For DWM systems in DWSCs, Council cannot issue a 'Permit to Install' until it has received comment and/or conditions from the applicable Water Corporation;
- Council must issue a 'Permit to Install/Alter' before a DWM system can be installed;
- A Council officer assesses the application and plans and conducts site inspections. Further information may be requested from the applicant;
- Council issues a 'Permit to Install' with approved plans and conditions or refuses application;
- The system must comply with permit conditions and its relevant EPA Certificate of Conformance;
- The system is inspected by a Council officer during installation;
- Council must issue a 'Permit of Use' before the DWM system can be used;

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- Council can issue fines to a system owner if an installation permit is not complied with; and
- Council can issue infringement notices (fine) under Regulation 171, and can issue improvement notices (Section 271 of the *Act*) and prohibition notices (Section 272 of the *Act*), if they have reasonable belief that any of the grounds listed in those sections of the *Act* are satisfied, to ensure the system ceases to operate and/or is upgraded to appropriately reduce the risk of human or environmental health impacts under the GED.

Inspection staff may inspect the site of a proposed DWM system at multiple stages during the assessment and installation process, as determined on a case-by-case basis. Key site inspection milestones can include (but are not limited to):

1. Pre-installation site inspection to ensure the site is suitable for the proposed DWM system (i.e. ground-truthing of the Land Capability Assessment);
2. Inspection during the installation stage, before excavations are back-filled (i.e. trenches are open and the wastewater treatment system has been installed but not backfilled, and not yet turned on), to ensure the system has been installed correctly; and
3. A post-installation inspection to ensure that the installation is complete and that the system is operating correctly.

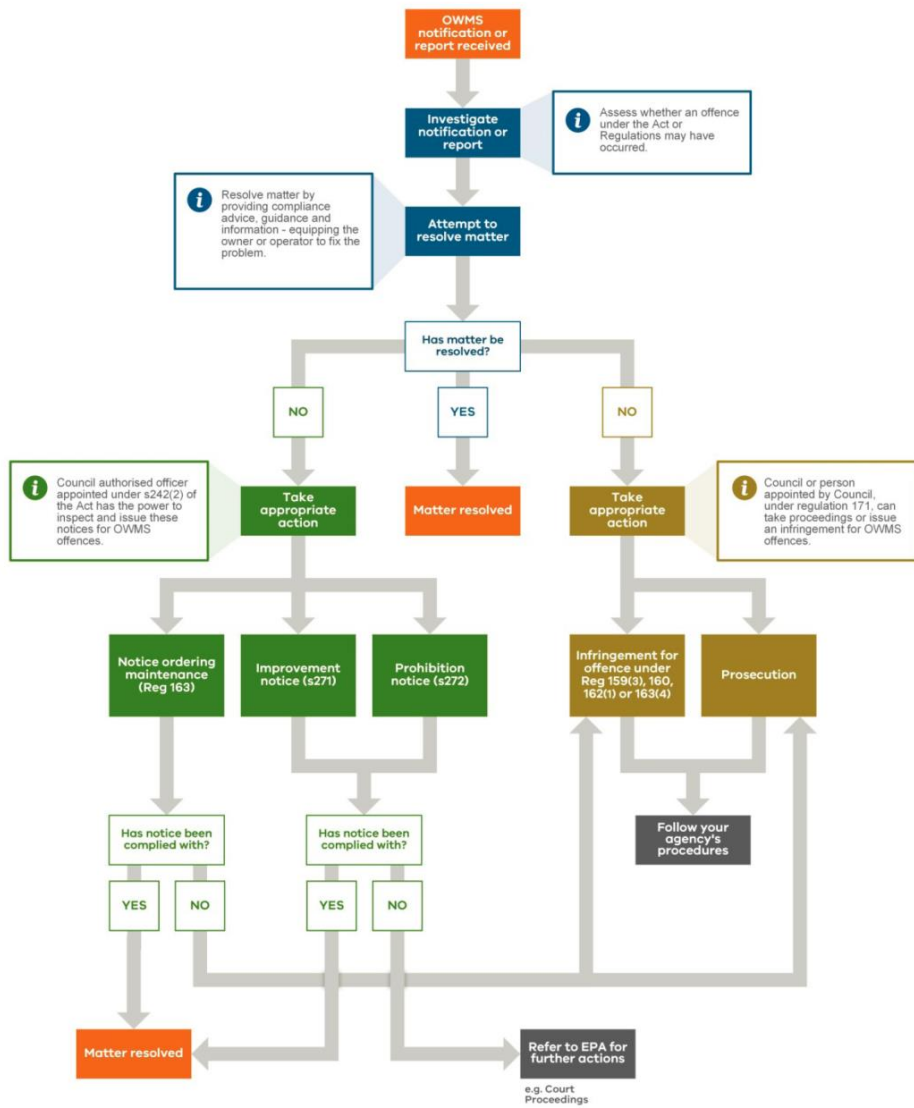
The number of inspections carried out must be weighed against the available resources (staff time) to carry out the inspections. Low risk sites may require just one inspection, whereas high risk sites may require three or more inspections, depending on the circumstances of each proposal.

Upgrade options for poorly performing systems are discussed in further detail in Section 8.

Regulating onsite wastewater management systems: local government toolkit

Appendix 3: Investigation flowchart

Investigating OWMS under the Environment Protection Act 2017 and Regulations



6.2 Owners' and Occupiers of the Land Responsibilities

The operation and maintenance of DWM systems (both new and legacy) will be managed under the GED. The GED requires any person that operates a DWM system (owner and occupier of the land) to take all reasonably practicable steps to eliminate or reduce risks of harm to the environment and human health so far as reasonably practicable. Part 5.7 of the *Regulations 2021*, states that for persons in management or control of land which a DWM system is located, including legacy systems that do not have a permit that were installed pre-1970 superseded Act; have an obligation to take reasonable steps to maintain the DWM system in good working order, a duty to keep maintenance records, respond to any problems that arise, and notify Council of a failure and rectification steps.

The owners and occupiers of the land (i.e. tenants) of unsewered dwellings and commercial operations have primary responsibility for the operation and maintenance of the DWM system. In accordance with the EPA Code of Practice, owners and occupiers must ensure that the DWM system is operated, maintained and monitored in accordance with Council requirements. This requires a proactive approach from owners and residents, with Table 2 of the new EPA '*Regulating onsite wastewater management systems: local government toolkit*' (publication 1974:2021) outlining the requirements for the operation and maintenance of a DWM system for both the owner and occupier of the land. As a minimum:

- familiarise themselves with the type of system (treatment and land application components);
- identify the location of all system components on the site;
- regularly inspect their system for any signs of problems;
- regularly maintain their system to prevent problems from occurring (or worsening) (i.e. desludging, pipe integrity, comply with manufacturer specifications and recommendations, repair and replace components and fittings);
- follow any instructions issued by Council pertaining to their system;
- ensure that the contents of the DWM system does not overflow;
- notify the Council as soon as practicable after the person becomes aware, or reasonably should have been aware, that the system poses a risk to human health or the environment, or is in otherwise not in good working order (i.e. disposal area becomes sodden, wastewater runoff from disposal area, order, drain or toilet running slowly, grease trap full or blocked);
- keep and hold all records of maintenance activities carried out on the system, including any pump out and service records, for five years after each activity. These must be made available for inspection if Council requests it under sub-regulation (1); and
- to upgrade or replace their system where insurmountable problems are occurring.

Owners of land on which a DWM system is located must provide written information to a person in management or control of the DWM system (i.e. tenant/ occupier) regarding the correct operation and maintenance of that system.

Details on appropriate DWM system maintenance are provided in Section 6.6 and Section 8 of this Operational Plan. Details on options for upgrading and replacing DWM systems are provided in Section 8 of this Operational Plan. Objectives to achieve better DWM system management in the Action Plan (Section 13) include:

- ✓ Action 1 – development of Council policies and procedures;
- ✓ Action 4b – ongoing management of the planning map interface on Councils website for the Sensitivity Mapping, allowing owners to determine individual lot Sensitivity ratings;

- ✓ Action 6 – compliance audits, monitoring and necessary upgrades or modifications based on existing DWM system permit conditions to ensure compliance; and
- ✓ Actions 8 and 9 – development of a community and owner education program.

6.3 LCA Assessor/System Designer's Responsibilities

The EPA Code of Practice outlines minimum requirements for land capability assessors (Section 1.8.3) with regards to qualifications, experience, association, insurances and independence.

The professional engaged to undertake the LCA and the DWM system design has a responsibility to prepare a site-specific DWM design and supporting documentation that demonstrates that the requirements of the SEPP and the *EP Act 2017* will be achievable. The LCA must include sufficient information regarding treatment performance (effluent standard) and land application area (sizing and layout) to allow for an appropriate DWM system design to be provided with an application.

The assessor/designer is required to undertake the level of investigation and reporting appropriate to the Sensitivity Rating applied to the lot, as prescribed in Appendix C: Land Capability Assessment Checklists. The following sections provide general advice on design, installation and maintenance of DWM systems, that applies to all unsewered properties in the Shire.

6.4 DWM System Design

6.4.1 Treatment Systems

Where a new system or major upgrade works are proposed in COS, the system must comply with the current Standards and Code of Practice. Where an existing system is operating effectively but does not comply with the current EPA Code of Practice or Standards, the system will be monitored; however, unless a failure occurs or a contravene of the GED, the owner will not be required to upgrade or replace the system.

For the installation of new proprietary systems, the selected system must have a current certificate of conformity from a conformity assessment body, conforming to the relevant Australian Standard. The appropriate standards for the different types of treatment systems is as follows:

- Septic tanks (and vermiculture systems) – AS/NZS 1546.1:2008, on-site domestic wastewater treatment units, Part 1: Septic tanks.
- Waterless composting toilets – AS/NZS 1546.2:2008, on-site domestic wastewater treatment units, Part 2: Waterless composting toilets.
- Secondary treatment systems – AS/NZS 1546.3:2017, on-site domestic wastewater treatment units, Part 3: Secondary treatment systems.
- Sand filters – AS/NZS 1546.3:2017, on-site domestic wastewater treatment units, Part 3: Secondary treatment systems and s459 exemption applications for transitional arrangements.
- Domestic greywater system – AS/NZS 1546.3:2016, on-site domestic wastewater treatment units, Part 4: Domestic greywater treatment systems.

EPA holds a register of the DWM systems with valid Certificates of Conformance within Victoria (www.epa.vic.gov.au/your-environment/water/onsite-wastewater). Transitional arrangements will also apply to previously issued certificates that have not expired by 1 July 2021. For innovative DWM systems, an exemption from these requirements may be granted to a permit applicant by EPA under section 459 of the Act, inclusive of sand filters as per transitional arrangements between Council and the EPA.

As part of a permit application to Council, the applicant will need to include a copy of the certificate of conformity.

Appendix C of the EPA Code of Practice 891.4 (2016) provides useful guidance on factors to consider when selecting an EPA-approved DWM system. Site constraints (including for effluent dispersal or reuse) are a major factor when deciding on a treatment system.

6.4.2 Land Application Systems

The key issues that influence the selection and design of land application systems (domestic or commercial) are:

- The level of treatment of the effluent (primary, secondary or advanced secondary);
- Soil characteristics (particularly texture, structure, depth, dispersibility and phosphorus adsorption capacity);
- Site characteristics (particularly slope, aspect and shading); and
- Proximity to sensitive receiving environments (such as surface waters and groundwater).

The degree of constraint for sustainable land application of effluent can be a major factor in selecting a treatment system. The design of the land application system must be carried out consistently with the two guidelines cited in 6.4.1 above, as well as the *Australian Standard 1547:2012*. Table 2 of the EPA Code of Practice (891.4) details the permissible DWM treatment and land application system options.

It is preferable to design the land application area based on both a water and nutrient balance (as described in the MAV Model LCA, 2014); however, the level of detail required depends on the risk category of the lot and any other factors as determined by Council and/or the LCA assessor. For Low and Moderate Risk properties, the standard Sizing Tables (Appendix B of the Technical Document) may be used to determine the minimum area for the chosen land application system, based on climate and soils.

There are various options to mitigate constrained sites. For example, it may be appropriate to import lighter-textured topsoil (to appropriate depths) to the land application area in order to increase the DLR/DIR and thereby reduce the minimum required area of the system.

The Sizing Tables for each system type were created using monthly average water balances, using methods described in MAV Model LCA, 2014. Further details are provided in Appendix B of the Technical Document.

6.5 Installation

Often system failures will occur as a result of poor installation practices. The installation of DWM systems must be undertaken by a licensed plumber or system installer who is familiar with the requirements of Council, the Guidelines and Standards, and has experience in installing DWM systems. Issues such as poor drainage around tanks and uneven distribution of effluent throughout trenches or irrigation systems can all result in effluent ponding, runoff or impacts on human and environmental health which can easily be avoided.

6.6 Maintenance

For a system to operate and perform as it was designed, the system must be installed in accordance with the manufacturer's requirements and regular maintenance must be undertaken in accordance with the maintenance procedures outlined in Section 8.2 of this Operational Plan. By undertaking these regular maintenance tasks a system can operate effectively without major problems; however, a lack of care for any one, or all, of these items can result in system failures.

Secondary treatment systems such as Aerated Wastewater Treatment Systems (AWTS) rely on primary treatment as well as the addition of oxygen for the aerobic breakdown of organic matter by aerobic microbes in a secondary stage which is generally followed by disinfection, usually by chlorine. If there has been poor primary treatment of effluent, it can be detrimental to the secondary treatment process and most commonly disinfection will not be effective. These systems require regular maintenance and monitoring by a qualified service agent in accordance with specific EPA Certificates of Approval.

7 Compliance Monitoring

7.1 Record Keeping

Electronic database records of applications and permits for DWM systems in the Shire date back to 2002 and hardcopies to the 1970s. The current record system for DWM system applications and permits is as follows:

- Application and permits are electronically registered in the Health Manager database. Details of the type of system, the permit conditions, the issue dates and the inspection results are kept on the database. This register dates back to 2002. The electronic database is linked to Council's main lot database which allows for the effective integration and recovery of information.
- Hard copy records of plans, permits and inspections notes are kept on the relevant lot files. It is thought that information should be available for most of the DWM systems that have been installed since 1970 (and all since 2002).
- Hard copies of active files are kept by the Health Protection Unit.

7.2 Electronic Records of Inspections

The use of a paper based records system for field work can be time consuming and requires extra staff to enter the details into the database upon return to the office. It is recommended that the proposed monitoring program and the existing records database are supported by a portable, hand-held device (e.g. tablet or small laptop) loaded with software that includes the system inspection pro-forma (i.e. the inquiry fields to be completed by the Council Officer). The device would also record the GPS coordinates of the system components (tank and application area/s).

In addition, it is recommended that COS investigates the feasibility of an online system linked to the central database whereby service agents and plumbers can log in to record an AWTS service or system maintenance report. This would enable Council staff to cut down on some of the administration duties and increase productivity elsewhere.

However, if resources are limited, the above options should be delayed in order to ensure that adequate staff time is allocated to complete the system inspections, record data and implement the follow-up actions as required by the compliance monitoring.

In the absence of electronic inspection software, hard-copy inspection checklists have been developed based on existing templates in use by COS and current best practice.

7.3 Fees or Charges for DWM System Owners

Many rural and regional Council's with a high proportion of DWM systems have introduced an annual fee or charge for owners of unsewered properties, to help resource inspection programs as well as education programs. Adequate resourcing is a prerequisite to implementing the DWMP and monitoring its effectiveness.

7.4 Inspections

7.4.1 Overview

The effective management of DWM systems requires a robust and well-resourced inspection and compliance program for existing and future systems. The below factors trigger inspections of any DWM system, including:

- A complaint made by a member of the public in relation to a system;
- The owners of a system lodge a planning permit to alter the associated dwelling or commercial premises;
- Council reasonably suspects there is a nuisance caused by a system; or

- Where it is a condition of approval that the system be maintained to a certain standard (systems approved since 1996).

It is important that all DWM systems are inspected as part of the compliance monitoring program; however, the short-term focus (refer to Action No. 6 of the Action Plan in Section 13) is on those properties where the environmental and human health impact is likely to be the greatest, and the required permit inspections associated with planning approvals. It must be recognised that many DWM systems are 10-30 years old on lots that are largely unsuitable for DWM. These systems are a historical legacy of Council and whilst it is now clear that such systems are not appropriate or may be creating unacceptable risks, there does need to be an acknowledgement that many of these problems will take time to rectify.

7.4.2 Legislation

There are two pieces of legislation applicable to management of domestic onsite wastewater management, the *Public Health and Wellbeing Act 2008* and amended *Environment Protection Act 2017*, which deals with new septic systems, historic systems with permits and the setting of current standards for onsite waste management, and the legacy older systems that were not required to obtain a permit and pose, or may pose, a risk to human health or the environment, or are not, or may not be, in good working order.

Each piece of legislation has different, but compatible objectives, and requirements for the exercising of powers by authorised officers and mechanisms that may apply to improvement of septic systems.

7.4.3 Inspection Program

Council has carried out inspections of all (except for the historical records entered into the database, e.g. pump-out receipt records) existing DWM systems with permits within the Shire to date; at least once for each system. However, records are not available for every inspection carried out (particularly older systems). All system inspection records are to be incorporated into the Health Manager database.

The inspection program involves:

1. Permit approval inspections;
2. Unpermitted system detection and capture;
3. Ad-hoc inspection by request or nuisance complaint; and
4. Compliance inspection, including mandatory audits of systems located within DWSCs.

Permit approval process:

Following the review of the proposed system, if it is deemed suitable for the site, Council will issue a 'Permit to Install' and stipulate any conditions. Council inspects a DWM system prior to approving it for use and issues a 'Permit to Use'.

Unpermitted system detection and capture:

Identification of improved properties without a record of permit will be undertaken using indicative data. An approach based on a case-by-case basis will be used to ensure these unpermitted systems comply with current legislation.

Ah-hoc inspection by request or complaint:

Inspections can be made in response to nuisance complaints from system owners or the general public or in response to other actions as Council deems appropriate, on a case-by-case basis.

Audit Program and Compliance Inspection:

Council's audit and compliance program will continue. The DWM Sensitivity Ratings, as determined in Section 4, are used to inform compliance and auditing scheduling. Council will use this priority to inform the order of the audits and inspections in addition to relevant information gained as part of its audit program. The Very High and High Sensitivity Rating lots with a

where there has been identified non-compliance, should be assessed first as a priority before other lots. Table 8 in Section 4.4 details the prioritisation for the targeted localities with regards to their DWM sensitivity.

Various factors need to be taken into consideration with regards to audit and compliance inspections of individual DWM systems to prioritise staff resourcing, projects and townships; including:

- Lots that have a higher Sensitivity Analysis Risk Rating;
- Lots located within the DWSCs;
- Lots or properties that have been identified as non-compliant.
- Lots with septic tanks and trenches (primary treatment) should be inspected as a priority within each lot Sensitivity Analysis Risk Rating;
- Properties older than 30 years (pre 1985) should be inspected prior to newer systems within each lot Sensitivity Analysis Risk Rating;
- All properties with a Section 173 Agreement under the *Planning and Environment Act 1987* relating to DWM will be inspected as a priority;
- Additional inspections can be made in response to nuisance complaints from system owners or the general public or in response to other actions as Council deems appropriate.

A DWM audit and compliance inspection program has been developed for all lots located within the DWSCs as detailed in Action 6d of the Action Plan (Section 13). COS have developed a 'standard operating procedure' as part of Action Plan Item 1 that will outline the approach and procedures for the DWM system audits. COS are to allocate 40 officer days per year to undertake the DWM system audits for lots located within the DWSCs.

7.4.4 Inspection Protocol

Appendix D provides an example system inspection pro-forma covering virtually all possible attributes that may be used to record details and observations in the field, for entering into Council's Health Manager database.

In summary, the inspection should record key DWM system information, including (but not limited to):

- exact location and GPS coordinates of system components
- type of treatment and land application systems
- performance and compliance of systems (e.g. if there are any maintenance issues which need to be addressed, and their urgency)

The results of inspections are highly valuable for improving and refining the risk assessment tools and for providing a rationale for the rectification or replacement of poorly functioning DWM systems.

Section 8 outlines the various methods for rectification or upgrade works which may be required following an inspection of a system.

8 Onsite System Maintenance and Upgrade Options

This section aims to provide information and direction on the range of options available for improving and rectifying failing or poorly operating DWM systems. It is provided for informative purposes only and does not represent a rigid or exhaustive list of troubleshooting options.

8.1 Non-compliant Systems

The potential management strategies for failing systems include the repair, improvement or replacement of systems (or components). The high priority localities (detailed in Table 8, Section 4.4) will form the focus of improvement works in terms of the implementation of this DWMP. Every effort will be made to ensure owners and occupiers of the land are aware of their responsibilities and are willing to commit resources to such projects.

However, it is recognised that many existing DWM systems are several decades old and/or are located on lots that may be unsuitable for DWM. Existing systems may be undersized or have direct greywater discharge off-lot, in most cases approved by Council at the time they were installed. While it is now clear that such practices are no longer appropriate and may be creating unacceptable risks, it is acknowledged that many of these problems will take time to rectify.

8.1.1 Addressing Compliance

Stage 4 of the Risk Assessment Framework (see Figure 2b) outlines the procedure for managing existing DWM systems in the Shire through regular inspection, monitoring and improvement (upgrade or rectification). Actions 9a-d of the Action Plan (Section 13) outline Council's objectives, intentions and resource commitments in this regard.

It is not intended that the inspection and compliance monitoring take a 'hard-line' approach and require all under-performing systems to be upgraded immediately. However, a commitment is required from owners, Council, and State and regional management entities to improve DWM practices in a progressive and incremental manner, with a focus on high-priority localities and/or systems. Sections 8.3 to 8.5 (following) outline the range of options available to COS to improve DWM performance in the Shire.

Implementation of the DWMP will be reviewed internally by Council every 3 years.

8.2 Maintenance of Existing Systems

The following maintenance actions should be undertaken by the owner or occupier of the land, or a qualified service agent in order to minimise the risk of system failure (compliant and under-performing systems alike):

- Regular desludging of septic or primary tank as required by EPA Certificates of Conformance for each type of system. The 2007 Plan noted that failure to regularly desludge septic tanks caused the majority of preventable problems with onsite systems, as evidenced by plumbers servicing unsewered areas. A pump-out should significantly improve performance; however, this will not rectify existing damage to the dispersal areas resulting from excess suspended solids;
- Checking of all system chambers and other checks as required by system manufacturers for secondary systems;
- Addition of chlorine for disinfection where an AWTS with chlorination is used;
- Ensuring householders do not discharge chemicals used within the house to the system i.e. bleaches, antibacterial cleaning products, paints, dyes etc.;
- Ensuring that the system is not turned off at any time;
- Responding to system alarms as this usually indicates a system failure or problem;
- If the secondary treatment system (of any type) is more than five years old, then effluent samples should be collected for analysis of BOD₅, TSS and faecal coliforms/*E. coli* to

assess whether the system is still functioning to its specification and achieving the target effluent quality as prescribed by EPA Victoria; and

- Ensuring sprinklers or irrigation area is maintained, i.e. lawn mowing, checking that sprinklers/distribution lines are not damaged and that flushing of lines is undertaken periodically.

By undertaking these regular maintenance tasks, a compliant system can be expected to operate effectively without major problems. Maintenance measures can also benefit under-performing systems by mitigating the risks posed by the system failure (e.g. if an irrigation area is surcharging effluent, it is preferable that the effluent is disinfected).

System modification and upgrade options for failing or undersized systems are discussed below.

8.3 Modifications for Existing Systems

In some cases, it is not necessary to replace all of the system components. Risks from defective DWM systems can be appropriately managed by modifying a system. The required modifications should be determined on a case-by-case basis, and discussed with Council prior to implementation. If existing septic tanks are to be modified or repaired, they must be structurally sound and adequately sized for the number of bedrooms in the dwelling. Otherwise, they should be replaced with an adequately sized septic tank.

Typical modifications are discussed below.

8.3.1 Install Service Riser for Septic Tank Access

Inaccessible tanks (those that have been buried or built over) are highly unlikely to be inspected or pumped out as regularly as is required for optimum system performance (3-5 years for pump outs as recommended by *AS/NZS 1547:2012*). Tanks are often installed completely below ground to achieve minimum fall for gravity drainage from the dwelling; however, buried septic tanks often result in owners not knowing where the septic tank is (especially after properties change ownership). Non-accessible tanks were common in the audits of existing systems in the Shire undertaken by the consultants and were deemed to be in an unsatisfactory condition as a result, due to the very high likelihood that the tank had not been adequately serviced or desludged.

Service risers are typically made from concrete or high density plastic and must be installed by a suitably experienced professional (such as a plumber). Care should be taken to ensure that tank and riser lids, and any other potential inlet points, are protected from groundwater and surface water ingress.

8.3.2 Minor Repairs

The structural integrity and design of the septic tank also determine its suitability for continued use. Generally, the older a septic tank, the more likely it is to have cracks, missing components (e.g. outlet 'T junctions'), poorly sealed access openings, corrosion, or other physical problems. It is possible to mitigate or repair these issues, and the estimates have assumed a nominal cost of \$500 per identified tank to carry out minor repairs. Repairing cracks will need to be done when the tank is empty (after it has been pumped out), with care taken to ensure that all cracks are identified and repaired.

AWTS and sand filter components can often require repair or replacement following flooding, electrical faults or pump failure. Pumps can be removed and replaced when necessary and internal pipes can be replaced where necessary if they have been dislodged or damaged. A suitably qualified service agent or the system manufacturer should undertake these repairs.

8.3.3 Install Outlet Filters in Septic Tanks

The simplest way to improve the performance of a standard septic tank is to retrofit the outlet pipe with an outlet filter. Filters of various designs are commercially available and can provide significant solids retention. Filters have a large surface area to limit clogging and reduce maintenance requirements. Filters can reduce the impacts of solids carry over to the land application area or secondary treatment system. Filters should be removed and cleaned (hosed

onto grass or gardens with limited human and animal contact) and replaced in the septic tank at least twice per year.

8.4 Upgrade/Replacement of Existing Systems

Where a new system, or major upgrade works, are required (i.e. substantial repair, expansion or replacement of either the treatment system and/or land application system), the system must comply with the current Standards and EPA Code of Practice.

Where an existing system is shown to be operating effectively but does not comply with the current EPA Code of Practice or Standards, then the system should be monitored. However, unless a failure occurs (contravening the GED), effluent is discharging off-site (particularly within a DWSC), or a house extension/modification is proposed, the owner should not be required to upgrade or replace the system as long as it is performing as per the original permit conditions (this situation is common for older homes where trenches may be undersized for the number of bedrooms, but only one or two people are living in the dwelling).

Replacement of systems and system components should be carried out according to the site-specific conditions and requirements of the lot, and by an appropriately qualified and experienced person. Common upgrade and replacement options for DWM systems are discussed below.

8.4.1 Enforcement of Upgrade Works

Under the amended *Environment Protection Act 2017*, local government is the primary agency responsible for the management of DWM systems. Under this Act, a property owner or occupier of the land cannot construct, alter or install a DWM system without a local government permit. Local Government use permits to regulate the installation, maintenance and monitoring of DWM systems within their LGA. Council is also responsible for identifying failing DWM systems that are causing environmental, public health and amenity risks.

The new EP legislation introduces the general environmental duty (GED), which is a criminally enforceable preventative duty. A delegation of functions and powers from EPA to Council under the new Act will allow for Council to take action under the GED. Under the *Environment Protection Act 2017*, Councils have the power to enforce compliance with Council permits, Certificate of Conformance conditions and issue penalty infringement notices to premises where owners do not have their system regularly maintained by a professional service technician.

Part 5.7 of the *Regulations 2021*, states that for persons in management or control of land which a DWM system is located, including legacy systems that do not have a permit and were installed pre-1970 superseded Act; have an obligation to take reasonable steps to maintain the DWM system in good working order, a duty to keep maintenance records, respond to any problems that arise, and notify Council of a failure and rectification steps. Council can issue infringement notices (fine) under Regulation 171, and can issue improvement notices (Section 271 of the *Act*) and prohibition notices (Section 272 of the *Act*), if they have reasonable belief that any of the grounds listed in those sections of the *Act* are satisfied. COS will endeavour to liaise with an occupier to ensure upgrade works are undertaken; however, in some circumstances enforcement will be required to ensure compliance with the amended *Environment Protection Act 2017*. Where a Council authorised officer has detected alleged non-compliance with an improvement notice or prohibition notice that they have issued, they may refer the alleged offence(s) to EPA for consideration of further enforcement action.

8.4.2 Replacement of Septic Tanks

It is envisaged that where simple repairs and pump-outs fail to meet compliance standards, existing septic tanks will require complete replacement, due to being undersized, structurally unsound and/or discharging effluent inappropriately.

Where appropriate, septic tanks can be replaced with another septic tank, in accordance with a LCA report and design for the lot's specific circumstances. However, for permanently-occupied premises, it is likely that an upgrade to a secondary treatment system will be the preferred

outcome (in accordance with a site-specific LCA and design report by an appropriately qualified professional).

All proprietary treatment systems must have current accreditation from the EPA, which is called a Certificate of Conformance.

Secondary treatment systems allow greater flexibility for land application options for the treated effluent. The existing trenches can be used to receive the secondary effluent from a new treatment system, with or without trench rejuvenation (discussed below) as required. Alternatively, the existing trenches can be decommissioned (and rehabilitated with clean soil where required) and replaced with a different land application system (including irrigation systems).

Where existing septic tanks are performing adequately (or have this capability), they can be retained and used as part of the secondary treatment system. The suitability of the existing tank for this purpose needs to be thoroughly assessed by a suitably qualified wastewater professional. In most cases, it will be more straightforward to decommission the septic tank and replace it with a new treatment system. Disposal options for decommissioned septic tanks include collapse and in-fill, removal to off-site landfill, or appropriate sterilisation for non-potable water storage; in accordance with the current EPA Code of Practice.

8.4.3 Upgrades, Extensions and Replacements for Trenches

Trenches and beds have relatively small footprint areas and rely substantially on effluent absorption, thus imposing high loading rates on the soil. This increases the risk of systems being overloaded and failing hydraulically in the long term, with potential adverse health and environmental impacts. Furthermore, prolonged effluent application through absorption systems increases the risk of soil degradation by increasing salinity and sodicity, as well as the development of a 'clogging layer.' Over time, the organic load in effluent forms a clogging layer in the soil around the trench, which reduces the porosity of the soil and limits soil absorption of effluent. Higher suspended solids concentration in the primary-treated effluent increases the rate of development of the clogging layer. The suspended solids concentration of septic tank effluent generally increases as the pump out rate decreases (particularly if there is no outlet filter installed).

A range of options for upgrading or replacing trenches and beds is provided below. Site constraints, particularly available suitable space, will determine what options are feasible, and will be determined on a case by case basis as part of the recommended servicing strategy. Properties with inadequate suitable space to replicate or extend their trenches will be most suited to trench rejuvenation, and potentially replacement of the septic tank with a secondary treatment system.

Trench Rejuvenation

Provided the trenches are structurally sound and the clogging layer is not excessively developed, it is possible to 'rejuvenate' existing trenches by oxidising the clogging layer, either using an oxidising chemical, physical aeration (compressed air blowers) or both. This technique in combination with septic tank pump-out (if required) and installation of an outlet filter has good potential to improve overall system performance, and is relatively low-cost. This solution will only be appropriate as a long-term solution on lots with adequate available space for effluent dispersal and if the existing trench system is appropriately sized for the number of occupants or number of bedrooms. However, it could be a valuable interim solution for lots without adequate available space, prior to implementation of a compliant solution.

Replace, Replicate or Expand Trenches

Where rejuvenation is not an option (e.g. if trenches are physically damaged or collapsed), there is scope for trenches to be excavated and replaced in-situ, using imported materials including topsoil (preferably loam or sandy loam) and improving the existing subsoils (see below). This is the most feasible option for small lots, or where other areas have been used for other improvements.

If there is adequate available space elsewhere on the lot that has not been used for trenches previously, it is likely to be more straightforward and cost-effective to replicate the trenches in this area. This is more likely to be achievable on larger lots.

If the existing trenches are undersized, and there is adequate suitable space adjacent to the terminal ends of the trenches, then the trenches can be extended to the minimum required size (as described in the Sizing Tables). The existing section of trench can also be rejuvenated to improve performance, or replaced if required.

Soil Amelioration

In practice, the most limiting layer to water movement is usually the heavier textured, clayey subsoil in the profile. Quite often, the soil chemistry of this layer is dominated by adsorbed sodium ions and/or magnesium ions, causing the clay particles to be easily dispersed and mobilised when in contact with water. When used for effluent dispersal these clay particles move down with the percolating water and clog up the fine pores, thus reducing the soil's permeability.

Subsoil clay that is dispersive must be treated with gypsum (calcium sulphate) to counteract the excessive sodium and magnesium and bring about a strong flocculated condition of the clay particles.

Shallow topsoil or topsoil that is too sandy may also limit the growth of the vegetation in the land application area. For optimal growth of typical vegetation used with DWM systems, the topsoil should be at least 250mm deep and have at least 5% organic matter.

Alternative Trench Designs

Over the years there have been various modifications to conventional absorption trenches and beds, some of which have been developed into proprietary 'off-the-shelf' products including various brands of self-supporting arch drains and the *Advanced Enviro-Septic™* modular trench.

Other modified designs are based on existing technologies which, although not all are formally approved, have been shown to enhance performance. One recent example of this is the 'Wick' trench, developed for use in clay soils as an alternative to standard absorption trenches (referred to in the current EPA Code of Practice as a 'Wick trench or bed'). This system can be described as a conventional absorption trench adjacent to a shallower evapotranspiration/absorption bed, with a continuous layer of geotextile fabric laid under the trench and up into the evapotranspiration bed. The geotextile acts as a wick, using capillary movement, to distribute some of the effluent over the transpiration bed adjacent to the trench. This provides a larger surface area than would be available using the trench alone, with a greater potential for evapotranspiration and greater infiltration capacity. Typically, the evapotranspiration/absorption bed is approximately twice the width of the trench. This option requires a larger area than conventional trenches, but smaller than that required for irrigation.

8.5 Decentralised or Clustered Wastewater Management

Where local conditions (including dwelling density and layout) allow, it may be feasible for small groups of properties to enter into a decentralised servicing arrangement whereby raw wastewater or primary-treated effluent is collected from each lot in a common pipe, for off-site treatment and discharge, or treatment and discharge on one or more of the serviced lots. Systems include pressure sewer, vacuum sewer and Common Effluent Discharge (CED) systems.

This option is unlikely to be further explored by landowners due to the complexity involved. This option would best be classified as a commercial wastewater system and would require investigations and approvals by a range of stakeholders (including, but not limited to, Council and the relevant Water Corporations). Off-site treatment and/or disposal is likely to trigger the regulatory involvement of the EPA. EPA Works Approval and licencing is discussed below. Options for connection to reticulated sewerage or a decentralised cluster system are typically more expensive when compared to onsite alternatives.

9 Commercial Wastewater Management Systems

9.1 Overview

Wastewater Treatment Systems with a design capacity between 5,000 - 100,000L/day require Works Approval from the EPA. From 1 July 2021, the EPA works approval will be replaced by a development licence and operating licence (unless an exemption applies). Systems in this range which discharge solely to land in accordance with specification acceptable to EPA are exempt from ongoing licensing. Acceptable practices are defined in guidance material, the EPA Vic Guidelines for Wastewater Re-Use, Publication 464.

The *Environment Protection (Regulations 2021)* define which activities require EPA Works Approval and licensing under the *Environment Protection Act 2017*. A Works Approval is statutory document which allows scheduled works to be constructed, subject to whatever conditions the EPA deems appropriate as part of the assessment process. As part of the approval process, the EPA assesses any potential environmental impacts from the proposal, ways to mitigate any impacts, compliance with policy requirements (including protection of beneficial uses), and comments from referral agencies and the general public.

Systems with a design capacity greater than 100,000 L/day are subject to works approval as above and also to ongoing licensing from the EPA. The EPA licences set acceptable waste discharge and management criteria. They are publicly available documents that can be viewed at <http://www.epa.vic.gov.au/our-work/licences-and-approvals/search-licence>. In some cases, the EPA may approve an exemption from the need to obtain Works Approval for current licence holders who are upgrading an existing system. The EPA periodically inspects all licenced sites, with the frequency informed by a range of factors related to the degree of environmental risk posed by the site. Targeted inspections can also be made based on intelligence and pollution report information. Licenced sites are required to submit an Annual Performance Statement detailing their performance against the licence conditions. These are also public documents that can be searched on the above link. The EPA conducts a combination of targeted and random assessments of Annual Performance Statements. As of May 2015, the EPA notified Council that there are 3 licenced wastewater discharge sites in COS.

There are other types of industrial activity (not wastewater treatment) that are not directly regulated under the *Environment Protection Regulations 2021* that still have potential to impact on water quality. Examples include dairy farm effluent management and stormwater from commercial and light industrial operations, particularly in unsewered areas. The EPA has a role in pollution prevention and response in these activities. The EPA's approach to these issues is outlined in the Compliance and Enforcement Policy, Publication 1388. The Compliance and Enforcement Policy articulates the EPA's approach, method and priorities for ensuring compliance with Council's Acts and carrying out Council's compliance and enforcement powers.

Council is responsible for the management of all wastewater systems <5,000L/day, which includes some commercial systems. It is important to note that commercial enterprises, such as small factories and cafes operating in unsewered areas, often generate less than 2,000L of wastewater per day and therefore are regarded from an operational perspective as domestic systems. The characteristics of the wastewater will differ from a typical residential dwelling, but the wastewater is expected to contain the same broad ranges of contaminants (unless the commercial enterprise is producing high strength or unusual wastes, such as small-scale food, alcohol or chemical processing, in which case it should be regarded as a commercial development). Commercial enterprises generating up to 5,000L/day in Colac Otway Shire include (but are not limited to) restaurants, pubs, tourist accommodation, adventure parks, dairies, breweries and food processing facilities.

There is limited available information on the performance of commercial systems in the Shire. COS have identified importance of gathering all of the commercial system data for the Shire which is noted as Action No. 5 in the Action Plan. Commercial systems within COS will be managed as per the same criteria as domestic systems, with some consideration for the specific waste stream.

Generally speaking, commercial treatment plants are often the same age as the development they service, and are upgraded or replaced only when a noticeable problem is observed, and/or the development is modified to alter (usually increase) design flows (e.g. expanding operations).

Without proactive enforcement from the regulator, system maintenance, monitoring and record-keeping can become lax over time, with system performance suffering as a result. Generally speaking, older commercial systems are often non-compliant with current expectations and standards (e.g. are licenced to discharge treated effluent to surface watercourses or within watercourse buffers). However, they continue operating until improvements are triggered, typically by the identification of problems, the redevelopment of the premises, or proactive intervention by regulators, local government or other agencies.

Whilst COS do not have ultimate regulatory responsibility for all commercial systems in the Shire, the DWMP identifies the importance of actively managing commercial system data for the Shire. Objectives to achieve better management of larger DWM systems in the Action Plan (Section 13) include:

- ✓ Action 5a – scheduled audits of all commercial systems (2,000 - ≤5,000L/day); and
- ✓ Action 5b – regularly updating details of EPA licenses for all commercial systems (>5,000L/day) in the Shire, including provision of O&M plans where applicable.

COS will work closely with EPA to ensure the database remains current.

9.2 Risks Associated with Commercial Systems

The most common causes of failure or underperformance of commercial wastewater treatment systems include the following:

- Surge loads, e.g. peak holiday seasons or production cycles in factories;
- Irregular and/or ineffective maintenance and upgrades;
- Inadequate desludging; and
- AWTs and other aerobic systems being switched off for long periods of time, leading to die-off of aerobic microorganisms and delayed start-up and poor performance when switched back on.

The most common causes of failure or underperformance of commercial effluent dispersal or reuse systems include the following:

- Inappropriate design, including undersized land application area for peak loads (without appropriate load buffering);
- Inadequate setback buffers from sensitive receptors, such as watercourses, which no longer meet the minimum buffers in the current EPA Victoria Code of Practice;
- Poor or inappropriate installation;
- Inadequate maintenance, including regular back-flushing of irrigation systems with clean water to prevent solids build-up and delays to repairs (e.g. broken sections of pipe); and
- 'Creeping failure' of trench and bed systems as soils and media become blocked with suspended solids from poorly designed and/or poorly maintained treatment systems.

9.3 Management Strategies for Commercial Systems

9.3.1 Wastewater Treatment Systems

All commercial wastewater treatment systems should have an up-to-date Operation and Maintenance (O&M) Plan or Manual which includes a diagram of the system and provides instructions for all maintenance schedules required for the system, and details of who is responsible for the management and maintenance of the system.

Regular maintenance by appropriately trained staff and/or contractors is essential. Depending on the scale and complexity of the treatment system, and the nature of the wastewater to be treated, daily low-level maintenance may be required. This can often be carried out by regular, appropriately trained, staff (e.g. checking effluent levels, visually checking and/or testing samples of effluent for treatment performance, etc.). More specialised maintenance must be carried out by appropriately qualified and experienced personnel.

Routine inspections of the wastewater treatment and land application systems at EPA-licensed commercial properties should be carried out by an appropriately qualified and experienced contractor. The contractor should be independent, i.e. not an employee or regular contractor of the owner of the premises. More recent EPA licences typically include a schedule of inspections.

Council is responsible for monitoring commercial systems <5,000L/day. These systems should be included in the Council inspection program and, where problems or complaints are received, Council should assess and manage the system in a similar fashion to a domestic system and also inform the EPA of the investigation. The EPA is responsible for carrying out additional investigations at its own discretion, including in response to complaints about a system from Council or members of the public.

Council is required to maintain a database of all commercial systems within COS; this data base will also include a list of EPA Works Approved sites as well as EPA licensed premises. This database will be maintained and updated annually and include any maintenance records of the premises (commercial 2,000-5,000L/day) under Council control. This is included in the Action Plan (Action No. 5b).

9.3.2 Effluent Management Systems

The issues surrounding selection, design, installation and maintenance of commercial-scale effluent management systems are largely the same as for domestic systems. However, potential problems associated with scale and flow-balancing are introduced with large and/or irregular effluent flows. For seasonal developments, part of the effluent land application area may need to be switched off, or alternatively the off-season (reduced) effluent load can be distributed throughout the entire area over longer time periods using a flow sequencing control system.

All effluent management areas require regular maintenance and should be closely monitored to ensure effective operation and even distribution of effluent. An Operation and Maintenance Manual or Plan should be developed (if not in existence) and regularly referred to by staff and contractors. Land application areas that are turfed will require regular mowing (and lawn clippings removed from the area). Other vegetation types should be pruned and maintained as necessary to ensure nutrients are being removed by plant uptake.

Commercial systems less than 5,000L/day should be serviced and maintained in accordance with the system manufacturer's requirements. Secondary treatment systems will require servicing quarterly; however, some commercial systems will require daily monitoring by an onsite system operator. Results of system servicing should be submitted to Council on a quarterly basis or in accordance with the system conditions of approval to operate. Where system maintenance records are not supplied to Council as required, follow up action should be taken by Council to ensure the system is serviced appropriately. Commercial systems which are licensed by the EPA will require effluent quality monitoring (at the outlet point of the treatment system) to ensure the effluent quality meets the requirements for its end use. For example, surface irrigation requires disinfection (indicated by concentrations of pathogen indicator organisms, as well as residual chlorine levels, if chlorine is the method of disinfection used).

10 Educational Programs

COS currently uses DWM systems inspections as an opportunity to educate system owners 'one-on-one' in order to improve system maintenance and performance. In addition, the COS website has an extensive section dedicated to DWM in the Shire, which explains how owners and residents of unsewered properties can best manage their systems in order to protect human and environmental health. This online content is supported by printed publications which are available at Council offices and are given to owners and residents during system inspections where appropriate. There is scope for printed and online information to be updated to reflect the revised DWMP and Victorian government documents (including the current EPA Code of Practice) and to provide more useful guidance and information for home owners and residents. The education program is outlined in the Action Plan in Section 13 (Action Numbers 8 & 9).

11 Downstream Water Quality Monitoring

COS has historically undertaken regular sampling of waterways to monitor the level of *E. coli* contamination of recreational waterways. CCMA sponsored WaterWatch community groups undertake water quality testing (excluding bacterial) at a variety of locations (e.g. electrical conductivity (EC), sodium concentration, pH and nutrients). High pH, EC and sodium together can indicate the presence of greywater contamination as laundry products are typically alkaline and have a high salt content (as a filler in powder detergents). However, *E. coli* is not human-specific and high concentrations can be caused by other animals (including livestock) and birds (including wetland birds), and the forestry industry can impact on downstream water quality.

The EPA is responsible for environmental monitoring and the Catchment Management Authorities also undertake water quality monitor programs.

COS should review existing water quality data collected by other authorities in the Shire (including Water Corporations), where this data is relevant and available. A detailed water quality monitoring program is beyond the scope of this DWMP and could form part of a broader water quality monitoring program that considers a range of regional stakeholders and objectives.

It is recommended that human-specific contamination indicators should be targeted for downstream water quality testing, to rule out non-human sources of generic contaminants (pathogens, nutrients and chemical compounds). Commonly used indicators include:

- Optical brighteners used in laundry detergents (especially soaking detergents); and
- Faecal sterol compounds.

While it is desirable that a monitoring program is undertaken to at least establish a baseline for future analysis, improving septic system performance will positively impact water quality and reduce the impact of human specific contamination.

Targeted sampling is more costly and can be carried out periodically (e.g. every two years).

12 Risk Mitigation in DWM Design and Installation

The DWM risks identified across unsewered areas in the DWMP are based on the predominance of standard (primary) septic tanks with conventional absorption trenches throughout the Shire (as confirmed by Council records and supported by field investigations). The summary table below outlines some possible ways these risks can be mitigated.

Table 8: Risk Mitigation for Various Constraints

Risk Category	Issue	Possible solutions	Methods	Benefits
Soils	Poor soils make it difficult for the site to contain effluent.	Enhanced treatment of effluent.	Septic System and Sand Filter.	Passive system; only uses electricity for pumps. Sand life should exceed 10 years before replacement.
			AWTS 20/30.	Higher standard of treatment suitable for sub- surface effluent dispersal in poorer soils.
			AWTS 20/30/10.	Disinfection stage decreases public health risk. Higher standard of treatment suitable for sub-surface effluent dispersal in poorer soils.
		Remediate soils.	Addition of gypsum/lime as per LCA recommendation.	Can assist in improving effluent adsorption capabilities of dispersive soil.
		Import better quality soils.	Sandy loams, loams and clay loams with <10% gravel content.	Soils can be selected for suitable characteristics (e.g. permeability) and also increase profile depth.
Slope	Steep slopes can be destabilised by effluent, and it is difficult to contain effluent onsite.	Terracing.	Reduce slopes by creating flatter areas (ensure soil depth is adequate if using cut and fill).	Ease of access and maintenance (e.g. mowing) and other controls (e.g. erosion).
Lot size	The smaller the lot the less area is available for	Reduce house size (number of bedrooms).	To be done at the planning and design stage.	If a house is smaller with fewer occupants, it will generate less wastewater.

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Risk Category	Issue	Possible solutions	Methods	Benefits
	effluent management.	Reduce footprint of house and other improvements.	To be done at the planning and design stage.	To ensure there is enough area to use for effluent dispersal, reduce the space occupied by the house, shed, driveway etc.
		Consider mound system as land application option.		Permits highest effluent loading rate per square metre.
Water-courses/ Groundwater Bores	The Code has setback distances from watercourses and groundwater bores.	Ensure entire system (including house) is located outside of setbacks and consider treatment options.	Increase wastewater treatment standard.	Setbacks can be reduced when higher treatment standards (e.g. advanced secondary with disinfection) are used.
Flood Prone Land	Wastewater should not be disposed of in flood prone land.	Ensure entire system (including house) is located away from flood prone land.		Waters are protected from contamination. System is protected from inundation of water which eliminates the potential need for costly system replacement.

13 Action Plan Timeline

This Action Plan Timeline outlines the management strategies and actions to address priorities. The Health Protection Unit will have the primary responsibility for the coordination and implementation of the recommendations. Council’s Planning, Environment, Infrastructure, Building and GIS staff will assist them. This Action Plan was updated in 2021 to reflect the changes in requirements associated with the amended *Environment Protection Act 2017*.

Item Number	Action	Description	Term	Due Date	Responsibility	Resource Funding
1	Preparation of policies and procedures	Prepare (or revise/finalise) and document the following to ensure they are in line with this DWMP: <ul style="list-style-type: none"> • DWM system inspection procedure and program. • Non-compliance with inspection procedure. • Complaint inspection procedure. • Rectification/upgrade works procedure. • Issuing of fines/notice procedure. • ‘Permit to Install’ procedure. • Approval to Use procedure. • Compliance and Enforcement Policy. 	Short	March 2022	Health Protection Coordinator	Within current resourcing
2	Fees and Charges	In order to fund the Actions in this Plan, Council will need to consider sustainable options for ensuring appropriate resources.	Short	March 2022	Planning, Building and Health Manager	Within current resourcing
3a	Continuation of improvement of data collection	Update a GIS layer for DWM systems in the Shire. Ensure cadastre (lot data) is routinely updated.	Medium	July 2023	GIS Officer	Within current resourcing
3b		Development of geo-referencing of “as constructed plans” and incorporated as a GIS layer.	Ongoing)	Ongoing	Health Protection Coordinator; IT/GIS (assistance)	Budget bid / within current resources

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Item Number	Action	Description	Term	Due Date	Responsibility	Resource Funding
4a	Sensitivity Analysis Mapping	Regularly update Sensitivity Rating spreadsheet with any additional comments on constraints following a system inspection or LCA report.	Ongoing	Ongoing	GIS Officer & HPO	Within current resources
4b		Update the Council planning map interface on the Council's website with the updated Sensitivity mapping reviewed in 2021. Printed maps to be updated at least annually.	Short	November 2021	GIS Officer, HPO	Within current resources
5	Commercial Systems	Identify all commercial premises and commence priority auditing of commercial systems (2,000 - ≤5,000L/day).	Short-ongoing	November 2022	HPO	Within current resources
6a	Septic Tank (DWM system) Permit Conditions and Compliance	Undertake compliance audits of new installations.	Ongoing	Ongoing	Health Protection Coordinator; HPO	Within current resources
6b		Enforce upgrades of poorly performing systems, as required (case-by-case).	Ongoing	Ongoing	Health Protection Coordinator; HPO	Within current resources
6c		Enforce mandatory maintenance of systems (depending on system type).	Ongoing	Ongoing	HPO	
6d		Undertake compliance audits of lots located within DWSCs with prioritisation based on the DWM risk rating.	Ongoing	Ongoing	Health Protection Coordinator; HPO	Within current resources with dedicated 40 EHO audit days/year
7a	Locality Investigations and Planning	Review Locality Reports in DWMP and system inspection data to inform planning decisions regarding unsewered towns.	Short	Completed in 2021 review	Planning, Building and Health Manager; Health Protection	Within current resources

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Item Number	Action	Description	Term	Due Date	Responsibility	Resource Funding
					Coordinator; HPO	
7b		Brief all Planning staff on the DWM by providing a summary document or meeting briefing.	Short	August 2022	Health Protection Coordinator; HPO	Within current resources
8	System Owners Education Program	Discuss individual systems with owners during the application process and in response to enquiries from owners. Develop mechanisms to prompt pro-active education upon purchase of lot.	Short and Ongoing	March 2023-ongoing	HPO; Health Protection Coordinator	Within current resources
9a	Broader Community Education Program	<ul style="list-style-type: none"> Provide details about permit process on Council's website. Promote policies and educational materials to the community and service providers. Educate future/potential owners of homes with DWM systems. 	Short	June 2022	Health Protection Unit and Community Relations Officer	Within current resources
9b		<ul style="list-style-type: none"> Revise existing educational material for distribution to residents and on website. Develop new educational material for distribution to residents and on website. 	Short	November 2022	Health Protection Unit and Community Relations Officer	Within current resources
10	DWM Professionals Briefing	Conduct a briefing session, potential training, and/or annual meetings with local DWM & LCA consultants, plumbers and system maintenance contractors to inform and educate on the new requirements of the DWMP and to discuss any recurring questions/issues.	Ongoing	Ongoing	Health Protection Coordinator; Professional Consultant	2 x sessions Whitehead & Associates; within current resources
11	Resource Allocation	Investigate budget requirements for the implementation of the DWMP including system monitoring, compliance and enforcement of DWMP (& this Action Plan). <ul style="list-style-type: none"> Implementation phase. 	Immediate	March 2022	Planning, Building and Health Manager and Health	Within current resources

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Item Number	Action	Description	Term	Due Date	Responsibility	Resource Funding
		<ul style="list-style-type: none"> Ongoing administration of DWMP. 			Protection Coordinator	
12a	Reviews	Biannual progress review of 2021 DWMP and meeting with the Water Corporations to ensure the effective management of planning referral process under the DWMP.	Ongoing	Biannual	Health Protection Coordinator and Stakeholders	Within current resources
12b		Major (three-yearly) external audit and	Long	2024	Health Protection Coordinator; Stakeholders and External Auditor	Within current resources
12c		Review of 2021 DWMP after five (5) years.	Long	2026		Within current resources

14 Glossary of Terms

Term	Definition
Aerobic treatment	Biological treatment processes that occur in the presence of oxygen (i.e. aerobic bacteria digest wastewater contaminants). Aerobic bacteria are organisms that require oxygen to survive and grow.
Anaerobic treatment	Biological treatment processes that occur in the absence of oxygen.
Blackwater	Wastewater grossly contaminated with faeces (i.e. from a toilet).
Desludging	Removal of the semi solid waste from a tank.
Effluent	Water discharged from a treatment plant.
Evapotranspiration	Transfer of water from the soil to the atmosphere through evaporation and plant transpiration. Calculated using the FAO Penman-Monteith method to derive (ET ₀).
GED	General Environmental Duty associated with the amended <i>Environment Protection Act 2017</i>
Greywater	Wastewater from showers, baths, sinks, washing machines, dish washers.
Hardpan	A hardened, compacted and/or cemented horizon.
Locality	The broader locality surrounding a town (place name within mapped boundaries).
Non-Potable	Water not suitable for human consumption.
Organic Matter	Material that comes from the tissues of organisms (plants, animals, or microorganisms) that are currently or were once living.
Parcel	The smallest unit of land able to be transferred within Victoria's cadastral system, usually having one proprietor or owner (land.vic.gov.au). For the purposes of this DWMP, parcel and lot are given to have the same meaning.
Peds	An aggregate of soil particles.
Permeability	The ability of the soil to allow water to pass through.
P-sorb	Phosphorus adsorption capacity of a soil.
Property	Land under common occupation (land.vic.gov.au). May include multiple parcels.
Sensitivity	The 'likely' consequence of off-site (DWM) impacts based on the cumulative effect of individual lot constraints (soil suitability, slope, useable lot area, climate and location) and variables affecting the

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

Term	Definition
	specific land capability and associated limitations of the lot to sustainably manage wastewater in compliance with SEPP objectives.
Settlement	An area of residential development within the Rural Living Zone (Barongarook and Kawarren) or Rural Conservation Zone (Barham River).
Sewage	Solid and liquid wastewater conveyed through sewers.
Sewerage	A system of sewers.
Town	The town servicing a locality, which is predominantly, zoned Township Zone. It contains both residential and commercial development.

15 References (Cited and Used)

Department of Local Government NSW (1998) Environment and Health Protection Guidelines: On-site Sewage Management for Single Households.

Environment Protection Authority Victoria (1991) Guidelines for Wastewater Irrigation, Publication 168.

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Environment Protection Authority Victoria (2003) State Environment Protection Policy - Waters of Victoria.

Environment Protection Authority Victoria (2003) Guidelines for Environmental Management: Use of Reclaimed Water, Publication 464.2.

Environment Protection Authority Victoria (2013) Code of Practice for Onsite Wastewater Management, Publication 891.3.

Hazelton, P. and Murphy, B. (2007) Interpreting soil test results – what do all the numbers mean? CSIRO Publishing.

Isbell, R.F. (1996) The Australian Soil Classification. CSIRO Publishing, Melbourne.

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Municipal Association of Victoria, Department of Environment and Sustainability and EPA Victoria (2014) Victorian Land Capability Assessment Framework.

SKM (2014) Wye River and Separation Creek: Quantitative Microbial Risk Assessment and Ecological Risk Assessment, VW07110.

Standards Australia/ Standards New Zealand (2012) AS/NZS 1547:2012 On-site domestic-wastewater management.

Standards Australia/ Standards New Zealand (2008) AS/NZS 1546.1:2008 On-site domestic-wastewater treatment units – Septic tanks.

USEPA (2002) Onsite Wastewater Treatment Systems Manual. United States Environmental Protection Agency.

Appendix A

Evaluation of Wastewater Management Systems

1. Overview

This Section provides a review of the range of accredited wastewater treatment systems and available land application systems available for domestic and commercial application in Victoria, with particular consideration given to their suitability for use in the study area.

EPA Victoria will continue to regulate under the *Environment Protection Act 2017 (as amended)* what types of DWM systems are approved for use. The new legislation will be in operation from 1 July 2021. DWM treatment system brands and models will need to be certified by an accredited conformity assessment body as conforming to the relevant Australian Standard. This accreditation will be given by the Joint Accreditation System of Australia and New Zealand or any other accreditation body approved by the Authority (assessment body). The assessment body must certify the treatment system as conforming to the relevant Australian and New Zealand Standard. The appropriate standards for the different types of treatment systems is as follows:

- Septic tanks (and vermiculture systems) – AS/NZS 1546.1:2008, on-site domestic wastewater treatment units, Part 1: Septic tanks.
- Waterless composting toilets – AS/NZS 1546.2:2008, on-site domestic wastewater treatment units, Part 2: Waterless composting toilets.
- Secondary treatment systems – AS/NZS 1546.3:2017, on-site domestic wastewater treatment units, Part 3: Secondary treatment systems.
- Sand filters – AS/NZS 1546.3:2017, on-site domestic wastewater treatment units, Part 3: Secondary treatment systems.
- Domestic greywater system – AS/NZS 1546.3:2016, on-site domestic wastewater treatment units, Part 4: Domestic greywater treatment systems.

EPA holds a register of the DWM systems with valid Certificates of Conformance within Victoria, with the EPA website to be regularly consulted for an up-to-date list of accredited systems. Transitional arrangements will also apply to previously issue certificates that have not expired by 1 July 2021. For innovative DWM systems, an exemption from these requirements may be granted to a permit applicant by EPA under section 459 of the Act.

Please note that Council approval is required prior to the installation, alteration or rectification of any DWM system.

2. Exclusions and Variations

These guidelines do not relate to the mass production of manufactured proprietary treatment systems approved by EPA Victoria. Information and standards for the internal design and manufacturing of such units should be obtained from EPA Victoria and the relevant Australian/New Zealand Standard.

However, these guidelines do address the design and installation of on-site wastewater management components that are subject to meeting the system type EPA Victoria Certificate of Conformance. Some aspects of this document vary from the standard requirements of the relevant Certificates of Conformance. These variations are considered appropriate for the following reasons:

- Because they represent a higher standard of practice than that included in the Certificates of Conformance that can be justified by current best practice from around the world.
- Because they may reduce risk to public health and the environment in comparison to current practice.
- Because they will increase the capacity for achieving the performance objectives set out in the *State Environment Protection Policy (Waters of Victoria)* and *Environment Protection Act 2017*.

- Because they reflect a more site specific approach utilising local conditions to set requirements.

A proposed installation or rectification that does not conform to the standard drawings contained in this guideline may be acceptable, providing it:

- is assessed by, and deemed acceptable to, Council; and
- can achieve the performance objectives set out in Part IV, Section 32 of the *State Environment Protection Policy (Waters of Victoria)*.

It is recommended that Council be consulted on any variation from this document in the installation of DWM system components.

3. Plumbing and Drainage Work

This appendix does not address standards of work for plumbing and drainage as they relate to DWM components. The *Plumbing Regulations 2018* set out these requirements and generally require plumbing and drainage work to be carried out in accordance with *AS/NZS 3500 – National Plumbing and Drainage Code of Practice*. A licensed plumber is required to carry out all plumbing and drainage work up to the connection point to the treatment system. This document does not eliminate any requirement to comply with the EPA Code of Practice.

4. Key issues for System Selection and Design

4.1 Wastewater Treatment

For domestic and commercial wastewater management systems alike, the key issues that determine the selection of wastewater treatment systems are:

- Flow volumes/loads;
- Flow rates and peaks (including intermittent usage);
- Wastewater strength (particularly organics); and
- The degree of constraint of the site for land application of effluent.

Depending on the nature of the development, these aspects of wastewater management can vary significantly and pose challenges to the system designer and owner. Specialist design is typically required for commercial wastewater streams and for seasonal fluctuations in flows (such as holiday rental properties). Section 6 below discusses each of the treatment technologies widely available, and their opportunities and limitations.

In addition, there are considerations relating to costs and practicalities, such as system footprint and ease of installation and servicing. Appendix C of the EPA Code of Practice 819.4 (2016) provides useful guidance on the factors to consider when selecting an EPA-approved DWM system.

4.2 Land Application of Effluent

The key issues that influence the selection and design of land application systems (domestic or commercial) are:

- The level of treatment of the effluent (primary, secondary or advanced secondary);
- Soil characteristics (particularly texture, structure, depth, dispersibility and phosphorus adsorption capacity);
- Site characteristics (particularly slope, aspect and shading); and
- Proximity to sensitive receiving environments (such as surface waters and groundwater).

For constrained sites, the preferred effluent management strategy can dictate the level of wastewater treatment required. For example, a small lot with insufficient area to apply the entire effluent load may require a composting toilet with advanced greywater treatment for beneficial reuse to reduce volume of treated effluent being applied to the limited available space. In some

cases, there may be no suitable solution, or a pump-out tank may be required to tanker wastewater off-site for disposal at an approved facility.

5. Pump-out Systems

Pump-out systems convey raw wastewater or septic tank effluent to a holding tank (also known as a pump-out tank or collection well) for removal by licenced tanker (pump-truck) for disposal in an approved sewer main access hatch or municipal sewage treatment plant (under contract). They are generally regarded as a last resort, typically used to service properties where:

- there is inadequate available space to sustainably assimilate treated effluent by land application;
- existing land application systems have failed and cannot be safely used to apply effluent; or
- the lot will be connected to sewer in future (i.e. an interim solution).

The EPA Code of Practice 891.4 states that a pump-out tank must not be permitted for a new development, allotment or building.

Adequate sizing of holding tanks is important to ensure that adequate storage capacity is provided to allow lead time to arrange a licenced pump-out contractor.

Holding tanks should be fitted with high water level alarms and must incorporate both audible (buzzer) and visual (strobe) alarm components. The following minimum standards are required for high water alarm systems:

- a muting facility for the audible alarm is to be incorporated into the alarm design. The muting facility shall reset to audible after 24-hours;
- the alarm panel shall be located in a visible position within the building or other location approved by Council;
- the float switch shall be set at a level such that on activation, two (2) days storage remains within the collection well; and
- provision of an information sign that provides contact names and telephone numbers should the alarm be activated.

All wastewater or effluent holding tanks should be installed with adequately sealed lids, and positioned, so that they do not impact on existing structures or neighbouring properties and stormwater is diverted around the tanks. Stormwater ingress must be avoided, as it can result in excessive pump out costs and may result in displacement of raw wastewater to the ground surface, posing a significant human health and environmental risk. The tanks must be positioned to allow access by a pump-truck and its vacuum hose attachment.

AS/1546.1:2008 is broadly applicable to the design, installation and maintenance of holding for domestic and small commercial systems.

6. Wastewater Treatment Systems

There are currently five (5) broad categories of wastewater treatment system types that are accredited by the EPA:

1. AS 1546.1 – Septic Tanks (and vermiculture systems);
2. AS 1546.2 – Waterless Composting Toilets (and dry composting toilets);
3. AS 1546.3 – Secondary Treatment Systems;
4. AS 1546.3 – Sand Filters; and
5. AS 1546.4 – Domestic Greywater Treatment Systems.

A brief summary of each is provided below. For more detailed information, consult the current EPA Code of Practice and the EPA website –

<http://www.epa.vic.gov.au/yourenvironment/water/onsite-wastewater>. Tables comparing the specific types of treatment and land application systems, and their suitability for use within various areas of the Shire, are provided at the end of this Appendix.

6.1 Greywater Treatment Systems

Greywater treatment systems are accredited to treat laundry, shower, bath, hand-basin and kitchen greywater only. Blackwater (toilet waste) must never be treated in greywater treatment systems. It is preferable that kitchen water is kept separate from the other greywater streams and treated with the blackwater stream, as kitchen greywater can be relatively high in contaminants compared to other greywater streams. Greywater treatment systems can be useful for upgrading direct-diversion greywater systems where blackwater is to be kept separate, particularly if kitchen wastewater can be re-plumbed to the blackwater septic tank to prevent it entering the greywater treatment system.

If a greywater treatment system is utilised at a site, the blackwater also needs to be treated and disposed of onsite in an appropriately designed and accredited system. A justification is required within the LCA by the assessor, but the greywater typically accounts for 65% of the total wastewater load for a domestic development. The blackwater stream accounts for the remaining 35%, or appropriate leachate if opting for a waterless blackwater system (i.e. composting toilet).

Greywater that is treated to advanced secondary standard, in accordance with the current EPA Code of Practice and AS 1546.4, is of 'advanced secondary' standard that can be used for toilet flushing, cold water supply to clothes washing machines, and surface and subsurface irrigation. Advanced secondary effluent must achieve the following criteria:

- Biochemical Oxygen Demand (BOD₅): <10mg/L
- Total Suspended Solids (TSS): <10mg/L
- *E. coli* or thermotolerant coliforms (if disinfected): <10cfu/100mL

This is also referred to as the 10/10/10 standard by EPA Victoria. The nutrient removal performance varies considerably between and within advanced secondary treatment system types. Only greywater systems are accredited by EPA Victoria to achieve this standard as per AS 1546.4. The operational costs of greywater systems can outweigh the benefits of reusing the recycled water. For this reason, they are most commonly used when potable water supply is not reliable (e.g. for households supplied by rainwater tank in a low-rainfall area).

6.2 Collection/ Pump Wells and Wastewater Pumps

Collection/ pump wells must be designed and constructed to comply with AS/NZS 1546:2008. The capacity of domestic collection/ pump wells shall be calculated based on the dosing requirements of the downstream component (e.g. subsurface irrigation area, trench or additional treatment system such as a sand filter). A minimum of 12 hours retention time must be provided above the operating level of the flat switch for emergency storage. The storage capacity of a pump well must also be adequate to handle the peak hourly flow from the system (when considering pump capacities). All pump wells must have a minimum capacity of 1,000L. Collection/ pump wells installed in commercial or industrial premises shall be designed and sized according to the projected demand by a suitably qualified person. A high level alarm light and/or audible device (bell or buzzer) must be located on the premises so that failure of the pump set is easily detected.

Pump wells may be configured as demand dosing or timer dosing. This will depend on the need for flow balancing/ equalisation. Float switches do not provide any flow balancing capabilities to a system.

- Tank size for timer dosing systems must be calculated using a cumulative storage assessment to make sure flow balancing can be sustained. Consideration will need to be given to variations in incoming hydraulic load and the maximum daily loading rate of the receiving component.
- A high level alarm light and/or audible device (bell or buzzer) must be located on the premises so that failure of the pump set is easily detected.

- Standby pumps which incorporate automatic cut-in devices must be installed in all systems except those serving single dwelling houses or premises where the daily flow is less than 1500 litres.
- Pump sets and control switches shall be installed in accordance with the manufacturer's specifications and to the requirements of the electricity supply authority.

6.2.1 Pumps

Pumps must be designed and warranted by the manufacturer for use in wastewater and should have a design life of at least five (5) years. Components will need to be corrosion resistant and capably of transferring wastewater with characteristics that match the job. Typically a pump will be designed to convey wastewater with predicted characteristics, including raw wastewater (significantly large solids), primary treated effluent (some solids), secondary treated effluent ('dirty water') or advanced secondary treated effluent ('clean water'). Systems that utilise chlorine for disinfection will have a greater potential for pump corrosion. Domestic wastewater pumps must be warranted by the manufacturer to operate at the duty required for the job (i.e. frequently but for short periods, or constantly). Pumps must be capable of delivering wastewater at simultaneous flow rate and pressure that matches the hydraulic characteristics of the target component. The required flow rate and total dynamic head must be calculated for all pressurised components (i.e. dosing manifolds). The total dynamic head must be calculated for all non-pressurised components (i.e. transfer pumps between non-pressurised treatment components and pump dosed trenches and beds).

6.2.2 Dosing Siphon

If there is a desire to avoid the use of electricity and mechanical devices, a dosing siphon can be used to pressure dose system components. Automatic dosing siphons consist of a single apparatus with no moving parts installed in a collection tank that can trigger a siphon action when effluent rises to a predetermined level. The siphon resets itself when the level drops to a predetermined level prior to the next cycle. Requirements for the use of dosing siphons include:

- dosing siphons for single domestic houses should be installed in a 250L collection well.
- alternative sizes for the collection well will be necessary if doses that are larger or smaller than typical domestic loads are required.
- a minimum fall of 0.5m will be required between the outlet of this well and the distribution manifold of the pressurised component.

6.3 Primary Treatment Systems

According to the EPA, there are four (4) broad categories of primary treatment systems (for use with combined wastewater, blackwater only or as pre-treatment for greywater treatment systems):

1. Septic tanks;
2. Incinerating toilets (toilet waste only);
3. Wet composting systems (combined wastewater); and
4. Dry composting toilets (toilet waste only).

Primary-treated effluent quality can vary considerably, depending on a broad range of factors, and there are no minimum standards specified by EPA Victoria. Incinerating toilets do not produce effluent and composting toilets produce a concentrated leachate, to which effluent quality standards do not apply.

6.3.1 Septic Tanks

Septic tanks (for combined wastewater or blackwater only) are traditionally the most common type of treatment system in established localities without reticulated sewerage. They can also be used as pre-treatment for greywater treatment systems, although this is far less common. The technology is passive, whereby wastewater is gravity fed to a single tank (typically concrete or plastic), ideally fitted with a baffle and inlet and outlet 'T-pieces' to prevent extrusion of solids into

the trenches or backflow to the inlet. All new septic tanks shall be fitted with an effluent outlet filter that fits into the outlet square of the tank. Some tanks may require minor modification of the access hole to allow for maintenance of the filter. Where possible, an outlet filter shall be installed on existing septic tanks during rectification or modification work to a system. Dense solids settle to the bottom of the tank to form sludge, while a lower-density scum forms at the surface (comprised of cellulose, fats, oils, grease and other materials). Anaerobic digestion of colloidal and dissolved organic solids occurs, and some nitrogen and phosphorus is also removed. The primary-treated effluent is discharged by gravity for further treatment in a secondary treatment system or to a land application system suitable for primary effluent (such as trenches, beds or a mound).

Septic tanks should be pumped out before sludge build-up or scum thickness reduces the available capacity for wastewater detention to the point where treatment efficacy is being impacted. Depending on tank capacity, household occupancy and influent strength, the pump-out period would be required every 3-5 years for combined wastewater and blackwater septic tanks (the EPA currently requires septic tanks be desludged every three years to ensure maximum effectiveness), and about 10-15 years for greywater only.

Septic tanks are subject to *AS 1546.1:2008* (On-site domestic wastewater treatment units – septic tanks) as well as the current EPA Code of Practice and current system type EPA Certificate of Conformance.

6.3.2 Incinerating Toilets

Incinerating toilets are rarely installed and are most suited to situations where a very small footprint and nil water use (and wastewater generation) are required. There are few models on the market, but all are similar in design and operation: wastewater is captured in a cone-shaped bowl or void, generally upon a fresh paper liner for each use system. With the push of a lever or button, the waste drops into the electric incineration chamber below which is sealed off from the bowl, but is vented to the outdoors (or to an approved ventilation system). A small amount (approximately 1 tablespoon) of ash is produced with each use and the ash collection trap must be cleaned approximately weekly (depending on frequency of use). The energy costs of this system are very high compared to other treatment systems.

6.3.3 Wet composting systems (combined wastewater)

Wet composting systems are also known as ‘worm farms’ and ‘biological filters’ and have increased in popularity over the past decade. Raw wastewater is discharged directly to the top of the filter (contained in a plastic tank similar to a septic tank) and a rich humus layer develops that separates the solids from liquid prior to composting the solids with the aid of soil micro- and macro-fauna, including earthworms. The liquid is discharged by gravity to absorption trenches and the composted solids are periodically removed by maintenance staff (every two years). Unless otherwise directed by Council, the composted humus material is to be buried within the confines of the premises. The cover of soil over the deposited humus must be at least 75mm deep. Compost must not be buried in an area used for the cultivation of crops for human consumption, unless: compost is placed in a separate lidded composting bin providing aeration for at least three (3) months with no further addition; or compost has been seasoned underground for at least three (3) months. The system is a passive, biologically-driven treatment process that mimics processes occurring in nature.

Wet composting toilets (or vermiculture systems) are subject to *AS 1546.1:2008* as well as the current EPA Code of Practice and current system type EPA Certificate of Conformance.

6.3.4 Dry Composting toilets (waterless or low-flush)

The EPA list refers to only dry (waterless) composting toilets; however low-flush models are also available, although they are less common. Composting toilets are generally installed for water saving or lifestyle reasons (e.g. ‘eco homes’ or remote homes with limited water supply). They are very rarely retrofitted into existing homes, and require a separate greywater treatment system to treat all greywater streams (including kitchen greywater).

Any liquid in the system (including urine) forms a concentrated leachate which is disposed of by gravity drainage to a small absorption trench, which has long-term sustainability implications and is not suitable for areas with shallow soils, heavy-textured soils or high water tables. Alternatively, the leachate can be collected in a sealed container for disposal at a licenced wastewater treatment facility.

Waterless composting toilets are subject to AS 1546.2:2008 ('On-site domestic wastewater treatment units – waterless composting toilets') as well as the current EPA Code of Practice and current system type EPA Certificate of Conformance.

6.4 Combined Wastewater Secondary Domestic Treatment Systems

According to the EPA, there are four (4) broad categories of domestic secondary treatment systems:

- Aerated wastewater treatment systems (AWTS)
- Membrane Filters
- Reedbeds
- Sand and other Media Trickling Filters

The technologies used in domestic-scale systems are also often used in commercial systems (discussed in 6.4.5 below). The minimum standards for secondary effluent quality in Victoria (as per the current EPA Code of Practice) are as follows:

- Biochemical Oxygen Demand (BOD₅): <20mg/L
- Total Suspended Solids (TSS): <30mg/L
- *E. coli* or thermotolerant coliforms (if disinfected): <10cfu/100mL

Nutrient removal performance varies considerably between secondary treatment systems and largely depends on design and operation (as well as influent nutrient concentrations).

6.4.1 Aerated wastewater treatment systems (AWTS)

Domestic AWTS are pre-fabricated, mechanically aerated wastewater treatment systems designed to treat wastewater flows of <2,000L/day. They are tank-based systems, comprising either one or two discrete tanks that typically employ the following processes:

- settling of solids and flotation of scum in an anaerobic primary chamber or separate primary tank (effectively operating as a septic tank). This stage is omitted in some models.
- oxidation and consumption of organic matter through aerobic biological processes using (active or passive) mechanical aeration.
- clarification – secondary settling of solids.
- disinfection – usually by chlorination but occasionally using ultraviolet irradiation.
- regular removal of sludge to maintain the process.

AWTS are typically supplied as stand-alone, proprietary systems. They require regular maintenance in accordance with the EPA Certificate of Conformance for the specific model (usually quarterly) to ensure satisfactory performance and adequate disinfection. The operating (power) costs of AWTS are relatively high compared to more passive systems such as trickling filters and reed beds, as the aerobic treatment phase requires air blowers to be run for several hours each day.

AWTS are generally **not** suitable for premises with intermittent use or surge loads, such as holiday homes and commercial premises with very low flow/high flow wastewater cycles. AWTS must not be switched off when not in use as the deprivation of oxygen will kill the aerobic bacteria within a few days and populations can take weeks to be re-established when the system is turned on and

wastewater supply resumes. Some AWTS models have a low-flow switch which re-circulates effluent to keep aerobic bacteria alive when not in use.

All AWTS must be installed with an alarm that has visual and audible components to indicate mechanical and electrical malfunctions. The alarm shall have one signal next to it and another in a suitable position attached to the house. The alarm shall incorporate a warning lamp, which may be reset only by the service agent.

Prior to the installation of a system, the owner must enter into an annual service contract for the AWTS with a service agent authorised by BBSC.

AWTS are subject to *AS1546.3:2017* (Secondary Treatment Systems)) as well as the current EPA Code of Practice and current system type EPA Certificate of Conformance.

6.4.2 Membrane Filters

Membrane filters provide advanced secondary treated effluent using microfiltration or reverse osmosis membranes, usually following primary and secondary treatment in separate chambers or tanks. Use of membranes requires high energy use and therefore the ongoing costs as well as upfront costs of membranes systems which are high when compared to other systems. Furthermore, the systems require regular, ongoing maintenance to ensure membranes are not damaged or remain fouled.

6.4.3 Reedbeds

The wastewater influent must first undergo primary treatment (e.g. a septic tank) prior to being treated in a reed bed. A reed bed is also known as subsurface-flow reed bed or constructed wetland and is designed to ensure that effluent flows beneath the gravel media surface, within the root zone of wetland plants, to ensure there is no standing water in the system. The system is lined with an impermeable membrane and constructed so that effluent flows horizontally through the media, via gravity. The wetland plants (macrophytes) and microbiological biofilms that develop on roots and gravel surfaces remove contaminants and pathogens from the effluent as it passes through. The treated effluent drains to a collection sump, from which it is pumped or discharged by gravity to the land application area (e.g. subsurface irrigation or absorption trench).

Reed beds are generally much more effective at nitrogen removal than phosphorus removal, with phosphorus removal expected to decline over time as the substrate becomes P-saturated. Although they are often touted as 'maintenance-free,' periodic replacement of the filter media assists in ongoing phosphorus removal.

Reedbeds are suitable for intermittent use and low-flow scenarios; however very high strength wastes (particularly BOD₅ and nutrients) can overwhelm the system and lead to poor treatment. For consistently high-strength influent wastewater (such as food or dairy processing premises), an additional primary treatment stage or secondary pre-treatment stage may be required, with the reed bed providing final effluent 'polishing'.

Any proposal to install a reed bed must be accompanied by a design report that includes the following:

- surface area (m²);
- hydraulic residence time (days);
- length and width; and
- any site specific recommendations regarding suitable plant species.

The report should be written by a suitably qualified person in accordance with recognised standards such as Headley & Davison (2003) and the NSW Department of Land and Water Conservation (1998).

The ground surface surrounding the reed bed is to be finished so as to allow for the free flow of stormwater away from the unit. This may require the installation of diversion drains.

6.4.4 Sand and other Media Trickling Filters

For all sand and media filters, the influent must first undergo a minimum of primary treatment (e.g. a septic tank). Sand and textile media filters are configured to provide a very large surface area to volume ratio, which hosts aerobic microorganisms that treat the effluent as it passes over the sand or media, usually by gravity. Proprietary filter systems typically incorporate the primary treatment tank into a stand-alone unit and recirculate a proportion of the treated effluent through the filter to improve effluent quality. The system is typically located below or at ground level. Sand filters can also be single-pass (i.e. non-recirculating) and therefore require a larger surface area to ensure adequate hydraulic residence time (HRT) of effluent.

Sand and textile media filters are generally more resilient to intermittent flows and shock loading than AWTs, and can have significantly lower operating costs. Recirculating systems (textile and some sand filters) have a relatively small footprint (and demand for materials) compared to single-pass sand filters; however, single pass filters can be designed with passive (gravity) dosing, requiring no electricity to operate. Site-specific hydraulic designs are required to support passive dosing systems.

Sand filters must comply with the requirements outlined in Appendix G of EPA Code of Practice (891.4). The maximum dosage rate that the sand filter is to be sized on is dependent on the type of wastewater being treated, but is typically a dosage rate of 50L/m²/day.

For consistently high-strength influent wastewater (such as food or dairy processing premises), an additional primary treatment stage or secondary pre-treatment stage may be required, with the filter providing final effluent 'polishing'.

6.4.5 Combined Wastewater Secondary Commercial Treatment Systems

These systems are for predominantly human waste (minimal trade wastes) with flows 2,000-5,000L/day (in accordance with EPA 2015 regulations). The treatment technologies used are broadly similar to those used in domestic wastewater treatment systems, but are expanded in scale. Some systems are modular in design, using numerous small treatment units either in series or in parallel, allowing expansion of treatment capacities where required (including bringing standby units online for peak loads or permanent increases in influent loads). In many cases, companies will provide systems to both the domestic and the commercial market.

7. Land Application Systems for Treated Effluent

The range of available land application systems is discussed below; and tables at the end of this Appendix provide a summary of DWM treatment and land application systems available, and their suitability for use in various regions of the Shire (with consideration of system compatibility, and seasonal variance of flows from intermittently occupied holiday dwellings and seasonally-operating small businesses).

The location of the land application system and the preferred land application option must be determined based on the outcomes of the appropriate level of Land Capability Assessment as per Section 4.2.

7.1 Absorption Trenches and Beds

Conventional absorption trenches and beds have conventionally been used for land application of septic tank effluent. Both options rely substantially on effluent absorption to the soil and impose relatively high loading rates on the soil (compared to irrigation). This increases the risk of systems being overloaded and failing hydraulically in the long term, with potential adverse health and environmental impacts. Furthermore, prolonged effluent application through absorption systems increases the risk of soil degradation by increasing salinity and sodicity, as well as the build-up of impermeable or slowly-permeable 'bio-mats' which can prevent movement of effluent into the soil, leading to 'creeping failure'. These disposal systems offer very limited opportunity for effective reuse of effluent and do not represent current best practice.

Over the years there have been various modifications to conventional absorption trenches and beds, some of which have been developed into proprietary ‘off-the-shelf’ products including various brands of self-supporting arch drains and the *Advanced Enviro-Septic™* modular trench.

Absorption trenches and beds are considered inappropriate for sites with shallow soils, high groundwater or heavy-textured (clay-based) soils, due to limited infiltration capacity. They are also generally not suitable for gravels and sands, as the very high permeability of these materials can inhibit beneficial treatment within the soil profile and allow effluent to rapidly percolate to the groundwater table. Areas with high rainfall are also at high risk of surface and groundwater contamination from conventional trenches and beds. Absorption trenches and beds can also be used with secondary-treated effluent, which can be dosed at a higher rate than primary-treated effluent (in accordance with Table 9 of the EPA Code of Practice (2013) and Table 5.2 of *AS1547:2012*).

Absorption trenches/ beds must be inspected by Council;

- prior to backfilling; and
- after completion of all work (and landscaping/ turfing).

7.2 Evapotranspiration-Absorption Trenches and Beds

Evapotranspiration-absorption (ETA) beds are essentially shallower absorption trenches or beds that allow some plant uptake of the effluent from the soil profile, reducing the amount of effluent that is leached to deeper soils and groundwater. They can improve environmental and public health outcomes for areas with heavy-textured or shallow soils, or high watertables, compared to absorption trenches and beds. However, they are prone to similar problems to conventional absorption trenches, including build-up of bio-mats and rapid percolation in highly-permeable soils. ETA systems are suitable for both primary and secondary treated effluent; however the DLRs nominated by both the current EPA Code of Practice and *AS1547:2012* do not vary with the level of treatment (as is the case for absorption systems).

ETA beds must be inspected by Council:

- prior to backfilling; and
- after completion of all work (and landscaping/ turfing).

7.3 Modified ETA Trenches and Beds

In recent years, there have been several proprietary and custom-built modifications to standard ETA trenches and beds, which further optimise evapotranspiration of effluent and minimise deep drainage. The most common example is the custom-made geotextile-wrapped and/or lined arch or pipe trenches, which use capillary action in the geotextile to ‘wick’ effluent into the topsoil and root zone above (referred to in the current EPA Code of Practice as a ‘wick trench or bed’). Wick trenches/beds are generally considered suitable for low-permeability soils. Like standard ETA systems, the modified versions are suitable for both primary and secondary treated effluent. The EPA Code of Practice nominates Design Loading Rates (DLRs) for wick trenches using secondary-treated effluent. For primary-treated effluent, however, the nominated DLRs for standard ETA systems in Table 5.2 of *AS1547:2012* should be adopted. The long term performance of modified ETA systems has not been tested as they are a relative recent innovation. Use of primary-treated effluent could result in clogging of geotextile materials over time.

7.4 Mounds

Sand mounds, also known as Wisconsin mounds, are often an appropriate on-site solution for lots with limited space, shallow soil profiles, poor drainage or high water tables. Mounds are effectively raised soil absorption systems comprising layered fill, into which effluent is dosed. Effluent receives further treatment as it percolates down through the mound and is then absorbed by the natural soils below the mound. A properly designed mound can have a higher evapotranspiration potential than an ETA bed of equivalent size, further enhancing effluent disposal on constrained lots.

The basal footprint of a domestic mound is typically in the order of 7m wide by at least 20m long, and there are considerable up-front cost in the materials and construction of mounds. Mounds are suitable for primary or secondary treated effluent, and provide further treatment of effluent as it moves through the sand profile.

In addition, there are proprietary mound systems which use a modified fill media primarily from industrial waste products of aluminium or iron smelting, which have a very high phosphorus adsorption capacity. When designed, installed and maintained correctly, these systems can present a good solution for constrained sites. However, the success of these systems has been variable in the past, largely due to inappropriate design and installation. Table 9 of the EPA Code of Practice (2013) and Table 5.2 of *AS/NZS 1547:2012* provide DLRs for mounds. Mounds must be inspected by Council;

- once the basal area of the mound has been prepared
- prior to covering the distribution manifold and before the agricultural pipe has been placed over the pressure manifold. At this inspection the squirt height from all orifices will be measured. There should be no more than 15% variation in squirt height across the whole manifold; and
- after completion of all work and landscaping/ turfing.

7.5 Low Pressure Effluent Distribution (LPED) Irrigation

LPED irrigation systems were originally developed for use in Category 1 and 2 soils (as per *AS/NZS 1547:2012*) where conventional absorption beds can result in overloading of soils at the proximal section of the trench while under-loading the remainder of the trench. Note that Table 9 of the EPA Code of Practice 891.4 (2016) prohibits the use of LPED systems in Category 1 soils (gravels and sands) and Category 2a soils (weakly structured sandy loams). LPED systems can be beneficial for Category 5 soils; however, the large area they must occupy for such soils would be better served by subsurface irrigation (using secondary treated effluent) – see Section 5.7 below.

In LPED systems, effluent is discharged into 25-30mm perforated pipes contained within 50-100mm slotted pipes, to distribute effluent more evenly into the surrounding aggregate and to prevent soil intrusion into the perforations. The pipes are laid in narrow, shallow trenches (filled with aggregate and capped with topsoil), in order to optimise contact with aerobic bacteria in topsoil and to facilitate plant uptake of effluent. The system can be pressurised using a pump or a passive dosing device (i.e. a Flout™ or a siphon), with a detailed hydraulic design to ensure even distribution throughout the system. LPED irrigation can be used with either primary or secondary effluent, but is more commonly used as an alternative to trench and bed systems for primary effluent. It is recommended that an outlet filter is installed on primary treatment systems to reduce the amount of suspended solids and organics being conveyed into the LPED system. Table 9 of the EPA Code of Practice 891.4 (2016) and Table 5.2 of *AS1547:2012* provide DLRs for LPED systems (one rate for both primary and secondary effluent). Detailed design and installation advice is provided in Auckland Regional Council (2004) Technical Publication 58 (however the local DLRs must be used instead of those specified by ARC).

7.6 Surface Spray Irrigation

Surface spray irrigation (using mist or droplet sprinklers) while increasing in popularity over the past 20 years, is now considered an outdated technology that can pose unacceptable public and environmental health risks due to potential exposure and also surface runoff during rainfall. Often, an inadequate number of sprinklers are installed to ensure even coverage over an adequately large area; and commonly the sprinklers are not fixed and must be frequently moved by the resident to reduce over-loading (which is often neglected over time). In addition, surface irrigation is not considered appropriate for slopes greater than 10%, as the risk of runoff increases. Surface spray irrigation is more suitable for relatively large and flat areas, with limited access to the irrigation field and large buffer distances to surface watercourses and drains. For typical domestic and small commercial sites, subsurface or covered-surface (i.e. under mulch) drip irrigation is considered best practice. Table 9 of the EPA Code of Practice 891.4 (2016) and Table 5.2 of

AS1547:2012 provide Design Irrigation Rates (DIRs) for surface irrigation systems. Council does not permit any new surface irrigation systems to be installed, but permits the existing surface irrigation systems to be managed as per their current permit.

7.7 Subsurface or Covered-surface Drip Irrigation

Subsurface drip irrigation or covered-surface drip irrigation systems are becoming more popular in recent years. Properly designed systems apply effluent at much lower volumetric rates and over larger areas than absorption or ETA trenches/beds or mounds.

Effluent is applied in the root zone of plants (100-150mm below the surface) at a rate that more closely matches plant and soil requirements (evapotranspiration), leading to more effective effluent reuse. The reliance on soil absorption is relatively low and hence the risk of contaminants accumulating in the soil or leaching to groundwater is also low.

Subsurface drip irrigation typically comprises a network of proprietary, pressure-compensating drip-irrigation line that is specially designed for use with effluent and contains specially designed emitters that reduce the risk of blockage, biofilm development and root intrusion. Subsurface irrigation virtually eliminates the risk of people inadvertently coming into contact with effluent and also minimises the risk of effluent being transported off-site, even during rain. Subsurface irrigation may be installed on sloping lots, provided the application rate is reduced accordingly to ensure that effluent migration down slope is taken up adequately within the root system (as per Table M2 of AS 1547:2012).

When properly designed, installed and operated, the system will ensure good distribution of effluent at uniform, controlled application rates. By properly sizing the land application areas to ensure sustainable hydraulic and nutrient loading rates, water and nutrients can be effectively utilised and are unlikely to seep to groundwater or run-off to surface waters. Care must be taken in designing and installing irrigation systems in areas that experience temperatures below freezing. Table 9 of the EPA Code of Practice (2013) and Table 5.2 of AS1547:2012 provide Design Irrigation Rates (DIRs) for subsurface irrigation systems.

Subsurface irrigation areas must be inspected by Council prior to:

- occupation of a new dwelling; and
- commissioning of the treatment system.

8. System Selection

The following tables provide an overview of the range and application of EPA-accredited wastewater treatment system types, their compatibility with land application systems, and their suitability for use across unsewered areas of the Shire (based on soil characteristics only). Individual proprietary systems (i.e. brands) are not discussed. Similarly, Table 2 of EPA Code of Practice 891.4 (2016) details DWM system compatibility.

The influence of climate patterns on land application system sizing is addressed in the Land Application System Sizing Tables which are included in the Locality Reports in Appendix B of the Technical Document. Note that the assessment of land application system suitability is based on the type and depth of soils identified in the locality, not the water balance for the locality. The Sizing Tables identify situations where the water balance does not resolve itself and minimum application areas cannot be determined using the water balance approach.

However, it may be possible to design and construct these systems in areas with high rainfall, following detailed LCA and system design, and potential mitigation measures such as the importation of topsoils to reduce effluent loading rates.

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Table 9: DWM System Compatibility Matrix

Onsite Wastewater Management System	Absorption Trenches/Beds	Standard and Modified ETA Trenches/Beds	Mounds	LPED Irrigation	Surface or Subsurface Irrigation ¹	Toilet flushing and cold water supply to washing machines
PRIMARY TREATMENT						
Septic Tanks	YES	YES	YES	YES	NO	NO
Wet Composting Systems/Biological Filters	YES	YES	YES	YES	NO	NO
SECONDARY TREATMENT						
Aerated Wastewater Treatment Systems	YES	YES	YES	YES	YES	NO
Membrane Filters	YES	YES	YES	YES	YES	NO
Reed Beds	YES	YES	YES	YES	YES	NO
Sand or Media Trickling Filters	YES	YES	YES	YES	YES	NO
ADVANCED SECONDARY TREATMENT						
Greywater Treatment Systems	YES	YES	YES	YES	YES	YES
¹ pressure-compensating, subsurface drip irrigation is preferred to surface spray or drip irrigation.						

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Table 10: Effluent Management Suitability by Locality

Locality	AS/NZS 1547:2012 Category of Limiting Soil Horizon	Indicative Soil Depth (m) ¹	Absorption Trenches/Beds	Standard and Modified ETA Trenches/Beds	Mounds	Surface or Subsurface Irrigation ²	LPED Irrigation
Alvie	4 and 5	1.5	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Barham River Catchment (within Apollo Bay) ³	5 and 6	1.2 (variable)	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Barongarook ³	4 and 5	2.0	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Barramunga ^{3,5}	4		POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Barwon Downs ³	5 and 6	2.0 (variable)	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Beeac	5 and 6	2.0	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Beech Forest ^{3,4,5}	4 and 5	<0.9	NOT SUPPORTED	POSSIBLE Secondary Wick Trench recommended	NOT SUPPORTED	NOT SUPPORTED	NOT SUPPORTED
Carlisle River ^{3,5}	5 and 6	>2.0	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Coragulac	5	1.5	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Cororooke	4	1.5	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Ferguson ^{3,4,5}	4 and 5	0.9	NOT SUPPORTED	POSSIBLE Secondary Wick Trench recommended	POSSIBLE	POSSIBLE	POSSIBLE
Forrest ³⁵	4 and 5	2.0	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Gellibrand ^{3,5}	5	0.9-2.0 (variable)	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Kawarren ^{3,5}	4 and 5	2.0	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Kennett River	4	0.9	NOT SUPPORTED	NOT SUPPORTED	POSSIBLE	POSSIBLE	POSSIBLE
Lavers Hill ^{3,4,5}	4 and 5	0.9	NOT SUPPORTED	Secondary Wick Trench only	NOT SUPPORTED	NOT SUPPORTED	NOT SUPPORTED
Weeaproinah ^{3,4,5}	4 and 5	0.9	NOT SUPPORTED	POSSIBLE Secondary Wick Trench recommended	NOT SUPPORTED	NOT SUPPORTED	NOT SUPPORTED
Wye River/ Separation Creek	1 (delta) - OR	0.9	NOT SUPPORTED	NOT SUPPORTED	NOT SUPPORTED	POSSIBLE	NOT SUPPORTED
	4 (slopes)		POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE	POSSIBLE
Wyelangtah ^{3,4,5}	4 and 5	0.9	NOT SUPPORTED	Secondary Wick Trench only	NOT SUPPORTED	NOT SUPPORTED	NOT SUPPORTED

¹ Soil profile information taken from Robinson *et al* (2003) study as used in Soil Suitability Sensitivity Analysis. This data was confirmed, where relevant, with field assessment of representative site's in each locality by Dr. Robert Van de Graaff in August 2014 and/or W&A in September 2014. Note that soil depth generally changes with slope. Only the most dominant soil landscape details are given for the town/settlement; hence, variability with soil type and depth may occur spatially throughout the locality. LCA investigations may identify differing soil conditions at individual locations.

² Pressure-compensating, subsurface drip irrigation is preferred to surface spray or drip irrigation

³ All or Part of locality is within a DWSC.

⁴ Towns/settlements in this locality are on the Otway Ridge (Climate Zone 4), system applicability improves as elevation reduces.

⁵ The best-practice approach in DWSCs is (minimum) secondary treatment (min. 20/30 standard) with subsurface drip irrigation, or (for highly constrained properties/parcels) a Wick Trench/Bed system.

Appendix B

Sensitivity Pro-forma Checklist

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Parameter	Site specific input
PFI Identification Number	
Lot Address	
Locality	
Zoning	
Area (ha)	
Soil Texture	
Soil Depth (m)	
Soil Structure	
Soil Limitations	
Permeability (Ksat) (m/day)	
Slope (%)	
Presence of Surface Waters	
Useable Lot Area (ha)	

Appendix C

Land Capability Assessment Checklists

Table C1: Minimum Requirement for a Standard LCA and Report

Report Element	<u>Standard</u> Requirements	Completed
1. Introduction and Background	Report summary/ executive summary.	<input type="checkbox"/>
	Confirmation of Sensitivity Rating.	<input type="checkbox"/>
	Confirmation of any relevant sensitivity overlays (e.g. landslip) as per communications with Council.	<input type="checkbox"/>
	Confirmation that lot(s) meets minimum lot size criteria for COS Planning Scheme Zone.	<input type="checkbox"/>
	Current land use and development overview (including occupancy); single lot, increase in building entitlements (subdivision) or non-domestic development.	<input type="checkbox"/>
	Name, contact details and qualifications (insurances) of LCA assessor (author).	<input type="checkbox"/>
	Site location (including address and lot details) and owner.	<input type="checkbox"/>
	Lot area.	<input type="checkbox"/>
	Proposed/existing water supply.	<input type="checkbox"/>
	Availability of sewer.	<input type="checkbox"/>
	Locality map showing the site in relation to surrounding region.	<input type="checkbox"/>
2. Site Inspection and Field Investigations	Gather information on relevant Council, Water Corporation, Catchment Management Authority and State Government requirements, including restrictions and caveats on title, and planning/building/bushfire/flood controls, e.g. zones and overlays. Note Environmental Significant Overlays, potable water supply and DWSCs. Impose this information on a base map (or site plan) which shows their location with respect to title boundaries.	<input type="checkbox"/>
	Broad overview of locality and landscape characteristics that may pose a constraint to the sustainable application of wastewater on the site and adjacent land, e.g. climatic information, groundwater and bore water information. (Refer to stage 3 pp.35 EPA Code of Practice 891.4 (2016)).	<input type="checkbox"/>
	Details of date, time and methodology of site inspection and field investigations.	<input type="checkbox"/>
	Site assessment that considers all of the parameters as per Table 1 of the Victorian LCA Framework (2014). Detailed explanation of the level of constraint with regards to DWM and recommended mitigation measures to overcome these constraints.	<input type="checkbox"/>
	Minimum of two soil test pits or auger holes within the identified available effluent management area(s), with additional test pits required for more than one soil type (multiple soil landscapes or facets) as per the current EPA Code of Practice.	<input type="checkbox"/>
	Soil assessment that considers the following parameters from Table 2 of the Victorian LCA Framework (2014): <ul style="list-style-type: none"> • colour and mottling; • electrical conductivity; • Emerson Aggregate Class; • permeability and design loading rate (using soil texture); • pH; • rock fragments; • soil depth; • soil texture (field textural analysis); and • depth to watertable (if required). Detailed explanation of the level of constraint with regards to DWM and recommended mitigation measures to overcome these constraints.	<input type="checkbox"/>

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Report Element	Standard Requirements	Completed
3. Available Area and Setback Distances	Calculation of available effluent management area and location on the Site Plan.	<input type="checkbox"/>
	Discussion regarding the achievability of the applicable setback distances (Table 5 of the EPA Code of Practice 891.4 (2016)). Justification required.	<input type="checkbox"/>
4. LCA Confirmation	Contact Council if the LCA assessor disagrees with the final Sensitivity Rating for the site.	<input type="checkbox"/>
5. Cumulative Impacts	Using the desktop and site assessment information for the site, comment on any possible cumulative detrimental impacts that the development may have on beneficial uses of the surrounding land, surface water and groundwater.	<input type="checkbox"/>
6. System Selection and Design*	Design maximum wastewater load (generation rates) and organic load for the proposed development.	<input type="checkbox"/>
	Description of existing system (if applicable).	<input type="checkbox"/>
	Target effluent treatment quality.	<input type="checkbox"/>
	Description and location of applicable DWM treatment system options (refer to relevant Locality Report and EPA website for list of currently approved systems).	<input type="checkbox"/>
	List of effluent land application options and detailed description of preferred option and location (as per relevant Locality Report). Sizing of land application area as per the system Sizing Tables detailed in the Technical Document.	<input type="checkbox"/>
7. Mitigation Measures	Detailed discussion of mitigation measures to overcome any site or soil constraints posed to the sustainable treatment and application of wastewater on-site. This may include the following: <ul style="list-style-type: none"> • Storm water management • Soil amelioration; and • Vegetation establishment and management. 	<input type="checkbox"/>
8. Site Management Plan	Description of ways to improve wastewater and DWM system performance for residents' reference.	<input type="checkbox"/>
	Operation and Management Plan.	<input type="checkbox"/>
9. Conclusion	Conclusion summarising all the important design, sizing and mitigation requirements to ensure sustainable on-site DWM.	<input type="checkbox"/>
10. Site Plan Requirements	Site address, including lot number and street number.	<input type="checkbox"/>
	All title boundaries.	<input type="checkbox"/>
	All relevant zones and overlays and/or restrictions (e.g. Council zoning and overlays, including Environmental Significant Overlays and DWSCs).	<input type="checkbox"/>
	Type of catchment (e.g. potable or other special water supply catchment).	<input type="checkbox"/>
	North arrow.	<input type="checkbox"/>
	Location of groundwater bores.	<input type="checkbox"/>
	Contour lines (at maximum 1 in 10m intervals), direction of slope and grade.	<input type="checkbox"/>
	Location of soil test pits or auger holes.	<input type="checkbox"/>
	Location of other utilities i.e. electricity, gas, telecommunications (which must be located outside the land application areas)	<input type="checkbox"/>
	Location of any significant site features e.g. rock outcrops or waterlogged regions.	<input type="checkbox"/>
Location of intermittent and permanent surface waterways (dams, creeks, reservoirs and springs).	<input type="checkbox"/>	

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Report Element	Standard Requirements	Completed
	Location of 1% and 5% Annual Exceedance Probability flood level contours lines (if applicable).	<input type="checkbox"/>
	Location, depth and specified use of groundwater bores on the site and adjacent properties from the register of the relevant Rural Water Corporation. Depth to groundwater table in winter (if less than 2.1m deep).	<input type="checkbox"/>
	Vegetation cover (can use aerial image as base map).	<input type="checkbox"/>
	Relevant setback distances as per Table 5 EPA Code of Practice 891.4 (2016).	<input type="checkbox"/>
	Location of existing and proposed buildings, sheds, driveways, paths and any other improvements.	<input type="checkbox"/>
	Available effluent management area(s).	<input type="checkbox"/>
	Location of proposed land application area (sized to scale).	<input type="checkbox"/>
	Location of proposed stormwater cut-off drains adjacent to the land application area.	<input type="checkbox"/>
	Location of proposed DWM system (nominal).	<input type="checkbox"/>
	Location of reserve land application area (sized to scale).	<input type="checkbox"/>
11. Appendices	Figures	<input type="checkbox"/>
	Site Plan	<input type="checkbox"/>
	Soil bore logs for all test pits or auger holes	<input type="checkbox"/>
	Certificate of Title(s) for lot (plan)	<input type="checkbox"/>
	Proposed building plans	<input type="checkbox"/>
	Planning Permit application (where applicable)	<input type="checkbox"/>
<p>* If site is located within Climate Zone 4, then site specific design is required and the Sizing Tables cannot be used. This is due to the higher rainfall and the need to utilise a water balance for design purposes. The LCA is to remain the same, except Stage 6 is to follow the requirements set out in the Detailed LCA Pro-forma.</p> <p>** Lots with a Low Sensitivity Rating that are located within a DWSC are required to complete this Standard LCA as per the current EPA Code of Practice requirements.</p>		

Table C2: Minimum Requirements for a Detailed LCA and Report

Report Element	<u>Detailed</u> Requirements	Completed
1. Introduction and Background	Report summary/ executive summary.	<input type="checkbox"/>
	Confirmation of Sensitivity Rating.	<input type="checkbox"/>
	Confirmation of any relevant sensitivity overlays (e.g. landslip) as per communications with Council.	<input type="checkbox"/>
	Confirmation that lot(s) meets minimum lot size criteria for COS Planning Scheme Zone.	<input type="checkbox"/>
	Current land use and development overview (including occupancy); single lot, increase in building entitlements (subdivision) or non-domestic development.	<input type="checkbox"/>
	Name, contact details and qualifications (insurances) of LCA assessor (author).	<input type="checkbox"/>
	Site location (including address and lot details) and owner.	<input type="checkbox"/>
	Lot area.	<input type="checkbox"/>
	Proposed/existing water supply.	<input type="checkbox"/>
	Availability of sewer.	<input type="checkbox"/>
	Locality map showing the site in relation to surrounding region.	<input type="checkbox"/>
Site survey plan (2m contours) will need to be conducted by a qualified surveyor.	<input type="checkbox"/>	
2. Site Inspection and Field Investigations	Gather information on relevant Council, Water Corporation, Catchment Management Authority and State Government requirements, including restrictions and caveats on title, and planning/building/bushfire/flood controls, e.g. zones and overlays. Note Environmental Significant Overlays, potable water supply and DWSCs. Impose this information on a base map (or site plan) which shows their location with respect to title boundaries.	<input type="checkbox"/>
	Broad overview of locality and landscape characteristics that may pose a constraint to the sustainable application of wastewater on the Site and adjacent land, e.g. climatic information, groundwater and bore water information. (Refer to stage 3 pp.35 EPA Code of Practice 891.4 (2016)).	<input type="checkbox"/>
	Details of date, time and methodology of site inspection and field investigations.	<input type="checkbox"/>
	Site assessment that considers all of the parameters as per Table 1 of the Victorian LCA Framework (2014). Detailed explanation of the level of constraint with regards to DWM and recommended mitigation measures to overcome these constraints.	<input type="checkbox"/>
	Minimum of two soil test pits or auger holes within the identified available effluent management area with additional test pits required for more than one soil type (multiple soil landscapes or facets) as per the current EPA Code of Practice.	<input type="checkbox"/>
Soil assessment that considers all of the parameters in Table 2 of the Victorian LCA Framework (2014): <ul style="list-style-type: none"> • colour and mottling; • electrical conductivity; • Emerson Aggregate Class; • permeability and design loading rate (using soil texture); • pH; • rock fragments; • soil depth; • soil texture (field textural analysis); • watertable (depth to); • cation exchange capacity (CEC); • sodicity (Exchangeable Sodium Percentage ESP); and 	<input type="checkbox"/>	

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Report Element	Detailed Requirements	Completed
	<ul style="list-style-type: none"> Sodium Absorption Ratio (SAR). <p>Detailed explanation of the level of constraint with regards to DWM and recommended mitigation measures to overcome these constraints.</p> <p>Soil permeability testing conducted in situ for the soil within the available effluent management area as per constant head well permeameter method (AS/NZS 1547:2012) can be undertaken if desired, otherwise soil texture classification and application of effluent using the loading rates within the AS/NZS 1547:2012 is satisfactory.</p>	
	Detailed review of available published soils information for the site. Soil landscapes and different soil facets should be mapped on the Site Plan.	<input type="checkbox"/>
3. Available Area and Setback Distances	Calculation of available effluent management area and location on Site Plan.	<input type="checkbox"/>
	Discussion regarding the achievability of the applicable setback distances (Table 5 of the EPA Code of Practice 891.4 (2016)). Justification required.	<input type="checkbox"/>
4. LCA Confirmation	Contact Council if the LCA assessor disagrees with the final Sensitivity Rating for the site.	<input type="checkbox"/>
5. Cumulative Impacts	Using the desktop and site assessment information for the site, comment on any possible cumulative detrimental impacts that the development may have on beneficial uses of the surrounding land, surface water and groundwater.	<input type="checkbox"/>
6. System Selection and Design	Design maximum wastewater load (generation rates) and organic load for the proposed development.	<input type="checkbox"/>
	Description of existing system (if applicable).	<input type="checkbox"/>
	Target effluent treatment quality.	<input type="checkbox"/>
	Assess the capacity of the land to assimilate the treated wastewater based on the data collected and the total dissolved salts (TDS) in the potable water supply (see Section 2.3.4 and Appendix H of EPA Code of Practice 891.4 (2016)) for both levels of effluent quality, primary and secondary.	<input type="checkbox"/>
	Description and location of applicable DWM treatment system options (refer to the EPA website for list of currently approved systems).	<input type="checkbox"/>
	List of effluent land application options and detailed description of preferred option and location.	<input type="checkbox"/>
	Monthly water balance sizing the preferred effluent land application area. 70 th percentile climate data must be used for your location within the relevant Climate Zone, as detailed in Section 6.2.2 of Technical Document. A copy of the 70 th percentile climate data is attached in Appendix C of the Technical Document. All inputs, results and justification to be shown in the report.	<input type="checkbox"/>
7. Mitigation Measures	<p>Detailed discussion of mitigation measures to overcome any site or soil constraints posed to the sustainable treatment and application of wastewater on-site. This may include the following:</p> <ul style="list-style-type: none"> Storm water management Soil amelioration; and Vegetation establishment and management. 	<input type="checkbox"/>
8. Site Management Plan	Description of ways to improve wastewater and DWM system performance for residents' reference.	<input type="checkbox"/>
	Operation and Management Plan.	<input type="checkbox"/>

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Report Element	Detailed Requirements	Completed
9. Conclusion	Conclusion summarising all the important design, sizing and mitigation requirements to ensure sustainable on-site DWM.	<input type="checkbox"/>
10. Site Plan Requirements	Site address, including lot number and street number.	<input type="checkbox"/>
	All title boundaries.	<input type="checkbox"/>
	All relevant zones and overlays and/or restrictions (e.g. Council zoning and overlays, including Environmental Significant Overlays and DWSCs).	<input type="checkbox"/>
	Type of catchment (i.e. potable or other special water supply catchment).	<input type="checkbox"/>
	North arrow.	<input type="checkbox"/>
	Location of groundwater bores.	<input type="checkbox"/>
	Contour lines (at maximum of 2m intervals), direction of slope and grade.	<input type="checkbox"/>
	Location of soil test pits or auger holes.	<input type="checkbox"/>
	Location of other utilities i.e. electricity, gas, telecommunications (which must be located outside the land application areas)	<input type="checkbox"/>
	Location of any significant site features e.g. rock outcrops or waterlogged regions.	<input type="checkbox"/>
	Location of intermittent and permanent surface waterways (dams, creeks, reservoirs and springs).	<input type="checkbox"/>
	Location of 1% and 5% Annual Exceedance Probability flood level contours lines (if applicable).	<input type="checkbox"/>
	Location, depth and specified use of groundwater bores on the site and adjacent properties from the register of the relevant Rural Water Corporation. Depth to groundwater table in winter (if less than 2.1m deep).	<input type="checkbox"/>
	Vegetation cover (can use aerial image as base map).	<input type="checkbox"/>
	Relevant setback distances as per Table 5 EPA Code of Practice 891.4 (2016).	<input type="checkbox"/>
	Location of existing and proposed buildings, sheds, driveways, paths and any other improvements.	<input type="checkbox"/>
	Available effluent management area(s).	<input type="checkbox"/>
	Location of proposed land application area (sized to scale).	<input type="checkbox"/>
	Location of proposed stormwater cut-off drains adjacent to the land application area.	<input type="checkbox"/>
	Location of proposed DWM system (nominal).	<input type="checkbox"/>
Location of reserve land application area (sized to scale).	<input type="checkbox"/>	
11. Appendices	Copy of the monthly water balance calculations.	<input type="checkbox"/>
	Figures.	<input type="checkbox"/>
	Site Plan.	<input type="checkbox"/>
	Soil bore logs for all test pits or auger holes.	<input type="checkbox"/>
	Certificate of Title (s) for lot (plan).	<input type="checkbox"/>
	Proposed building plans.	<input type="checkbox"/>
	Planning Permit application (where applicable).	<input type="checkbox"/>

Table C3: Minimum Requirements for a Comprehensive LCA and Report

Report Element	Comprehensive Requirements	Completed
1. Introduction and Background	Report summary/ executive summary.	<input type="checkbox"/>
	Confirmation of Sensitivity Rating.	<input type="checkbox"/>
	Confirmation of any relevant sensitivity overlays (e.g. landslip) as per communications with Council.	<input type="checkbox"/>
	Confirmation that lot(s) meets minimum lot size criteria for COS Planning Scheme Zone.	<input type="checkbox"/>
	Current land use and development overview (including occupancy); single lot, increase in building entitlements (subdivision) or non-domestic development.	<input type="checkbox"/>
	Name, contact details and qualifications (insurances) of LCA assessor (author).	<input type="checkbox"/>
	Site location (including address and lot details) and owner.	<input type="checkbox"/>
	Lot area.	<input type="checkbox"/>
	Proposed/existing water supply.	<input type="checkbox"/>
	Availability of sewer.	<input type="checkbox"/>
	Locality map showing the site in relation to surrounding region.	<input type="checkbox"/>
Site survey plan (2m contours) will need to be conducted by a qualified surveyor.	<input type="checkbox"/>	
2. Site Inspection and Field Investigations	Gather information on relevant Council, Water Corporation, Catchment Management Authority and State Government requirements, including restrictions and caveats on title, and planning/building/bushfire/flood controls, e.g. zones and overlays. Note Environmental Significant Overlays, potable water supply and DWSCs. Impose this information on a base map (or site plan) which shows their location with respect to title boundaries.	<input type="checkbox"/>
	Broad overview of locality and landscape characteristics that may pose a constraint to the sustainable application of wastewater on the Site and adjacent land, e.g. climatic information, groundwater and bore water information. (Refer to stage 3 pp.35 EPA Code of Practice 861.4 (2016)).	<input type="checkbox"/>
	Details of date, time and methodology of site inspection and field investigations.	<input type="checkbox"/>
	Site assessment that considers all of the parameters as per Table 1 of the Victorian LCA Framework (2014). Detailed explanation of the level of constraint with regards to DWM and recommended mitigation measures to overcome these constraints.	<input type="checkbox"/>
	Minimum of two soil test pits or auger holes within the identified available effluent management area with additional test pits required for more than one soil type (multiple soil landscapes or facets) as per the current EPA Code of Practice.	<input type="checkbox"/>
Soil assessment that considers all of the parameters in Table 2 of the Victorian LCA Framework (2014): <ul style="list-style-type: none"> • colour and mottling; • electrical conductivity; • Emerson Aggregate Class; • permeability and design loading rate (using soil texture); • pH; • rock fragments; • soil depth; • soil texture (field textural analysis); • watertable (depth to); • cation exchange capacity (CEC); and • sodicity (Exchangeable Sodium Percentage ESP). 	<input type="checkbox"/>	

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

Report Element	Comprehensive Requirements	Completed
	<p>Phosphorous Sorption Capacity is also required to be measured for the soil to which the effluent will be applied to.</p> <p>Detailed explanation of the level of constraint with regards to DWM and recommended mitigation measures to overcome these constraints.</p> <p>Soil permeability testing conducted in situ for the soil within the available effluent management area as per constant head well permeameter method (AS/NZS 1547:2012) must be undertaken to determine the sustainable daily effluent loading rates.</p>	
	Detailed review of available published soils information for the site. Soil landscapes and different soil facets should be mapped on the Site Plan.	<input type="checkbox"/>
3. Available Area and Setback Distances	Calculation of available effluent management area and location on Site Plan.	<input type="checkbox"/>
	Discussion regarding the achievability of the applicable setback distances (Table 5 of the EPA Code of Practice 891.4 (2016)). Justification required.	<input type="checkbox"/>
4. LCA Confirmation	Contact Council if the LCA assessor disagrees with the final Sensitivity Rating for the site.	<input type="checkbox"/>
5. Cumulative Impacts	Using the desktop and site assessment information for the site, comment on any possible cumulative detrimental impacts that the development may have on beneficial uses of the surrounding land, surface water and groundwater.	<input type="checkbox"/>
6. System Selection and Design	Design maximum wastewater load (generation rates) and organic load for the proposed development.	<input type="checkbox"/>
	Description of existing system (if applicable).	<input type="checkbox"/>
	Target effluent treatment quality.	<input type="checkbox"/>
	Assess the capacity of the land to assimilate the treated wastewater based on the data collected and the total dissolved salts (TDS) in the potable water supply (see Section 2.3.4 and Appendix H of EPA Code of Practice 891.4 (2016)) for both levels of effluent quality; primary and secondary.	<input type="checkbox"/>
	Description and location of applicable DWM treatment system options (refer to EPA website for list of currently approved systems).	<input type="checkbox"/>
	List of effluent land application options and detailed description of preferred option and location. Land application area to be sized on the most limiting balance as detailed below.	<input type="checkbox"/>
	<p>A water balance is required to size the preferred effluent land application area for the proposed development scenario.</p> <p>A monthly water balance using the prescribed 70th percentile climate data must be used for your location within the relevant Climate Zone, as detailed in Section 6.2.2 of the Technical Document. Alternately, a daily water balance model (i.e. MEDLI) using a minimum 30-year data period may be undertaken. A copy of the 70th percentile climate data is attached in Appendix C of the Technical Document.</p> <p>All inputs, results and justification to be shown in the report.</p>	<input type="checkbox"/>
	Undertake an annual nutrient balance (refer to pp.33 MAV (2014) for example methodology) for the proposed development scenario. All inputs, results and justification to be shown in the report.	<input type="checkbox"/>
	Prepare a site specific detailed hydraulic design for the land application area suitable for supplier quotation and construction.	<input type="checkbox"/>

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

Report Element	Comprehensive Requirements	Completed
7. Mitigation Measures	Detailed discussion of mitigation measures to overcome any site or soil constraints posed to the sustainable treatment and application of wastewater on-site. This may include the following: <ul style="list-style-type: none"> • Storm water management • Soil amelioration; and • Vegetation establishment and management. 	<input type="checkbox"/>
8. Site Management Plan	Description of ways to improve wastewater and DWM system performance for residents' reference.	<input type="checkbox"/>
	Operation and Management Plan.	<input type="checkbox"/>
9. Conclusion	Conclusion summarising all the important design, sizing and mitigation requirements to ensure sustainable on-site DWM.	<input type="checkbox"/>
10. Site Plan Requirements	Site address, including lot number and street number.	<input type="checkbox"/>
	All title boundaries.	<input type="checkbox"/>
	All relevant zones and overlays and/or restrictions (e.g. Council zoning and overlays, including Environmental Significant Overlays and DWSCs).	<input type="checkbox"/>
	Type of catchment (e.g. potable or other special water supply catchment).	<input type="checkbox"/>
	North arrow.	<input type="checkbox"/>
	Location of groundwater bores.	<input type="checkbox"/>
	Contour lines (2m intervals from survey plan or Council provided data), direction of slope and grade.	<input type="checkbox"/>
	Location of soil test pits or auger holes.	<input type="checkbox"/>
	Location of other utilities i.e. electricity, gas, telecommunications (which must be located outside the land application areas)	<input type="checkbox"/>
	Location of any significant site features e.g. rock outcrops or waterlogged regions.	<input type="checkbox"/>
	Location of intermittent and permanent surface waterways (dams, creeks, reservoirs and springs).	<input type="checkbox"/>
	Location of 1% and 5% Annual Exceedance Probability flood level contours lines (if applicable).	<input type="checkbox"/>
	Location, depth and specified use of groundwater bores on the site and adjacent properties from the register of the relevant Rural Water Corporation. Depth to groundwater table in winter (if less than 2.1m deep).	<input type="checkbox"/>
	Vegetation cover (can use aerial image as base map).	<input type="checkbox"/>
	Relevant setback distances as per Table 5 EPA Code of Practice 891.4 (2016).	<input type="checkbox"/>
	Location of existing and proposed buildings, sheds, driveways, paths and any other improvements.	<input type="checkbox"/>
	Available effluent management area(s).	<input type="checkbox"/>
	Location of proposed land application area (sized to scale).	<input type="checkbox"/>
Location of proposed stormwater cut-off drains adjacent to the land application area.	<input type="checkbox"/>	
Location of proposed DWM system (nominal).	<input type="checkbox"/>	
Location of reserve land application area (sized to scale).	<input type="checkbox"/>	
11. Appendices	Copy of the water (hydraulic) balance calculations.	<input type="checkbox"/>
	Copy of the nutrient balance calculations.	<input type="checkbox"/>
	Figures.	<input type="checkbox"/>
	Site Plan.	<input type="checkbox"/>

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

Report Element	Comprehensive Requirements	Completed
	Soil bore logs for all test pits or auger holes.	<input type="checkbox"/>
	Copy of the Survey Plan.	<input type="checkbox"/>
	Certificate of Title(s) for lot (plan).	<input type="checkbox"/>
	Proposed building plans.	<input type="checkbox"/>
	Planning Permit application (where applicable).	<input type="checkbox"/>

Appendix D

Example System Inspection Pro-forma

Colac Otway Shire Domestic Wastewater Management Plan – Operational Plan

Date & Time of Inspection	GPS Coordinates of LAA			Aspect:
	South	East	Owner Present	
Property Address				
Property Owners/Contact				
Inspected By				
Inspection Protocol				
Risk Rating	Low (1)	Medium (2)	High (3)	Upgrades Required / Comments
Treatment System				
Grease Trap				
Is Grease trap adequately sized, maintained and functioning?	Yes	No		
Greywater				
Is greywater directed to street/drain?	No		Yes	
If fitted, is greywater diversion device operating correctly?	Yes	No	No	
Septic Tank				
Is the tank(s) accessible for inspection and maintenance?	Yes	No		
Do the tank(s) and lid(s) appear structurally sound?	Yes		No	
Is the tank(s) adequately sealed?	Yes		No	
Is the tank area subject to stormwater or groundwater inundation?	No		Yes	
Do any tank(s) require urgent repair or replacement?	No		Yes	
Tank dimensions:				
Type	Plastic	Concrete	Other:	
Volume (L)				
Baffle?	Yes	No	Damaged	Damaged
Outlet height (mm)				
Liquid height (mm)				
Scum Depth (mm)				
Sludge Depth (mm)				
Operation:				
Are Both T pieces (junctions) attached and working?	Yes	No		
Does the tank require desludging?	No	Yes		
Is septic tank providing adequate anaerobic treatment?	Yes	No	No	
Pump/pump wells/controls				
Is the pumpwell(s) of adequate capacity (e.g. emergency storage)?	Yes	No		
Is the system fitted with a high level alarm?	Yes		No	
Are there any electrical hazards / issues with the system?	No		Yes	
Is there a suitable control system for the pump?	Yes	No		
Is the pump operational and in a satisfactory condition?	Yes	No	No	
Is pump well in satisfactory condition? (Yes - Low, No - Medium or High)	Yes	No	No	
AWTS				
Is the AWTS operating satisfactorily? (Yes - Low, No - Medium or High)	Yes	No	No	
Are the blowers working?	Yes	No		
Is there sludge or scum accumulation in aeration chamber, clarification chamber or irrigation chamber?	No	Yes		
Is the chlorine dispenser filled and functioning?	Yes	No	No	
Residual Chlorine (mg/L)				
Is system regularly serviced by a contractor?	Yes	No	No	
Land Application Area				
Absorption Trenches/Beds				
Dimensions (m)	Slope (%) approx.	<8%	8-12%	>12%
Is the land application area of adequate size?	Yes	No	No	No
Is there a suitable vegetation cover over the land application area?	Yes	No	No	No
Is there adequate exposure of the land application area? (i.e. not too shaded, or southerly aspect?)	Yes	No	No	No
Is the land application area wet or boggy?	No	Yes	Yes	Yes
Is there evidence of surface ponding or runoff from the land application area?	No	Yes	Yes	Yes
Is the area prone to poor drainage, flooding or high groundwater?	No	Yes	Yes	Yes
Are there any damaged or collapsed sections of the land application area?	No	Yes	Yes	Yes
Is there evidence of or access for vehicle and animal traffic?	No	Yes		
Does the land application area appear to be level and in line with contours?	Yes	No	No	No
Are buffer distances to trenches/beds adequate?	Yes	No	No	No
Surface/Subsurface Irrigation				
Dimensions (m ²)	Slope (%) approx.			
Is the land application area wet or boggy?	No	Yes	Yes	Yes
Is there evidence of surface ponding or runoff from the land application area?	No	Yes	Yes	Yes
Are buffer distances to irrigation area adequate?	Yes	No	No	No
Are all sprinklers working?	Yes	No	No	No
Overall Assessment				
Were you able to locate and access the whole system?	Yes	No	No	No
Was the system discharging effluent to the ground surface in an unsatisfactory manner?	Yes	No	No	No
General Condition of system	Good (Low) Satisfactory (Medium) Unsatisfactory (Hi)	Good	Satisfactory	Unsatisfactory
Proximity to Sensitive environments (streams, rivers)	>100m	<50m		
Located within a drinking water catchment? Y/N Distance to reservoir/stream:				
Overall Highest Risk Rating				
Are works required on the system?	Minor	Moderate	Major	Nil
Details of Required Works				



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Colac Otway Shire Council

Domestic Wastewater Management Plan

Technical Document

REVISED 2015 PLAN

December 2021

Prepared for: Colac Otway Shire Council

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Document Control Sheet

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Author:	Jasmin Kable				
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Job Reference:	1307 COS Review DWMP_Technical Document_011.docx				
Synopsis:	This document has been developed to accompany and direct the Operational Plan (revised 2015) to assist with detailed assessment of lots within the Shire to accommodate wastewater on-site. Together, both documents form the Domestic Wastewater Management Plan (DWMP). It provides additional detail and guidance on the relevant background documents (codes, policies, plans, legislation, regulations and standards) and the various constraints which impact upon or, is impacted upon, by domestic wastewater management (DWM) in the Shire.				
Client Details					
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Checked by: Mark Saunders			Issued by: Jasmin Kable		

Disclaimer

The information contained in this report is based on independent research undertaken by Whitehead & Associates Environmental Consultants Pty Ltd (W&A). To our knowledge, it does not contain any false, misleading or incomplete information. Recommendations are based on an appraisal of site conditions subject to the limited scope and resources available for this project, and follow relevant industry standards. The work performed by W&A included a limited system audit and site and soil investigation in addition to a desktop review, and the conclusions made in this report are based on the information gained and the assumptions as outlined. Under no circumstances, can it be considered that these results represent the actual conditions throughout the entire Shire due to the regional scale of this study.

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Document Certification

This Domestic Wastewater Management Plan has been prepared following the standards and guidelines set out in the following documents, where applicable:

- EPA Victoria (2016) 891.4 Code of Practice – *Onsite Wastewater Management*;
- Department of Sustainability and Environment (2012) *Planning permit applications in open, potable water supply catchment areas*;
- EPA Victoria (2018) *State Environmental Protection Policy: Waters of Victoria*;
- Municipal Association of Victoria (2014) *Victoria Land Capability Assessment Framework*, 2nd Ed; and
- AS/NZS 1547:2012 *On-site Domestic Wastewater Management* (Standards Australia/ Standards New Zealand, 2012).

To our knowledge, it does not contain any false, misleading or incomplete information. Recommendations are based on an honest appraisal of the sites' opportunities and constraints, subject to the limited scope and resources available for this project.

Supporting Author

Supporting technical contribution for this document was provided by Dr. Robert Van de Graaff (van de Graaff and Associates). Dr. Van de Graaff undertook detailed (field) soil investigation and has provided primary soil data and interpretation which has been utilised in the development of the methodology outlined in this document.

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Acronyms

AEP	Annual Exceedance Probability
ARI	Annual Recurrence Interval
AHD	Australian Height Datum
AWTS	Aerated Wastewater Treatment System
CMA	Catchment Management Authority
CA	Certificate of Approval
COS	Colac Otway Shire Council
DEM	Digital Elevation Model
DEPI	Department of Environment and Primary Industries (now known as DELWP)
DELWP	Department of Environment, Land, Water and Planning
DIR	Design Irrigation Rate
DLR	Design Loading Rate
DSE	Department of Sustainability and the Environment (former)
DSM	Decentralised Sewage Model
DWM	Domestic Wastewater Management
DWMP	Domestic Wastewater Management Plan
DWSC	Declared Water Supply Catchment
EPA	Environment Protection Authority
GIS	Geographic Information System
GMA	Groundwater Management Area
HPO	Health Protection Officer
LAA	Land Application Area
LCA	Land Capability Assessment
LGA	Local Government Area
LPED	Low-Pressure Effluent Distribution System
LRA	Land Resource Assessment
MAV	Municipal Association of Victoria
PIC	Plumbing Industry Commission
SEPP	State Environment Protection Policy
SILO	Scientific Information for Land Owners
VCAT	Victorian Civil and Administrative Tribunal
VVG	Visualising Victoria's Groundwater (Project)
WC	Water Corporation(s)
WMIS	Water Measurement Information System
WSPAs	Water Supply Protection Area(s)

1 Introduction

This document forms the Domestic Wastewater Management Plan (DWMP) together with the Operational Plan (2015), and has been prepared in order to assist with the detailed assessment of unsewered (developed and undeveloped) lots in the Colac Otway Shire municipal area (COS or “the Shire”). It provides additional detail and guidance on relevant background documents (codes, policies, plans, legislation, regulations and standards), an overview of on-site domestic wastewater management (DWM) within COS, the various constraints which impact upon or are impacted by on-site DWM, system sizing tables and DWM sensitivity analysis for locality and town/settlement prioritisation. The document also provides guidance for sustainable development in unsewered areas as detailed in the individual Locality Reports.

The amended *Environment Protection Act 2017* and *Regulations 2021* provide a foundation for a transformation of Victoria’s environment protection laws and EPA. It includes a new approach for the prevention of harm under ‘General Environmental Duty’ (GED). There will be inherent changes to the way wastewater is managed in Victoria over the next few years, with the repeal or amendment of the SEPP (Waters) 2018 yet to be determined in light of the amended *Environment Protection Act 2017*.

2 Council Policies and Plans

The DWMP has been developed to complement other Council policies and plans through the actions identified in the Operational Plan. The following is a brief outline of the various Council plans which have been included in the development of this DWMP.

2.1 Council Plan 2021 – 2025

Council’s Vision Statement applies to all Council policies including the DWMP. The Strategic Vision of COS is:

“By 2050, Colac Otway Shire will be a destination where people come to appreciate our unique and diverse environment and friendly communities. We value the wisdom of this land’s first caretakers, the Gulidjan and Gadabanud peoples, and recognise all those who have cared for the land since. We work to preserve what makes our place special. We focus on environmental sustainability to protect our precious natural assets. We are a proud and resilient community that values our welcoming spirit. We embrace new people, new business, new ideas. Our region is a great place to learn, live, work and play” (COS, 2050)

The Vision and Mission statements will be achieved with the Council Plan structured around four key themes:

1. Valuing our natural and built environment – we mitigate impacts to people and property arising from climate change; we operate sustainably with a reduced carbon footprint; protect and enhance the natural environment; we will satisfy our community’s reasonable expectations to reduce waste going to landfill, increase resource recovery and minimise waste charges; and provide and maintain an attractive and safe built environment;
2. Strong and resilient economy – affordable and available housing will support our growing community and economy; attract, retain and grow business in our Shire; key infrastructure investment supports our economy and liveability; Colac Otway Shire is a destination to visit; grow the Colac Otway Shire’s permanent population by at least 1.5%;

3. Healthy, inclusive and connected community – all people have opportunity to achieve and thrive our Shire; people are active and socially connected through engaging quality spaces and places; we are safe, equitable and inclusive community; and
4. Strong leadership and management – we commit to a program of best practice and continuous improvement; we are a financially robust organisation; we provide exceptional customer service; and we support and invest in our people.

The Council Plan outlines outcomes which must be achieved in line with the key values; these outcomes will be aligned with the DWMP.

2.2 Municipal Public Health and Wellbeing Plan 2021 – 2025

The Colac Otway Shire Municipal Public Health and Wellbeing Plan has now been incorporated into the Council Plan 2021-2025 and it aims to enhance the health and wellbeing of the residents of COS. The main priorities in this plan are categorised into the following themes: improving mental health and wellbeing, gender equity, increasing active living, tackling climate change and its impact on health, and preventing all forms of violence.

2.3 Colac Otway Planning Scheme

The Colac Otway Planning Scheme, approved under the *Planning and Environment Act 1987*, sets out planning policies for the municipality, and contains information about zones, overlays and other provisions which affect how land can be used and developed in COS. It identifies triggers for planning permit applications, and outlines application requirements and decision guidelines for the use, subdivision and development of land in the different zones.

On land where DWM is required, a planning application may need supporting information such as a Land Capability Assessment (LCA) to show that the lot can accommodate a DWM system. Almost all applications within DWSCs must be referred to the relevant Water Corporation (WC). If the WC objects to the application, it must be refused by Council.

Under Section 173 of the *Planning and Environment Act 1987*, Council can enter into a legal agreement with the owner of land in its municipality, with the agreement binding the owner to the covenants specified in the agreement. Such S173 agreements can be used to prohibit, restrict or regulate the use of land, or can relate to conditions subject to which the land may be used or developed for specified purposes. A Planning Permit condition can require the owner to enter such a legal agreement, which is subsequently registered on the title of the property. Such a legal agreement may be required by Council or the WC's when planning applications are located within a DWSCs. In such cases, the Section 173 agreements often contain maintenance requirements for DWM systems, which on the sale of a property, transfer to an incoming owner.

2.4 Environment Strategy 2010 – 2018

The Colac Otway Shire Environment Strategy aims to protect and enhance the environment, promote sustainable use of natural resources, strengthen partnerships with key stakeholders and build community capacity through environmental education and awareness raising programmes. The Strategy is not an action plan, but does set targets and outline a process for identifying the actions that need to be undertaken in order to achieve the targets. The Strategy sets 41 targets for four (4) major areas: Council Managed Land; Planning and Regulations, Physical Works and General Services; and Education and Awareness Raising Programmes. Wastewater is addressed in the Planning and Regulations Targets 7 and 8;

- Implement recommendations in the COS Domestic Wastewater Management Plan, review the Plan's performance and renew by 2014; and
- Develop and implement standards for DWM systems near waterways and in water supply and ground water recharge areas by 2014.

2.5 Environment Action Plan 2013 – 2015

The Environment Action Plan was developed from the adopted Environment Strategy (2010-2018) to form the basis of integrated action across all areas of the Shire's operations and are a further refinement of the targets as set out in the Strategy. The Action's specified in this Plan pertaining to DWM are the responsibility of the COS Public Health Unit.

Target 7 Action; implement an education program, and ensure monitoring and maintenance of Township DWM systems.

Target 8 Actions; investigate funding opportunities to develop a local standard for DWM systems near waterways, water supply and groundwater, and develop DWM standards for all areas near waterways, water supply and groundwater.

2.6 Rural Living Strategy 2011

Council adopted a Rural Living Strategy in 2011 which considered the development potential of smaller towns/settlements in the municipality. The towns of Forrest, Birregurra, Beeac, Alvie, Cororooke and Coragulac were all identified as having moderate growth potential. Gellibrand, Lavers Hill and Beech Forest had "deferred" growth potential due to potential bushfire and water catchment constraints.

2.7 Council Budget

The Council Budget sets out finances for all Council projects and their management. To implement the DWMP, the Budget will need to provide scope for the management of the audit and inspection program required as part of the DWMP. The Budget currently allocates fees and charges for Septic Tank Permits. These fees and charges cover resources required to assess, discuss, permit the installation, inspect, and approve the use of new and modified systems. Council may need to consider options for implementing appropriate ongoing fees and charges for all unsewered properties to provide resources to undertake Actions and programs within the Operational Plan.

3 Legislation and Regulation

3.1 Legislation

3.1.1 Local Government Act 2020

The *Local Government Act 2020* recently received Royal Assent on the 1989 Act and is the most ambitious reform in the local government sector in 30 years. The new act will improve local government democracy, accountability and service delivery for all Victorians. The *Local Environment Act 2020* outlines the provisions under which Council operates and empowers Councils to have local laws and regulations for DWM. The *Local Government Act 2020* empowers Council to enact local laws and set special charges for Council activities. Council can use these powers to develop local regulations for wastewater management, as long as these regulations are consistent with state policy and legislation and to raise revenue for its wastewater management programs.

3.1.2 Environment Protection Act 2017

The Environment Protection Act 2017 replaced the superseded 1970 Act and has recently been amended and will come into force on 1 July 2021 (version 005). The Environment Protection Act is used to regulate DWM systems within Victoria. Council will be utilising the new EPA '*Regulating onsite wastewater management systems: local government toolkit*' (publication 1974: 2021) to assist them in regulating DWM systems within COS and adhering to the new Act.

The main change that the new Act brings is the prevention of harm, whereas the superseded 1970 Act focused on the consequences of harm. The pollution offences have been replaced by 'General Environmental Duty' (GED) which is the primary way that EPA will achieve a prevention to harm approach. GED is supported by new duties to notify EPA of certain pollution incidents and the duty to clean up after an incident, if it occurs. The GED makes it clear that it is the owner or authorised or unauthorised entities responsibility to reduce the risk to the environment. A delegation of functions and powers from EPA to Council under the new Act will allow for Council to take action under the GED.

The Act is supported by Regulations which provide criteria for Council to consider when assessing DWM permit applications and enforcement. The following sections outline the requirements specific to DWM within the proposed final Regulations:

- Part 3.3 – Permits (regulations 25 to 35);
- Part 5.7 – On-site Wastewater Management Systems (regulations 159 to 163);
- Part 8.4 – Permit fees (regulations 186 to 200); and
- Schedule 1 – Prescribed permission activities and fees.

Under the Regulations, Council will continue to administer permits for construction, installation, or alteration of a DWM system with a capacity up to 5,000L/day.

A new section has been incorporated into the proposed final Regulations, Part 5.7, for persons in management or control of land which a DWM system is located, including legacy systems that do not have a permit that were installed pre-1970 superseded Act. Persons have an obligation to take reasonable steps to maintain the DWM system in good working order, a duty to keep maintenance records, respond to any problems that arise, and notify Council of a failure and rectification steps.

As per Part 5.7 regulation 163, Council may order maintenance of a DWM system if they have received a notification under regulation 161(2), or has a reasonable belief that a DWM system poses, or may pose, a risk to human health or the environment or is not, or may not be, in good working order. Council will no longer be required to lodge a DWM report to the EPA at the end of each financial year.

3.1.3 Water Act 1989

Section 183 of the *Water Act 1989*, provides a Water Corporation (WC) with the power to inspect and monitor existing septic tank systems within their sewerage district, and if the system does not comply with the *Environment Protection Act 2017* (as amended) and the *Public Health and Wellbeing Act 2008*, then the WC can require the owner to connect to the sewer where it is available under Section 147 of the *Act*.

3.1.4 Safe Drinking Water Act 2003 and Regulation 2005

The *Safe Drinking Water Act 2003* and the associated Regulation 2005 requires a catchment to apply a multi-barrier approach to managing risks to water quality. This applies to both water suppliers and water storage managers, whom are required to:

- ensure that drinking water meets quality standards specified by the Regulators;
- prepare and implement a risk management plan;
- provide independent audits of their performance in implementing the plans;
- disclose various types of information relation to the quality of the drinking water they supply to the consumers; and
- report any known or suspected contamination of the drinking water to the Secretary of the Department of Health.

3.1.5 Planning and Environment Act 1987

The *Planning and Environment Act 1987* is 'enabling' legislation, with more detailed planning matters dealt with by subordinate instruments under the Act, such as the Victorian Planning Provisions, planning schemes, regulations and Ministerial Directions. Key components of the planning framework established by the Act include:

- The system of planning schemes that sets out how the land may be used and developed;
- The VPP, which provide the template for the construction and layout of planning schemes;
- The procedures for preparing and amending the VPP and planning schemes;
- The procedures for obtaining planning permits under planning schemes; and
- The procedures for settling disputes, enforcing compliance with planning schemes and other administrative procedures.

Planning schemes set out how land may be used and developed, including the requirements for obtaining planning permits. Where domestic wastewater is required, a planning permit may need supporting information such as a Land Capability Assessment (LCA) to show that the development can accommodate a DWM system.

All applications within drinking water catchments must be referred to the applicable WC. If the referral authority objects to the application it must be refused by Council.

As noted in Section 2.3 above, Under Section 173 of the *Planning and Environment Act 1987*, Council can require the preparation of a legal agreement. These agreements are often requested by Council or the Water Authorities when planning applications are located within a Declared Water Supply Catchment (DWSC). The Section 173 agreements often contain maintenance requirements for DWM systems, which on the sale of a property transfer to an incoming owner.

3.1.6 Public Health and Wellbeing Act 2008

The *Public Health & Wellbeing Act 2008* lists types of nuisances which may be dangerous to health or offensive; these nuisances include those arising from water or any matter which is dangerous to health or offensive, including wastewater. Council has a duty under this *Act* to remedy as far as is reasonably possible all nuisances arising in the Shire, and it is an offence to cause or allow a nuisance to occur. Under this *Act*, Council must investigate all complaints relating to a nuisance or the illegal management of domestic wastewater and take action to rectify the nuisance where necessary. This can include a direction from Council to the owner of a DWM system to cease to operate and/or upgrade their DWM system, by issuing a Prohibition Notice and/or an Improvement Notice to the owner.

3.1.7 State Environmental Protection Policy (Waters) 2018

There have been recent legislative changes to the State Environment Protection Policy (Waters) of the *Environment Protection Act 1970*, with a recent Victorian Government Gazette (No. S 499) released on 23 October 2018, and Parliamentary Advice released by the Victorian Auditor-General's Office (VAGO) on 'Managing the Environmental Impacts of Domestic Wastewater' Sept 2018.

The SEPP (Waters) provides a regulatory framework for the protection and management of water quality in Victoria, covering surface waters, estuarine and marine waters and groundwaters across the state.

The SEPP (Waters) imposes increased responsibilities for Council in managing DWM, and continues to require a Schedule 5 referral to the Water Corporations if located within a Declared Water Supply Catchment (DWSC) as per the *Catchment and Land Protection Act 1994*, with approvals to be issued for permits in accordance with the Ministers Guidelines (2012). The responsible authorities must ensure that permits are consistent with guidance provided in the Code of Practice (publication 891.4, 2016).

3.1.8 State Environmental Protection Policy Waters of Victoria

The SEPP Waters of Victoria provides a regulatory framework for the protection and management of surface water environments in Victoria. This SEPP has three main policy sections; beneficial uses, environmental quality objectives and attainment program. The SEPP aims to protect surface water for a number of reasons, including but not limited to, human consumption after appropriate treatment, human consumption of aquatic fauna, recreation, agriculture and aquaculture.

The discharge of domestic wastewater in a manner which could enter surface waters has the potential to impact on the use of the water for any of the beneficial uses described above. As such, the discharge of domestic wastewater must be in accordance with buffer distances outlined in the current EPA Code of Practice so as to minimise any potential negative impacts on surface waters.

Environmental quality objectives are used to indicate and measure if the beneficial uses are being protected. The use of water quality and biological indicators, flow measurement, sediment quality

and habitat indicators can be used in accordance with the policy to determine if the surface waters have been affected. The SEPP indicates the roles and responsibilities, and details actions and tools, for the protection of surface waters in Victoria.

This policy is used for assessing effluent disposal areas and in preparing LCAs. Clause 32 (b) allows EPA guidance and the current EPA Code of Practice to be mandatory. The policy requires regulatory authorities to assess the suitability of land with reference to EPA Publication 746.1 – Land Capability Assessment for On-site Wastewater Management and to ensure that permits comply with EPA Code of Practice and all EPA publications and bulletins.

There will be inherent changes to the way wastewater is managed in Victoria over the next few years, with the repeal or amendment of the SEPP (Waters) 2018 yet to be determined in light of the amended Environment Protection Act 2017.

3.1.9 State Environmental Protection Policy Groundwaters of Victoria

The SEPP Groundwaters of Victoria currently provides a regulatory framework for the protection and management of groundwater environments in Victoria. The reuse of domestic wastewater on-site can impact on groundwater via deep drainage. Careful design of systems can ensure impacts are minimised so that groundwater resources are not affected. The SEPP indicates the roles and responsibilities, and details actions and tools, for the protection of ground waters in Victoria. This policy requires effluent disposal to be carried out so as to protect groundwater. The preparation of a LCA must consider the potential impact, if any, on local and regional groundwater resources.

3.1.10 Catchment and Land Protection Act 1994

The *Catchment and Land Protection Act 1994* requires Catchment Management Authorities (CMAs) to prepare and implement a Regional Catchment Management Strategy, which includes:

- an assessment of long term requirements and the prioritisation of these requirements;
- identification of threats to environmental, economic and soil values; and
- identification of opportunities for improving natural resource management processes.

The Act empowers CMAs and defines their powers and functions. The developed Strategy influences and informs planning processes. DWSCs are declared under Schedule 5 of this Act, with planning applications referred to the relevant WA.

The Act also requires property owners to take reasonable steps to protect the catchment, with particular regards to water resources, avoid soil disturbance, weed growth and pests.

3.1.11 Victorian Building Regulations 2018

Under Part 8 Division 2 of the Regulations (Building work in special areas), Regulation 132 (Septic tank systems) applies as follows:

(1) The report and consent of the relevant council must be obtained to an application for a building permit that requires:

- (a) the installation or alteration of a septic tank system; or
- (b) the construction of a building over an existing septic tank system.

(2) The report and consent of the relevant council need not be obtained to an application for a building permit referred to in sub-regulation (1) if a permit for the construction, installation or alteration of the septic tank system that is relevant to the application has been issued under Section 53M(5) of the *Environment Protection Act 2017* (as amended).

3.2 Regulatory Authorities

3.2.1 Council

Council is responsible for issuing permits for new DWM systems under the *Environment Protection Act 2017 (as amended)*. Council is also responsible for the management of all DWM systems within the Shire; this includes the inspection of existing systems and ensuring compliance with Council and EPA requirements. Council is responsible for all DWM systems generating <5,000L/day. The legal requirements of Council include:

- Council must issue a permit to install/alter before a DWM system can be installed;
- Application for a permit to install/alter must be completed by the owner/builder/installer and submitted to Council for assessment;
- A Council officer assesses application and plans and conducts site inspections. Further information may be requested from applicant;
- Permit to install issued with approved plan and conditions;
- System must comply with permit conditions and relevant EPA Certificate(s) of Approval;
- System is inspected by a Council officer during installation; and
- Council must issue a permit of use before the system can be used.

In addition, Council can enforce upgrades of systems which are failing and potentially causing human or environmental health impact. This is discussed further in the Operational Plan of the DWMP.

3.2.2 Environment Protection Authority Victoria (EPA)

EPA Victoria will continue to regulate under the *Environment Protection Act 2017 (as amended)* what types of DWM systems are approved for use. The new legislation took effect on 1 July 2021. DWM treatment system brands and models will need to be certified by an accredited conformity assessment body as conforming to the relevant Australian Standard. This accreditation will be given by the Joint Accreditation System of Australia and New Zealand or any other accreditation body approved by the Authority (assessment body). The assessment body must certify the treatment system as conforming to the relevant Australian and New Zealand Standard. The appropriate standards for the different types of treatment systems is as follows:

- Septic tanks (and vermiculture systems) – AS/NZS 1546.1:2008, on-site domestic wastewater treatment units, Part 1: Septic tanks.
- Waterless composting toilets – AS/NZS 1546.2:2008, on-site domestic wastewater treatment units, Part 2: Waterless composting toilets.
- Secondary treatment systems – AS/NZS 1546.3:2017, on-site domestic wastewater treatment units, Part 3: Secondary treatment systems.
- Sand filters – AS/NZS 1546.3:2017, on-site domestic wastewater treatment units, Part 3: Secondary treatment systems and s459 exemption applications for transitional arrangements.
- Domestic greywater system – AS/NZS 1546.3:2016, on-site domestic wastewater treatment units, Part 4: Domestic greywater treatment systems.

EPA holds a register of the DWM systems with valid Certificates of Conformance within Victoria (www.epa.vic.gov.au/your-environment/water/onsite-wastewater). Transitional arrangements will also apply to previously issued certificates that had not expired by 1 July 2021. For innovative DWM systems, an exemption from these requirements may be granted to a permit applicant by EPA under section 459 of the Act.

As part of a permit application to Council, the applicant will need to include a copy of the certificate of conformity from a conformity assessment body.

The EPA has developed policies and Codes of Practice to regulate the use of DWM systems. These policies and codes include:

- SEPP Waters of Victoria;
- EPA 891.4 *Code of Practice – Onsite Wastewater Management*, 2016;
- EPA 746.1 *Land Capability Assessment – Onsite Wastewater Management*, 2003; and
- EPA 760 *Guidelines for Aerated Onsite Wastewater Treatment Systems*, 2002.

The EPA is responsible for the following activities related to wastewater management:

- Regulate the issuing of Certificates of Conformance for each DWM system type;
- Approval of commercial wastewater management systems with wastewater loading in the range of 5,000 – 100,000L/day (EPA Works Approval, as discussed in the Operational Plan will be replaced by development and operating licences unless an exemption applies);
- Licencing commercial wastewater management systems with wastewater loading above 100,000L/day, and systems which discharge effluent to surface waters (as discussed in the Operational Plan);
- Inspection of licenced commercial wastewater management systems and review of Annual Performance Statements for licenced commercial wastewater management systems;
- Compliance and enforcement activities for commercial wastewater systems;
- Developing policies and Codes of Practice;
- Provision of technical advice to Councils, owners and installers; and
- Possible referral authority for subdivisions.

3.2.3 Victorian Building Authority

The Victorian Building Authority (VBSA):

- Licenses all plumbers, drainers and septic tank installers across Victoria; and
- Regulates the installation of all plumbing works including internal plumbing works on septic tank systems.

3.2.4 Municipal Association of Victoria (MAV)

MAV has developed a model LCA report and procedures for undertaking a LCA, to assist land capability assessors and regulators. This has been developed in accordance with EPA Codes and AS/NZS 1547:2012.

3.2.5 Water Corporations

Water and sewerage services within COS are provided by Barwon Water, with water also supplied by Wannon Water to the Carlisle River town. This DWMP covers areas where reticulated sewer service is not provided by Barwon Water and, hence, are unsewered.

The WCs have interest in protecting the DWSCs which are susceptible to impact from DWM systems. Both Barwon Water and Wannon Water are statutory referral authorities under the *Planning and Environment Act 1987* for planning applications in the DWSCs within the southern region of the Shire. Where specified development or subdivision is proposed within a DWSC, the proposal must be referred to the relevant WC for assessment prior to Council issuing a planning permit. There are two types of referral authorities – a determining referral authority, which has the power to require a permit application to be refused or for certain conditions to be included in a permit, and a recommending referral authority, which can only comment on an application. Responsible authorities must consider the comments made by a recommending authority, but are not obliged to refuse the application or to include any conditions required by the authority. However, a recommending referral authority is able to seek a review at VCAT if it objects or it requests conditions that are not included by the responsible authority in the permit.

Clause 66 of the COS Planning Scheme identifies which authorities are determining authorities and which are recommending authorities. The schedule to Clause 66.04 of the COS Planning Scheme lists Barwon Water and Wannon Water (Water Authorities) as determining referral authorities in the DWSC areas along with Southern Rural Water within the Warrion Water Supply Protection Area. Corangamite CMA is the only recommending authority listed.

Where existing DWM systems are located in an area that has sewer available, the WC can require the property be connected to sewer if the system is found to be causing a health or environmental risk.

3.2.6 Department of Environment, Land, Water and Planning

The Department of Environment, Land, Water and Planning (DELWP) (formerly known as the Department of Environment and Primary Industries and Department of Sustainability and Environment) is responsible for the management of water resources, climate change, bushfires, public land, forests and ecosystems in Victoria. DELWP may be consulted by Council for specialist advice where a DWM system may impact on land or water resources.

3.2.7 Catchment Management Authority

COS falls within the Corangamite Catchment Management Authority (CMA) and has a large catchment area for a number of different water resources. Where DWM systems exist within sensitive catchments, close examination of a system, its operation and performance must be undertaken to ensure the protection of the asset. The CMA has policies and management tools to assist with the management of the waterways. The role of the CMA is:

- To ensure the sustainable development of natural resource based industries;
- To maintain and where possible, improve the quality of land and water resources;
- To conserve natural and cultural heritage;
- To involve the community in decisions relating to natural resource management within their region;
- To advise on matters relating to catchment management and land protection and the condition of land and water resources in the region; and

- To promote community awareness and understanding of the importance of land and water resources, their suitable use, conservation and rehabilitation.

3.3 Administrative Authorities

The Victorian Civil and Administrative Tribunal (VCAT) is a tribunal at which civil disputes, administrative decisions and appeals can be heard before a Judge or Tribunal Member. It provides a dispute resolution service for both government and individuals within Victoria.

In past cases throughout Victoria, VCAT has questioned the quality of LCAs for DWM, particularly where a site is located within a DWSC. VCAT has also questioned the rigour of some Council's evaluation of these LCAs, and how the minimum development guideline of 1 dwelling per 40 hectares should be applied in the DWSC.

3.4 Standards and Guidelines

3.4.1 EPA Code of Practice – On-site Wastewater Management

The EPA Code of Practice On-site Wastewater Management Publication 891.4 (EPA, 2016) outlines the measures which are required to sustainably manage household wastewater so as to minimise public health and environmental impacts. This Code is not limited to DWM systems; it also applies to systems at other premises including small scale commercial systems. The Code outlines planning requirements, system selection and system maintenance following installation.

3.4.2 Model Land Capability Assessment (2014)

The Municipal Association of Victoria Model Land Capability Assessment (2014) was revised to reflect the requirements of the current EPA Code of Practice and also provides further details on in-soil effluent assimilation processes and their influence on system design.

3.4.3 Land Capability Assessment (2003)

The Land Capability Assessment On-site Wastewater Management Publication 746.1 (2003) outlines the process to be undertaken when assessing a site for its suitability for DWM. An LCA must be conducted by a suitably qualified consultant experienced in on-site domestic wastewater land capability. Land capability assessors should follow the conservative and 'best practice' Model LCA Report (MAV, 2014). Council's role is to assess the land capability and risk assessment report, flow rates, land application calculations and design; it is not part of Council's role to undertake the calculations or design the land application system for the property owner.

3.4.4 AS/NZS 1547:2012 On-site Domestic Wastewater Management

AS/NZS 1547:2012 provides standardised guidance for the sizing, design and construction of Land Application Areas (LAAs). If there is an inconsistency between the Australian Standard (2012) and the current EPA Code of Practice, the Code takes precedence. Where the current EPA Code of Practice is silent on a topic, the relevant Australian Standard (2012) should be followed.

The Standard will be used to inform the selection of a suitable land application system, and where the standard sizing tables are not used, will inform the sizing of land application systems.

3.4.5 AS/NZS 1546.1-4 On-site Domestic Wastewater Treatment Units

AS/NZS 1546.1:2008- Part 1: Septic tanks

Specifies performance requirements and performance criteria for septic tanks, technical means of compliance and provides test specifications that enable septic tanks to be manufactured to comply with the performance requirements and performance criteria.

AS/NZS 1546.2:2008 – Part 2: Waterless composting toilets

Aims to: 1. Provide a set of performance statements that form a base against which any waterless composting toilet, conventional or innovative, may be assessed. 2. Provide manufacturers of waterless composting toilets with a performance evaluation test that will confirm the conditions under which it will function best (this will enable certification bodies to check that a product confirms to the Standard). 3. Ensure that the operation and maintenance of a waterless composting toilet is done in a safe manner that meets basic health requirements given that it involves the removal or composted or partially composted material.

AS/NZS 1546.3:2017 – Part 3: Secondary treatment systems

Sets out the requirements for the design, commissioning, performance and compliance testing of secondary treatment systems and advanced secondary treatment systems designed to treat domestic wastewater up to 5,000L/day. Guidance on installation, operation and maintenance is also provided.

AS/NZS 1546.4:2016 – Part 4: Domestic greywater treatment systems

Specifies requirements for the performance, design, installation and testing of domestic greywater treatment systems and associated fittings for single domestic dwellings where adequate backflow protection is provided in accordance with AS/NZS 3500.1.

3.4.6 AS/NZS 3500.1-4:2021 Plumbing and Drainage

The Plumbing and Drainage Standard AS/NZS 3500.1-4:2021 must be complied with for the installation of all plumbing work conducted on site.

Any design solution should be fitted and installed by a licensed plumbing contractor in compliance with the requirements of the Australian Standard (2021).

3.4.7 Guidelines for Development in Flood Affected Areas (DELWP, 2019)

The Guidelines for Development in Flood Affected Areas (DELWP, 2019) provide an assessment framework and method to assist decisions on development proposals in flood affected areas. Floodplain management authorities have the discretion to vary from the Guidelines to accommodate local floodplain issues.

Any development proposal should consider these Guidelines, with the design solution to meet the EPA Code of Practice 891.4 (2016) requirements in relation to flood prone land.

3.4.8 Auditor General of Victoria (2006) Protecting our environment and community from failing septic tanks

The Auditor General of Victoria released a performance audit report on *Protecting Our Environment and Community from Failing Septic Tanks* (2006). The aim of the report was to act as further stimulus in reducing the number of failing septic tanks throughout Victoria.

There is a historical legacy associated with failing DWM systems across the state which poses a threat to the environment and public health. A DWM system backlog program was generated, with rural Victoria falling under the Country Towns Water Supply and Sewerage Program (2005) initiated by DSE (now DELWP). The audit identified a clear need to improve backlog planning and

prioritisation processes, the legislation regulating septic tank management, and reporting and accountability mechanisms.

Records management and enforcement are two essential approaches to the management of environmental and public health risks caused by failing DWM systems. The following are the recommendations to reduce risks as outlined within the report:

- That the DSE, EPA and local government use available technical data sets such as LCAs, environmental monitoring, and cadastre (lot size) information to identify and monitor the impact of failing septic tanks across the state;
- That DSE, in consultation with CMAs, EPA, local government, DHS, water companies and authorities, establishes a mechanism to allow all stakeholders ready access to technical information such as LCA and environmental monitoring data, to improve risk identification and monitoring;
- That local government ensure that property owners and/or tenants understand that they have an existing septic tank system and that the owner has specific maintenance responsibilities for this system;
- That EPA, in consultation with local government, strengthens statutory requirements for local government to complete DWMPs by including an approval mechanism, periodic reviews and penalties for non-compliance; and

That local government reassess the resourcing levels needed to fulfil their legislative responsibilities for septic tanks.

4 Overview of DWM in Colac Otway Shire

4.1 The Local Environment

Colac Otway Shire is characterised by a unique environment including DWSCs covering approximately 30% of the Shire in the central region, large expanses of bushland and farmland, natural waterways and complex soils which all affect the way wastewater is managed on-site. There is lush hinterland, fertile grasslands, wetlands, rolling hills and volcanic cones. There are a number of State and National Parks in the Shire; notably, the Great Otway National Park and Otway Forest Park. The Shire contains three defined river Basins; Barwon, Corangamite and Otway Coast.

The Shire's major urban centre is Colac, with Apollo Bay being the other main centre in the south of the Shire. Most of the residential and commercial development outside of these towns exists within numerous small to medium sized towns/settlements, the majority unsewered. The Public Conservation and Resource Zones has been designated on public land, particularly along the coastline and the southeast of the Shire, with some privately owned land near the coast also in the Rural Conservation Zone. The Shire also has a significant percentage of land in Farming Zone, particular in the northern half of the Shire.

The diverse landscapes and climate patterns of the Shire present different opportunities and challenges for DWM. The constraints mapping (Section 6) describes in detail the different physical characteristics which are of most importance for sustainably managing treated effluent on-site, namely: climate, soils, slope, useable lot area and current Planning Scheme zone minimum lot size compliance.

4.1.1 Declared Water Supply Catchments

The Shire is drained by a number of large and small waterways, some of which enter the main drinking water supply for the Shire and surrounding regions. The protection of these waterways falls under the SEPP Waters of Victoria (2003). The active management of DWM systems in these special areas can help minimise any impacts on the surrounding environment.

The Shire incorporates a number of Declared Water Supply Catchments (DWSCs):

- Barwon Downs Wellfield Intake;
- Barham River;
- Gellibrand River;
- Gellibrand River South Otway;
- Upper Barwon;
- Pennyroyal Creek;
- Matthews Creek; and
- Gosling Creek.

These catchments provide drinking water to supply systems that are managed by Barwon Water and Wannon Water.

4.1.2 Soils

Site and soil investigations and sampling were conducted by Whitehead & Associates and Robert Van de Graaff & Associates on two separate occasions within the targeted localities and

towns/settlements to compare against the soil mapping collated by Robinson *et al.* 2003 LRA. The results were documented and adjusted accordingly in the soil suitability constraint mapping detailed in Section 6.2.6.

The geology and inherent soils of the Shire are separated into 3 distinct regions; the Volcanic Western Plains in the north underlain by extrusive igneous geology, a central region between Colac and Gellibrand that is underlain by variable geology including both marine, non-marine sedimentary and alluvial deposits, and the Otway Ranges which are part of the Otway Group and consist of non-marine sedimentary geology. Within the rural region in the north of COS, soils are predominantly gradational and texture contrast soils with clay subsoils derived from volcanic (basalt) lithology of the Western Volcanic Plains. The soils within the Otway Ranges are predominantly gradational soils with clay loam to loamy sand subsoils, while variable soil types occur within the central and coastal regions of the Shire. The specific soil types for the targeted localities and towns/settlements are discussed in the individual Locality Reports.

4.1.3 Climate

Climate, specifically rainfall and evaporation, plays a significant role in determining the appropriate loading rates of effluent and associated sizing of land application areas for DWM. The Shire was found to consist of four (4) distinct climate zones based on the climate analysis detailed in Section 6.2.2. The higher rainfall and low evaporation in the cooler months makes DWM problematic in all four climate regions.

4.1.4 Bushfire

Bushfire risk areas are not incompatible with DWM; however, bushfire risk has implications for planning town/settlement areas or allowing single dwellings, and can preclude residential intensification in certain areas.

4.2 DWM Systems and Trends in Colac Otway Shire

There are approximately 18,795 properties and 22,127 parcels within the Shire as of May 2021. The towns which are currently sewered are Colac, Elliminyt, Apollo Bay, Skenes Creek, Marengo and Birregurra, resulting in approximately 8,992 lots that are currently sewered. There are approximately 8,886 unsewered lots (properties and parcels within townships) which are not located within reasonable distance to a sewer, or to which no sewer connection exists; although it is not known how many of these are developed. Of these unsewered lots there have been 750 new unsewered lots that have been created since 2015. All non-developable lots (i.e. National Park, State Forest, waterway or road) were not included in the unsewered lot count and subsequent analyses.

Of those 8,886 lots, there are approximately 3,884 DWM systems (applications) on Council's permit management system. It is expected that there are a number of lots within the Shire which have DWM systems which are unknown to COS, either constructed without a permit, before permits were required, or where continuity of records has been interrupted during amalgamation. It is also expected that there are some lots with DWM systems with permits which are not recorded in the Council's current record system. Therefore, all of these numbers are approximate.

Historically, greywater was managed separately to blackwater and permitted to discharge off-site. Council no longer permits off-site discharge of greywater; however, there will be a number of systems still operating in this manner. The majority of older systems include a conventional septic tank (typically cylindrical, laid horizontally) with conventional absorption trenches. These can operate effectively in many cases; however, they do require regular maintenance. Common

practice with these systems in Victoria is to bury the septic tank underground. Thus, the septic tanks are often difficult to locate and many property owners cannot locate them. This typically results in inadequate maintenance of the septic tank and in particular inadequate desludging. Without periodic desludging (every 3-5 years depending on occupancy), tanks become overloaded with solids and do not provide adequate residence time for effluent to enable suspended solids to settle out. These solids then carry over to the land application system (typically an absorption trench) and usually cause the soil to block up over time, causing failure of the trench and surcharge of effluent to the ground surface.

Newer systems installed in COS tend to provide higher levels of treatment through the use of AWTs, sand filters or greywater treatment systems, and no longer discharge greywater separately. These systems provide secondary treatment of the wastewater before discharge to LAA irrigation systems. These systems do require more maintenance than a septic tank and servicing every three months is a requirement of the system Certificate of Conformance.

From July 2015 to June 2021, there had been 444 DWM system applications; including the following treatment types: 137 septic primary systems, 279 AWTs, 13 sand filter, 1 pump out, and 14 worm farm systems. These have been included into Table 1 and 2 below. There has also been 387 Permits to Install issued and 253 Certificates to Use (some not yet issued/ outstanding), and 2,998 service reports received. In addition, there has been 474 inspections of premises under the *Food Act 1984* and *Public Health and Wellbeing Act 2008*, with any DWM systems servicing these premises also inspected.

Considering the date of issue of many of the permits, there may be a large number of systems operating which do not meet current Council or EPA requirements. There have been 21 notified wastewater complaints to Council regarding DWM systems and associated land applications that have been registered in Council's Health Manager database from 2015- 2021. These were all located within the township of Forrest. The reticulation/sewering of Forrest would be beneficial as wastewater management complaints are received in this township. There are a number of site constraints that are present within these township properties. Protecting the environment and public health through the sewerage of Forrest would be supported.

Table 1 and Table 2 below provide a summary of the treatment and land application system types known in the Shire. The data was provided by COS (current June 2021) and represents currently registered DWM systems within COS's permit management system. For a number of reasons, there are a large number of unknown system types; however, this is generally not an indication of poor performance of these systems.

Table 1: DWM System Types

System Type	System Brand	Number of Systems Inspected
Septic Tank	Unknown	1,280
AWTS	Unknown	105
	AquaNova	58
	Aquacycle	3
	Aquatreat	3
	Alpha Treat DP10	4
	Biocycle	19
	BioFicient Series 1	5
	Biolytix	13
	Clearwater Bio-Filter	4
	Diston Bio-Rotor	1
	Econocycle	60
	Envirocycle	20
	Envirosepp	196
	FujiClean	44
	Global Roto-Moulding	1
	Graf	3
	Nova Clear	3
	Ozzi Kleen	232
	Ozzi Kleen greywater treatment system	16
	Septech	36
Supertreat	1	
Taylex ABS	56	
20EP Sewage Plant	2	
Composting	Biolet composting	1
	Clivus Multrum	3
	Ecolet	1
	Rota-loo	3
Sand Filter	Sand Filter	293
Other	Constructed Wetlands Reedbed	1
	Unknown	1
Worm Farm	A&A Worm Farm Waste Systems	38
	Zenplumb wormworx	1
	Unknown	6
Unknown	Unknown	779
Total (includes split treatment systems for blackwater & greywater)		3,292

Table 2: Land Application Methods

Effluent Disposal Method	Number of Systems
Drip Irrigation	224
Irrigation	75
Pressure Irrigation	95
Subsurface Irrigation	532
Trench	665
Transpiration Bed	47
ETA Bed	6
LPED	2
Wick Trench	42
Reln™ Drains	2
As Per Plan	41
Unknown	2,242
Pump out	5
Total	3,978

To date, 100% of systems with a permit in the Shire have been inspected by Council staff at least once. However, older systems without a permit, and those where tanks are buried and not able to be located, may not have been inspected by Council staff, either at the time of installation or since.

Since the appointment of a dedicated DWM officer from 2018-2021, 406 DWM audits have been undertaken as part of a targeted risk-based compliance monitoring program. The audits focused on the higher risk townships and those located within a DWSC; including, Beech Forest (95), Kennett River (152), Barwon Downs (67), Lavers Hill (41), and Gellibrand (51). The breakdown of the DWM treatment system types audited is as follows: AWTS 21%, septic (with trenches) 61%, worm farm 1.6%, sand filter 2.9%, composting toilet 0.8%, and unknown 11.3%. Of these DWM systems audited, only 71% contained effluent within the LAA; with 14% discharging to the surface on-lot and 15% discharging effluent off-site. There were an additional 110 audits undertaken by an external contractor in Forrest in 2017.

4.3 DWM System Inspections in Drinking Water Catchments

Site assessments were undertaken for a representative sample of properties in unsewered towns/settlements located in the Declared Water Supply Catchments (DWSCs) in September 2014. Approximately 10% of permanently-occupied households in selected towns/settlements were inspected, encompassing a typical range of land sizes. The results are considered to be broadly reflective of the towns/settlements assessed.

4.3.1 Wastewater Treatment Systems

The proportion of combined (blackwater + greywater) wastewater systems was often higher than expected, as well-established rural localities and associated towns/settlements commonly have separate greywater and blackwater systems. The newer houses (<20 years) were more likely to have combined systems than older houses (>20 years).

Regardless of whether blackwater and greywater streams were separate or combined, septic tanks were often unsatisfactory in terms of accessibility for maintenance, capacity and/or structural integrity. Frequently, septic tanks were buried under more than 150mm of soil, making identification and access difficult and in some cases, the resident/owner was not aware of the septic tank location. Most systems had not been serviced or pumped out within the past 10 years. Many septic tanks allowed stormwater ingress through cracks or gaps alongside the lids, which were typically installed at or below ground level.

There were relatively few secondary treatment systems or greywater treatment systems installed at the inspected properties.

4.3.2 Effluent Disposal Systems

Where greywater was managed separately, it was typically directed off-lot, either to the street drain at the front or beyond the back fence (to neighbouring public land or private agricultural land). Due to the cool weather and high rainfall of the inspection period (early spring), effluent did not drain away and was often present in stagnant odorous pools near the point of discharge. In many cases, the direct flow path to nearby surface waters, including drains, creeks and rivers, was less than 100m, posing a high risk to public and environmental health.

Blackwater or combined effluent septic tanks typically discharged to conventional absorption trenches. It was often difficult or impossible to determine the dimensions and layout of trench systems, particularly as wet weather did not cause preferential growth of grass over trenches (as is the case in drier seasons). However, it was evident that many if not most trenches were undersized for the expected wastewater load (number of bedrooms), particularly when the age and potential for 'creeping failure'¹ of the system is taken into account.

However, the existing trenches may be acceptable for the typically small number of occupants of most households (an average of approximately 2 – 2.5 across the Shire, according to ABS 2011 Census data); in which case upgrades may not be immediately necessary.

¹ Refers to the progressive clogging of a soil absorption (trench) system along a linear front from the loading end to its terminus.

5 Preliminary Data Collection (Stage 1)

The following section details data acquisition undertaken for the project and used to process information for input into the Sensitivity Analysis. Section 4.1 of the Operational Plan details the methodology and results of the Sensitivity Analysis and overarching Risk Assessment Framework. The background legislative/regulatory requirements are discussed above in Sections 2 and 3.

5.1 Data Acquisition

Geographic Information System (GIS) data, covering a wide variety of physical and planning components, has been acquired from COS, the Department of Environment, Land, Water and Planning (DELWP), Wannon Water, Barwon Water, Southern Rural Water, FedUni, Visualising Victoria's Groundwater (VVG) Project by University of Ballarat and the former Department of Sustainability and the Environment (DSE).

The data obtained included: property and parcel (for targeted localities only) information (cadastre), roads, local government area (LGA) and locality boundaries, sewer network, septic system information, topography, LIDAR, planning scheme zonings and overlays, surface elevation contours (a range of levels), hydrology and drainage, potable reservoirs and offtake points, climate data including rainfall and evapotranspiration, flood prone land (land subject to inundation), 1 in 100 year annual recurrence interval (ARI) flood level, soil landscape, lithology and land system information, groundwater bore locations and information, watertable depths and potable water catchment boundaries. All data was received during late 2014, except for the parcel cadastre layer which was updated as of June 2015. The Sensitivity Analysis was reviewed in 2021, with the revised cadastral data used to ensure that planning and development changes since 2015 were incorporated into the assessment and assigned a Sensitivity Risk Rating in relation to DWM. The only other layer that was also updated within the 2021 review was the COS planning scheme zonings and overlays. Comparisons with the other layers showed that there was no to little change in attributes between 2015 and 2021 so they were not updated within the Sensitivity Analysis.

The GIS data supplied was used for the development of individual constraint maps, informative maps and overlay maps of the Shire. This information provided a comprehensive basis for risk assessment.

5.2 Property (Parcel) Characterisation

Using cadastral data supplied by Council as part of the 2021 review, the analysis identified approximately 18,795 'properties', comprising of 22,127 'parcels' within the Shire. For analysis presented throughout the DWMP, the parcel dataset was used within the targeted localities and associated towns/settlements, with the property dataset used for the remainder of the Shire.

All non-developable lots (i.e. National Park, State Forest, recreation or conservation area, waterway or road etc.) are not included in the unsewered lot count and subsequent analyses in the DWMP. Towns which are currently sewered; including Colac, Elliminyt, Apollo Bay, Skenes Creek, Marengo and Birregurra, have also been excluded from the analysis.

Further, parcels that were <400m² in area were excluded from the analysis as they represent a land area too small to sustainably accommodate unsewered development (building/associated improvements and DWM) on-site. These areas most likely represent dataset irregularities (i.e.

artefacts), or Council or utility sites. If necessary, assumptions can be drawn from the constraints of the surrounding lots.

Based on the raw dataset, and the exclusions described, there are approximately **8,886 unsewered lots** which are not located within reasonable distance to a sewer, or to which no sewer connection exists; although it is not known how many of these are developed. Of these 8,886 unsewered lots; 750 new lots have been created since 2015. The regions excluded from analysis as outlined above are shown as white regions (cadastre) on the subsequent Constraint and Sensitivity Analysis maps.

Some discrepancies may be found between other published total lot numbers and those used, due to issues associated with lot amalgamation and subdivision over time and the current version of cadastre provided by the Council. The cadastre dataset used in this analysis will be progressively updated by Council to include the changes made to the lots within the Shire overtime; as exhibited during this 2021 review

6 GIS Data Analysis (Stage 2)

6.1 Domestic Wastewater Management Constraints

The individual constraint maps were created using a GIS, through QGIS™, which applied constraint classes for a number of built constraints and land capability constraints, including site and soil parameters. Five constraints were selected, which when consolidated, contribute to assessing the overall land capability for DWM systems, and were used as an input into the Sensitivity Analysis. These were selected based on the availability of digital data, and in the light of experience gained in designing and auditing DWM systems. The discrete constraints selected were:

- Climate;
- Useable Lot Area;
- Current Planning Scheme Zoning Minimum Lot Size Compliance (updated 2021 review);
- Slope (surface elevation); and
- Soil Suitability.

Sensitivity Analysis mapping refers to all unsewered lots, irrespective of whether they are developed or not. Lots that were excluded from the Sensitivity Analysis included those, sewerage, <400m² in area, zoned Public Park and Recreation Zone, Public Conservation and Resource Zone, and Road Zone as per the COS Planning Scheme, and areas that are categorised as waterbodies in the soil landscape mapping.

Thematic informative maps were also generated for existing lot size, current planning scheme zoning, vegetation, and geology. A sensitivity overlay was developed for landslip hazard and depth to groundwater to assist in refining the final risk rating as necessary for each lot as generated by the Risk Assessment.

There were other parameters that could have been considered in a more detailed constraint assessment; however, such data was not available for this Risk Assessment and the scope of the project did not permit its collection. Nevertheless, the constraints chosen were considered acceptable for the purpose of quantifying the constraints for the broad-scale Risk Assessment outlined in the Operational Plan. The maps have been produced for use at a broad scale (~1:330,000) and the limitations of the data used in the creation of these maps for input in the Sensitivity Analysis must be recognised and is detailed in Section 4.1 in the Operational Plan.

6.2 DWM Constraint Mapping

6.2.1 Constraint Classification Framework

For each of the constraints mentioned above, the degree of constraint in relation to DWM for all lots within the Shire was assessed and individually assigned a constraint class that is then used as an input into the Sensitivity Analysis. The criteria used to determine constraint categories were based on previous constraint assessments for unsewered towns in Australia undertaken by W&A and relevant Australian and Victorian guidelines for DWM.

Table 3 provides a rationale for the interpretations that were used to derive the constraint classes. The constraint classes give guidance towards the DWM requirements as stipulated by Council. For existing DWM systems, the level of constraint will commonly reflect the level of challenge that

has been experienced in managing the system. This information will help guide property owners and Council in the ongoing management of existing systems.

Table 3: Rationale for DWM Constraint Ratings

Constraint Class	Description
Very High	The constraint is present at a very high level and this significantly restricts opportunities for sustainable DWM. Traditional systems are 'typically' not appropriate and a detailed site and soil evaluation would be required to determine if DWM is achievable at all. If achievable, specialised, advanced treatment and land application systems may be required to overcome the constraint.
High	The constraint is present at a high level and this substantially restricts opportunities for sustainable DWM. Traditional systems (i.e. septic tanks and trenches) are 'typically' not appropriate and a detailed site and soil evaluation would be required to determine if they are supported. Otherwise, specialised, advanced treatment and land application systems may be required to overcome the constraint.
Moderate	The constraint is present at a moderate level and this limits the range of DWM options that are appropriate for the site. A detailed site and soil evaluation is required to identify the most appropriate DWM system and mitigation measures to be employed.
Low	The constraint is present at a low level and is unlikely to substantially limit opportunities for DWM. In most cases appropriately designed and managed conventional systems will be acceptable.

6.2.2 Climate

Climate, specifically rainfall and evaporation, plays a significant role in determining the appropriate loading rates of effluent and associated sizing of land application areas for DWM. The climate feature of most interest to DWM is the excess of rainfall over evaporation (more specifically evapotranspiration), which is denoted here as "moisture surplus". Moisture surplus can result in surface runoff, an increase in soil moisture storage (up to saturation point), and increasing deep infiltration to groundwater.

There are 21 Bureau of Meteorology (BoM) stations located throughout the Shire which record daily rainfall, including five on the Otway Ridge, which receives Victoria's highest average annual rainfall (up to 1,950mm/year). However, none of these stations measure pan evaporation. The closest station to the Shire that records pan evaporation is at Durdidwarrah, located approximately 45km from the north-eastern Shire boundary. Pan evaporation data for the period 1973-2000 is available at this station.

To overcome this data limitation, this project uses interpolated, gridded data from SILO. SILO (Scientific Information for Land Owners) is a climate and meteorological data service developed and hosted by the Queensland Government, which provides representative data for the entire continent, produced using real climate data collected over long time periods by the BoM. The service provides a realistic representation of a broad range of climate statistics (including rainfall and evapotranspiration) for most areas which are not serviced by local BoM stations. However, it is acknowledged that, due to the sparsity of raw data (BoM) sites and significant orographic influence, the interpolation for the Otway Range tends to underestimate the rainfall along the ridge.

Monthly rainfall and evapotranspiration data for 64 SILO data points at approximately 0.1 degree (~8.8km) grid spacings was collected for the entire Shire. Figure 1 shows the rainfall distribution pattern throughout the Shire based on annual 70th percentile rainfall for each SILO data point. The percentile rainfall data was interpolated using GIS across the Shire to produce a grid with approximately 300m cell size. With the exception of the Otway Ridge rainfall, the data is considered to be a realistic representation of climate patterns throughout the Shire on a long term basis, suitable for use in DWM investigations and designs. The data was also used in the System Sizing Tables, discussed in Section 7.

SILO potential evapotranspiration (ET_o) estimates are calculated using the FAO Penman-Monteith formula with a default wind value of 2 m/s. The Penman-Monteith formula also requires radiation, air temperature and humidity as an input. These data are readily available from existing BoM stations.

For each SILO data point for each year, the monthly water 'excess' totals were calculated by subtracting the total monthly rainfall from total monthly average evapotranspiration. When a water excess occurs within any given month, the rainfall exceeds the evapotranspiration, resulting in meteorological water being retained within the soil profile. From this, the total number of 'wet' months for each year were calculated and the median taken for each SILO data point. The number of 'wet' months has been gridded and the interpolated values have been converted to the nearest integer. The distribution of the number of 'wet' months throughout the Shire is shown in Figure 2. From this, four (4) distinct climate zones were identified based on the number of months where rainfall exceeds evapotranspiration and were categorised as detailed below. Each lot within the Shire was assigned to a climate zone as shown in Figure 3.

- Zone 1: 0 – 4 soil moisture surplus (70th percentile rainfall exceeds mean evaporation) months of the year;
- Zone 2: 5 – 6 soil moisture surplus (70th percentile rainfall exceeds mean evaporation) months of the year;
- Zone 3: >7 soil moisture surplus (70th percentile rainfall exceeds mean evaporation) months of the year; and
- Zone 4: average annual rainfall >1,600mm.

A lot is assigned the more conservative climate zone if it is located along a climate zone boundary. Table 4 details the results of the climate zone constraint analysis for the Shire.

Similarly, the longest run of consecutive 'wet' months in each year was also determined and the median longest run was calculated for each SILO data point. The number of consecutive 'wet' months has been gridded and the interpolated values have been converted to the nearest integer. The distribution of the number of consecutive 'wet' months throughout the Shire is shown in Figure 4.

Overall, there is a strong trend in greater rainfall towards the south of the Shire, particularly along the Otway Range. This is consistent with higher topography and coastal conditions in those regions. The 'wet' months are typically found to coincide with the winter calendar months and had a similar increasing trend towards the south of the Shire. All of the targeted localities and towns/settlements are located within climate zones 2 - 4.

The acquired climate data obtained for this assessment is available to Council and will provide a very useful resource for Council in the preparation and review of LCAs in the future. Monthly 70th percentile rainfall and average evapotranspiration data is available for the majority of the

unsewered localities and towns/settlements from Council for input into monthly water balances as part of a site specific LCA.

The climate data that was used in the development of the System Sizing Tables is attached in Appendix C. The BoM 70th percentile rainfall presented in Appendix C should be used instead of the SILO data for all localities along the Otway Ridge (i.e. Beech Forest, Ferguson, Lavers Hill, Wyelangta and Weeaprounah). This appended climate data also includes additional data for surrounding unsewered localities. Land Capability Assessors are also able to use site-specific SILO Data Drill and BoM climate data for LCA reports and DWM designs for particular lots. The use of such data should be clearly referenced and justified in the LCA report in each instance.

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Table 4: Climate Zones Constraint Map Summary

	Total Lots (Original (new >2015))	Total Number in Assigned Constraint Class			
		Zone 4	Zone 3	Zone 2	Zone 1
		Average Annual Rainfall >1,600mm	>7 months soil moisture surplus	5 – 6 months soil moisture surplus	0 – 4 months soil moisture surplus
Shire (Overall)	8,136 (750)	571 (18)	3,496 (391)	3,861 (317)	208 (24)
Alvie Town (Locality)	157 (4)	0 (0)	0 (0)	157 (4)	0 (0)
Barham River (Apollo Bay) Settlement (Locality)	309 (83)	0 (0)	309 (83)	0 (0)	0 (0)
Barongarook Settlement (Locality)	260 (2)	0 (0)	260 (2)	0 (0)	0 (0)
Barwon Downs Town (Locality)	252 (8)	0 (0)	251 (8)	1 (0)	0 (0)
Beeac Town (Locality)	628 (14)	0 (0)	0 (0)	628 (14)	0 (0)
Beech Forest Town (Locality)	329 (3)	293 (3)	36 (0)	0 (0)	0 (0)
Carlisle River Town (Locality)	245 (1)	1	241 (1)	3 (0)	0 (0)
Coragulac Town (Locality)	175 (13)	0 (0)	0 (0)	175 (13)	0 (0)
Cororooke Town (Locality)	254 (31)	0 (0)	0 (0)	254 (31)	0 (0)
Forrest Town (Locality)	344 (5)	0 (0)	315 (5)	29 (0)	0 (0)
Gellibrand Town (Locality)	260 (5)	0 (0)	260 (5)	0 (0)	0 (0)
Kawarren Settlement (Locality)	212 (3)	0 (0)	175 (0)	37 (3)	0 (0)
Kennett River Town (Locality)	183 (0)	0 (0)	2 (0)	181 (0)	0 (0)
Lavers Hill Town (Locality)	189 (5)	176 (5)	13 (0)	0 (0)	0 (0)
Separation Creek Town (Locality)	129 (0)	0 (0)	0 (0)	129 (0)	0 (0)
Wye River Town (Locality)	376 (13)	0 (0)	0 (0)	376 (13)	0 (0)

Whitehead & Associates Environmental Consultants

Legend

— 70th Percentile Rainfall Contours (50mm Intervals)

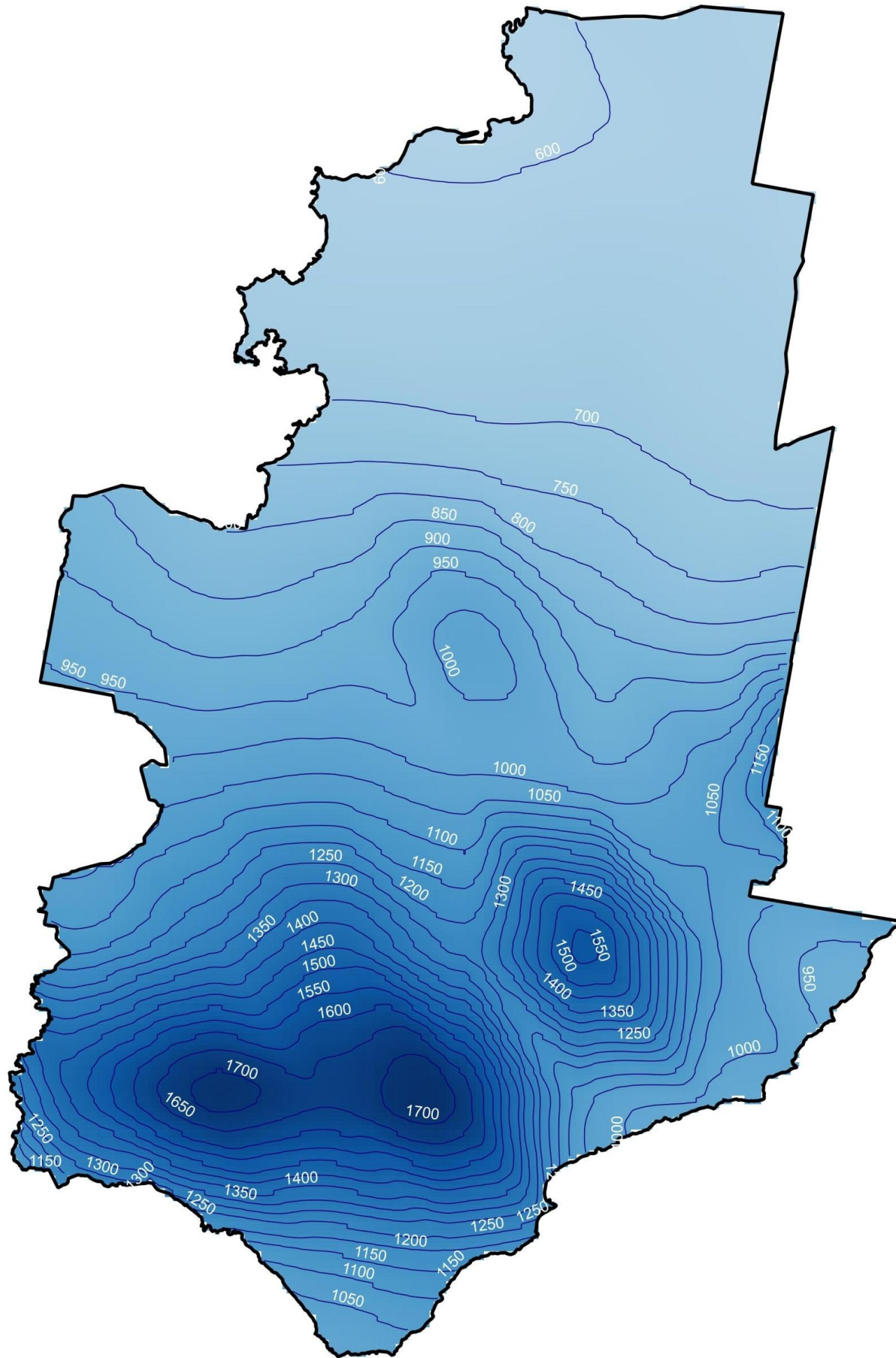
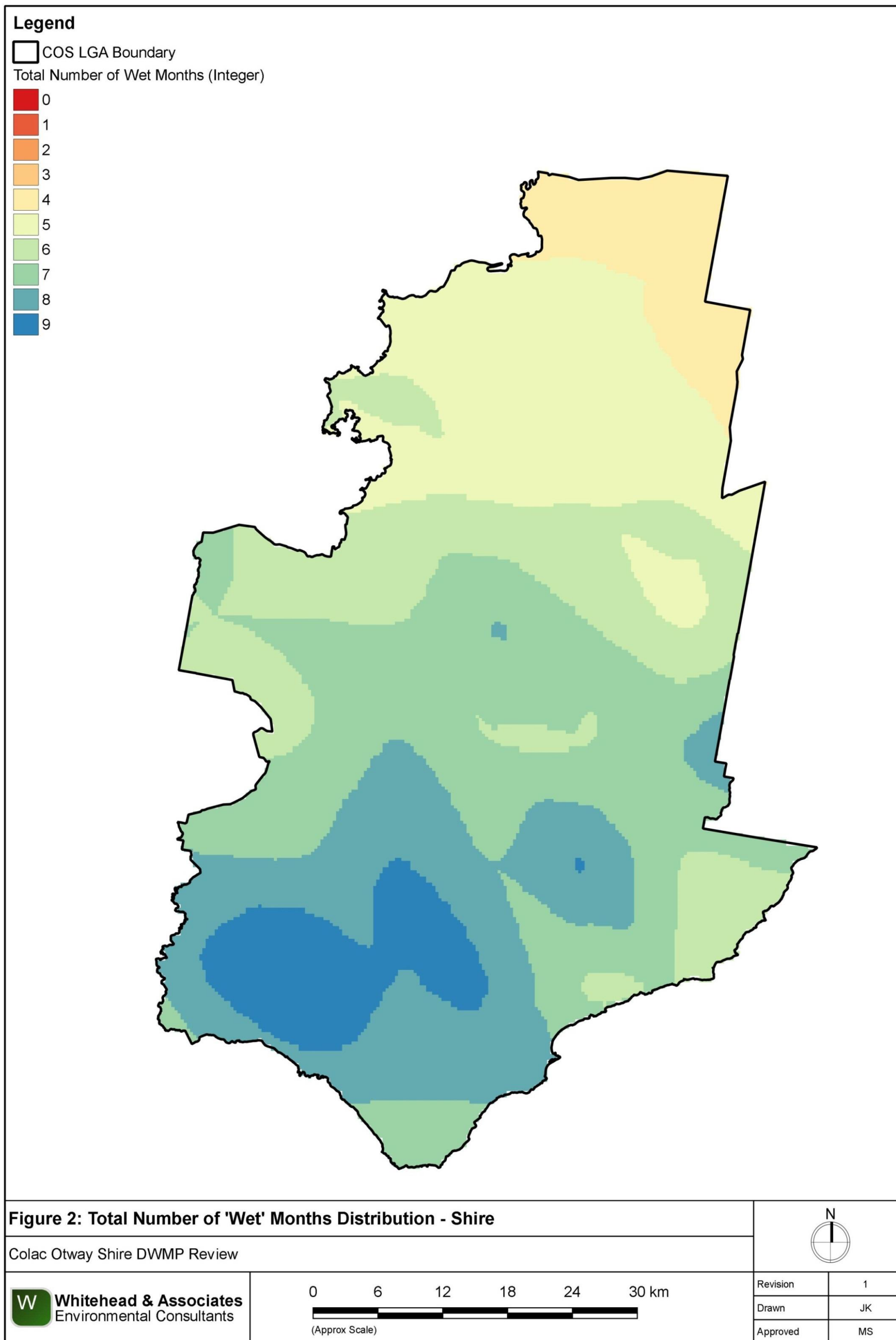


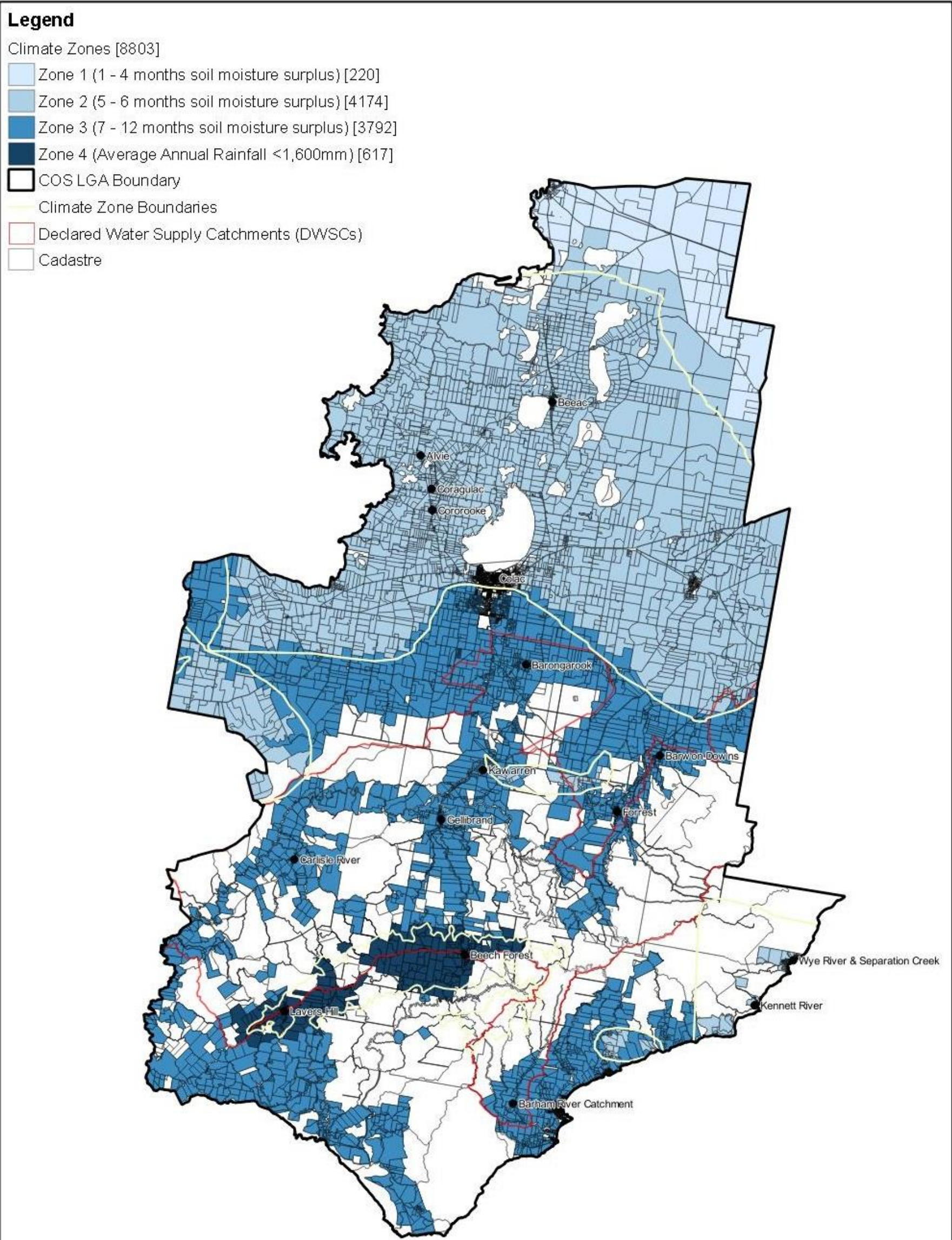
Figure 1: 70th Percentile Rainfall Distribution - Shire

Colac Otway Shire DWMP Review



Revision	1
Drawn	JK
Approved	MS

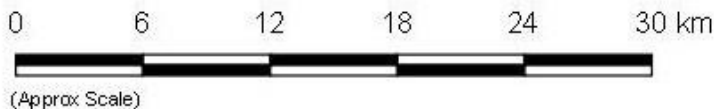




Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure 3: Climate Zones Distribution - Shire

Colac Otway Shire DWMP Review



Revision	6
Drawn	JK
Approved	MS

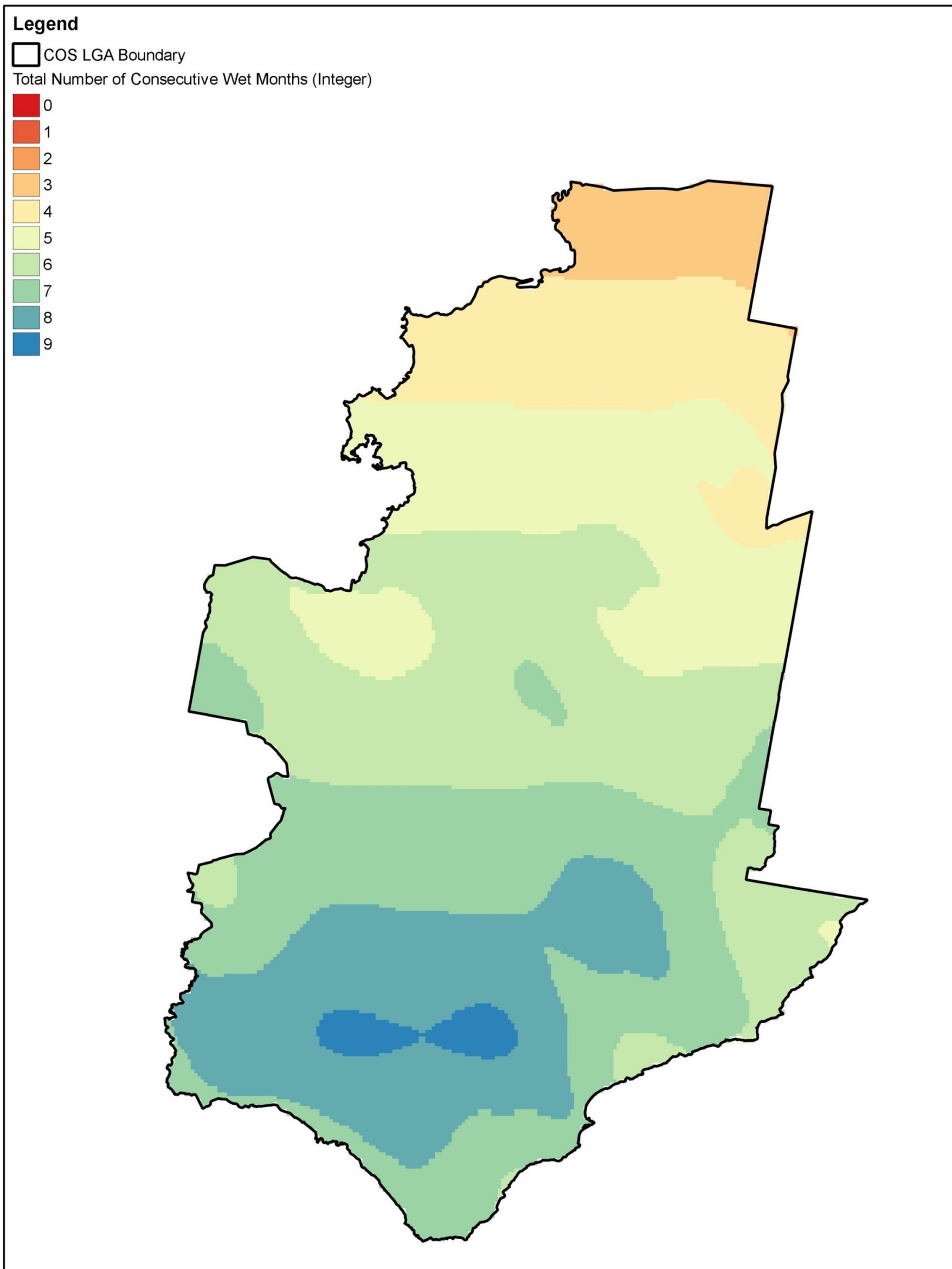
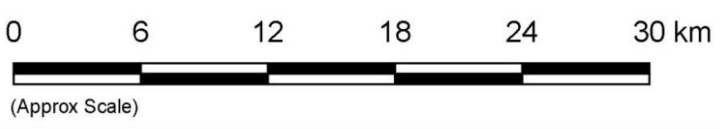


Figure 4: Total Number of Consecutive 'Wet' Months Distribution - Shire

Colac Otway Shire DWMP Review



Revision	1
Drawn	JK
Approved	MS

6.2.3 Useable Lot Area

The potential for sustainable DWM and the determination of suitable DWM system options is dependent on the amount of adequate area available for DWM. The useable lot area for effluent management broadly refers to available land (i.e. not built out or used for a conflicting purpose) where DWM will not be unduly constrained by site and soil characteristics.

The smaller the lot, the more difficult it is to treat and retain wastewater onsite in accordance with legislative requirements. A properly sized land application area provides for long-term, sustainable effluent loading rates that match the assimilative capacity of the soil and vegetation systems. Conversely, improperly designed or undersized land application areas are more likely to fail and lead to potential adverse impacts on both public health and the environment. In recent years, understanding of sustainable effluent loading rates has improved and it is now commonly identified that many older existing systems, such as septic absorption trenches and evapotranspiration beds, are undersized by today's standards.

Useable lot area, irrespective of total lot size, plays a key role in determining a lot's capacity for sustainable long-term DWM and influences the selection of appropriate DWM systems. However, as a general rule, the smaller the lot, the less land that will be available for effluent management after allowing for other development on the land. Older development controls and design standards (Codes etc.) did not always consider site-specific land capability constraints and, as a consequence, many existing and vacant residential lots may be too small to accommodate sustainable DWM systems, particularly by today's more informed standards.

There is no defined rule about what constitutes an appropriate minimum effluent management area, or in fact minimum useable area that is capable of providing such areas. This will vary depending on the physical constraints present on the lot, the nature of the development, as well as the type of treatment and land application system used. The constraint class boundaries reflect the likelihood of a lot having sufficient effluent management area available after allowing for typical improvements.

There are many factors that determine the available area on any given lot, including:

- Maintenance of appropriate setback buffers from boundaries, buildings, driveways and paths, groundwater bores, dams, intermittent and permanent watercourse; and
- Total development area (including the dwelling, sheds, pools, driveways and garden paths, gardens unsuitable for effluent reuse, and any other hardstand areas, etc.).

Available areas may be unsuitable or constrained for DWM due to other factors, including (but not limited to):

- Excessive slope;
- Excessively shallow soils;
- Heavy (clay) soils with low permeability;
- Climate in regards to the degree of soil moisture surplus;
- Excessively poor drainage and/or stormwater run-on; and
- Excessive shading by vegetation.

For this study, the useable lot area was determined by the setbacks to surface waterways, groundwater bores and land subject to inundation. The following sections detail the methodology and results for each analysis and the determination of the final useable lot area.

6.2.3.1 Proximity to Surface Waters

This section seeks to explain how the distance to waterways, lakes, dams and drinking water catchments influences the useable lot area calculation which forms part of the constraint mapping. This is of particular importance for lots within the DWSCs.

COS is located entirely within the Corangamite Catchment Management Area (CMA) and consists of the following defined three river basins; Barwon (to the east), Corangamite (north and west), and Otway Coast Basin (to the south).

A large portion (28%) of the Shire is located within a Declared Water Supply Catchment (DWSC). There are seven DWSCs located within the Shire; Gosling Creek, Pennyroyal Creek, Matthew Creek, Upper Barwon, Lorne, Barham River, Gellibrand River, Gellibrand River (South Otway), and Barwon Downs Wellfield Intake. Three of these DWSCs, Upper Barwon, Gellibrand River, and Gellibrand River (South Otway), have Special Area Plans. These DWSCs are detailed on the 'proximity to surface waterways informative map' in Appendix A and regionally below in Figure 5.

Buffer distances (setbacks) are usually provided between land application areas (including all pipes and fittings associated with the DWM system) and sensitive receptors, such as surface watercourses, to help prevent adverse impacts on water quality, particularly should the DWM system fail. There is no simple and defined method for objectively determining safe buffer distances, so regulators often recommend conservative, minimum buffer distances that would be expected to satisfy the objective in the majority of situations.

The current EPA Code of Practice recommends three tiers of setback distances from surface waterways that are applicable to the Shire. Further, the Code specifies differing setback distances for primary (i.e. septic/trench) systems, secondary and greywater systems, and advanced secondary greywater systems. The following (primary) buffers have been conservatively adopted and applied to the appropriate surface watercourse/waterway using data (1:25,000 scale) provided by DELWP. The resultant map is appended in Appendix A.

- 60m for non-potable watercourses, dams, wetlands, estuaries and surface water features (including the mean coastal high-tide mark and dams);
- 100m for potable watercourses² and surface waterway river bodies; and
- 300m for potable reservoirs or storages.

300m setbacks, similar to those applied for potable reservoirs, were also applied to the Water Corporation source points (i.e. offtake points, weirs, pumping stations, etc.) to ensure that the sensitivity of these local environments are accounted for.

No setbacks were applied to man-made drains or waterfalls, which would likely be accounted for within other watercourse/waterway setbacks.

Intuitively, the risk of DWM systems impacting on nearby receiving areas increases with decreasing separation distance. For a broad-scale risk assessment, it is appropriate to analyse

² It should be noted that the surface water map does not distinguish between permanent and intermittent watercourses. Diversion channels have been defined as a watercourse for this particular purpose.

the separation distances that are available on a lot basis and assign constraint classes accordingly.

AS/NZS 1547:2012 and Table 5 in EPA Code of Practice 891.4 details instances where recommended setbacks from sensitive receptors can be relaxed to accommodate certain types of systems where standard buffer distances cannot be achieved. These systems would require individual assessment and design in order to meet the requirements of the Standard.

For lots constrained by proximity to surface waters, it might be possible to mitigate this constraint by:

- Secondary treatment with an AWTS or sand filter;
- Moving the LAA to increase buffer distance; or
- Replacing surface irrigation with subsurface irrigation.

As mentioned previously in Section 3.2.5, water services within the Shire are provided primarily by Barwon Water, with water also supplied by Southern Rural Water to the north of the Shire and by Wannon Water to the town of Carlisle River. Both Barwon Water and Wannon Water are referral authorities for developments within the DWSCs within the southern region of the Shire. The referral authorities for each DWSC in the Shire are detailed within Clause 66.04 and Schedule 3 of the Environmental Significance Overlay (ES03) of the COS Planning Scheme.

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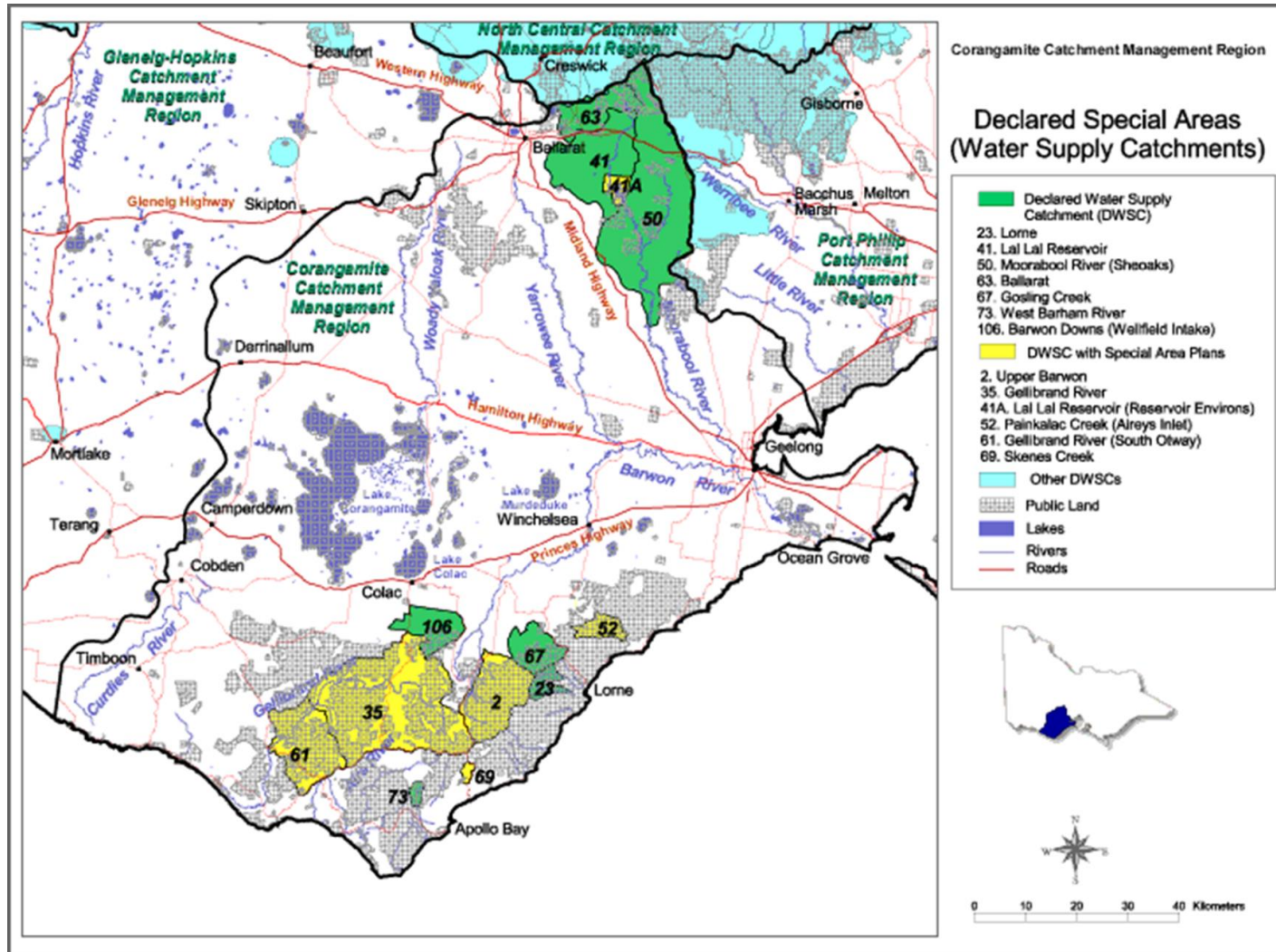


Figure 5: Corangamite CMA Declared Water Supply Catchments (DEPI, 2012)

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6.2.3.2 Proximity to Groundwater Bores

This section seeks to explain how the distance from DWM systems to groundwater bores can affect the quality of groundwater.

The principal groundwater resources in Victoria fall south of the Great Dividing Range and are generally contained in Tertiary or younger unconsolidated sediments. The Shire is located within the Otway-Torquay groundwater basins, within the Hopkins-Corangamite and Otway-Torquay groundwater catchment areas.

A Groundwater Management Unit refers to either a Groundwater Management Area or Water Supply Protection Area as determined within the Groundwater Catchment. Water Supply Protection Area(s) (WSPAs) are declared under Section 27 of the *Water Act 1989* to protect groundwater or surface water resources through the development of a management plan which aims for equitable management and long-term sustainability. There are nineteen WSPA declared in Victoria. A Groundwater Management Area(s) (GMAs) is defined as an area where groundwater of a suitable quality for irrigation, commercial or domestic and stock use is available or expected to be available. There are 34 GMAs declared in Victoria. There are four GMAs found within the Shire; Gerangamete to the east (60m depth), Gellibrand centrally located (at or near surface), Paaratte to the west (>120m depth) and Newlingrook to the west (at or near surface). There is one declared WSPA within the Shire; Warrion WSPA, which is located within the north east of the Shire and within the targeted localities of Alvie, Cororooke and Coragulac. This is managed by Southern Rural Water. The western edge of Lake Corangamite forms the administrative boundary between Colac Otway Shire and Corangamite Shire Council and also a natural hydrogeological boundary to the Warrion WSPA. The principal aquifer is unconfined and predominantly consists of volcanic material, including fractured basalt and scoria. There is also a potential of the Hanson Plains Sand aquifer underlying the volcanic aquifer supplying groundwater to this system. DELWP and Southern Rural Water, on behalf of the Minister of Water, jointly monitor and manage groundwater resources within the Shire.

The location of land application areas in close proximity to groundwater bores increases the potential for contamination of the groundwater. When water is extracted from the groundwater bores a zone of influence is created, whereby the head level of the groundwater is altered. Buffer distances (setbacks) are recommended between land application areas and both potable and non-potable groundwater bores. The current EPA Code of Practice recommends a 50m setback (for Category 1 and 2a soils) and 20m setback³ (for Category 2b to 6 soils) be maintained from such resources to protect human health. Setbacks in Category 1 and 2a soils can be reduced to 20m where treated and disinfected greywater or secondary treated (20/30/10 or better) effluent is applied and the property owner has a service contract for their DWM system. A conservative approach was taken when developing this DWMP and a setback distance of 50m was used for all the groundwater bores located within the Shire.

The spatial data of the groundwater bore locations within the Shire was acquired from the Water Measurement Information System (WMIS) Database Interface as managed by DELWP. Using GIS, the recommended groundwater buffer setback was applied to all of the groundwater bores located within the Shire. There was a total of 2,329 groundwater bores that were identified within the Shire. The resultant map is appended in Appendix A.

³ For secondary sewage and greywater effluent

As previously mentioned, *AS/NZS 1547:2012* and EPA Code of Practice details instances where recommended setbacks can be relaxed to accommodate certain types of systems where standard buffer distances cannot be achieved. In most cases, the preferred result would be to have the identified bores condemned and capped to prevent further use, negating the need for setbacks from these resources. However, it is acknowledged that this outcome would not be acceptable to some owners who utilise the resource.

For lots constrained by proximity to groundwater bores, it might be possible to mitigate the constraint by:

- Secondary treatment with an AWTS or sand filter;
- Moving LAA to increase buffer distance; or
- Replacing surface irrigation with subsurface irrigation.

6.2.3.3 Land Subject to Inundation

The DWM system, including any tanks, fields or trenches should be sited above any land subject to inundation.

Land that is subjected to frequent or intermittent inundation by floodwater has a significantly higher constraint for effective on-site DWM. Effluent management areas should not be located within flood prone regions as floodwaters have a higher probability of inundation leading to insufficient treatment of the effluent and an increase in potential environmental and public health risks.

Flood prone land, in the case of this report, is defined as land that is subject to inundation based on the 1 in 100 year flood level (1% Annual Exceedance Probability (AEP)) that delineates the areas likely to be inundated through statistical modelling or as determined by the floodplain management authority. Land subject to inundation was buffered from the useable lot area; the resultant map is appended in Appendix A.

It might be possible to mitigate the lots constrained by flood prone land by:

- Secondary treatment with an AWTS or sand filter;
- Using pressure compensating subsurface irrigation; or
- Raising level of application by constructing a raised bed or sand mound.

6.2.3.4 Useable Lot Area Analysis

The cadastre data set supplied by Council was queried to determine the spatial relationship between each lot, its existing land area and the buffer zones (cohesively) to determine the useable lot area for each lot within the Shire; whether developed or not. The following criteria were used to determine the useable lot area classification with regards to DWM suitability:

- High: useable area <0.15ha;
- Moderate: useable area 0.15 – 0.4ha;
- Low: useable area >0.4 – <40ha; and
- Compliant: useable area ≥40ha.

Lots containing less than 0.15ha of useable area invariably have a very limited available effluent management area and so DWM contained entirely on-site is in the vast majority of cases unsustainable, necessitating site specific hydraulic design for wastewater management. This is

based on an assumed footprint of 500m² for an average building envelope and improvements (e.g. driveway) and allowing for an average appropriately sized LAA and reserve LAA on the remainder of the lot.

If DWM is to be provided, it will be necessary to provide a high level of treatment and specialised land application design using systems such as sand mounds or pressurised subsurface irrigation, to ensure long term sustainability. Other mitigation measures like the adoption of water conserving practices will be important in ensuring the system's effectiveness. Such systems are likely to have limited opportunity for expansion, as may be required if the household wastewater load changes in response to increased occupancy, or if a new reticulated water supply becomes available. It should be taken into consideration that a lot <0.15ha will not necessarily be totally unsuitable for DWM or currently be serviced by a failing system; however, it is likely to contain a number of significant limitations to the safe operation of DWM systems assessed at a broad scale.

In the case of properties/parcels with areas between 0.15ha and 0.4ha, and in the absence of any other significant physical constraints, the availability of land for effluent management usually increases proportionately with a corresponding improvement in the potential for sustainable DWM. The choice of options is likely to be slightly greater than that available for lots with useable area less than 0.4ha; however, detailed site and soil investigation is still important to identify the most appropriate solution as other bio-geophysical constraints may limit opportunities for sustainable DWM. Again, conventional systems may not be appropriate for these sites. These lots have been assigned a 'moderate' overall constraint class.

In most cases, lots larger than 0.4ha will have far fewer problems providing sufficient space for sustainable on-site DWM. For this reason, these lots have been assigned a 'low' constraint class. Overall constraint for DWM for these lots will be determined by the land capability constraints.

Lots with a useable area larger than 40ha already meet the criteria prescribed by the Minister for Water's Guidelines (DSE, 2012) and are deemed to be compliant.

For lots constrained by useable area, it might be possible to mitigate this constraint by:

- Secondary treatment with an AWTS or sand filter;
- Secondary treatment with land application to trenches at higher loading rates as outlined in *AS/NZS 1547:2012*; or
- Increasing loading rate by use of sand mound.

Table 5 details the results of the useable lot area constraint analysis for the Shire. The associated DWM constraint map for the Shire is provided as Figure 6.

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Table 5: Useable Lot Area Constraint Map Summary

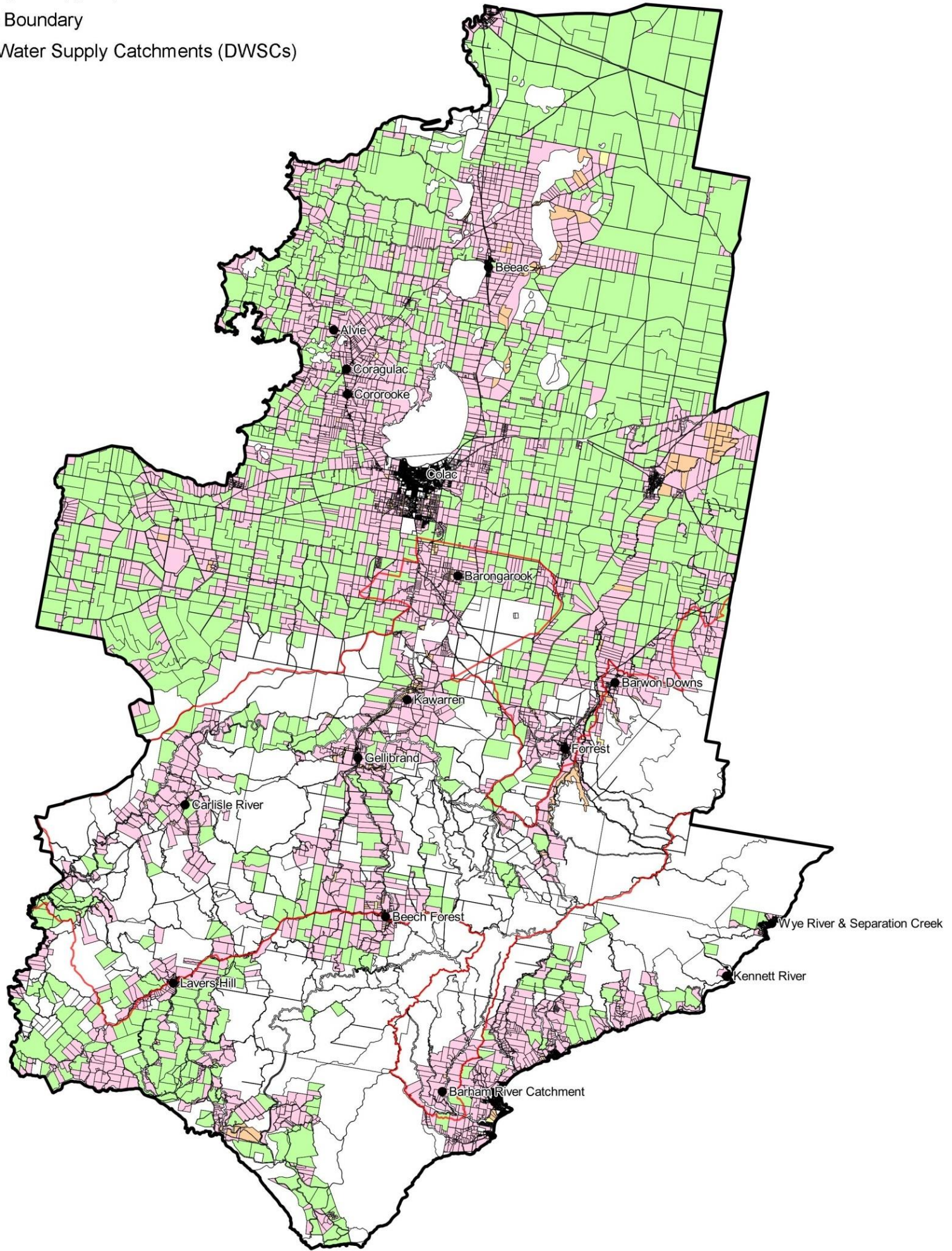
	Total Lots	Total Number in Assigned Constraint Class			
		High	Moderate	Low	Compliant
		<0.15ha	0.15 – 0.4ha	0.4ha – 40ha	>40ha
Shire (Overall)	8,136 (750)	1,944 (273)	779 (49)	4,563 (325)	850 (103)
Alvie Town (Locality)	157 (4)	22 (0)	22 (0)	102 (3)	11 (1)
Barham River (Apollo Bay) Settlement (Locality)	309 (83)	33 (73)	21 (1)	250 (8)	5 (1)
Barongarook Settlement (Locality)	260 (2)	26(0)	16(0)	211(2)	7 (0)
Barwon Downs Town (Locality)	252 (8)	75 (2)	27 (1)	143 (5)	7 (0)
Beeac Town (Locality)	628 (14)	238 (4)	81 (2)	298 (5)	11 (3)
Beech Forest Town (Locality)	329 (3)	113 (1)	60 (2)	140 (0)	16 (0)
Carlisle River Town (Locality)	245 (1)	40 (0)	16 (0)	167 (0)	22 (1)
Coragulac Town (Locality)	175 (13)	36 (1)	30 (0)	109 (10)	0 (2)
Cororooke Town (Locality)	254 (31)	87 (15)	39 (5)	126 (8)	2 (3)
Forrest Town (Locality)	344 (5)	123 (2)	61 (1)	154 (2)	6 (0)
Gellibrand Town (Locality)	260 (5)	58 (0)	46 (0)	143 (5)	13 (0)
Kawarren Settlement (Locality)	212 (3)	69 (3)	16 (0)	121 (0)	6 (0)
Kennett River Town (Locality)	183 (0)	172 (0)	8 (0)	2 (0)	1 (0)
Lavers Hill Town (Locality)	189 (5)	61 (1)	24 (3)	92 (1)	12 (0)
Separation Creek Town (Locality)	129 (0)	121 (0)	1 (0)	7 (0)	0 (0)
Wye River Town (Locality)	376 (13)	319 (11)	44 (1)	10 (1)	3 (0)

Legend

Useable Lot Area Assigned Constraint Class - Shire Cadastre [8803]

- High (<0.15ha) [2188]
- Moderate (0.15 - 0.4ha) [826]
- Low (0.4 - 40ha) [4833]
- Compliant (>40ha) [956]

- COS LGA Boundary
- Declared Water Supply Catchments (DWSCs)
- Cadastre



Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure 6: DWM Constraint Analysis - Useable Lot Area - Shire

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0 6 12 18 24 30 km



(Approx Scale)



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6.2.4 Current Planning Scheme Zone - Minimum Lot Size Compliance

As discussed in Section 6.2.3, area plays a key role in determining a lots' capacity for sustainable long-term DWM and influences the selection of appropriate DWM systems. The COS Planning Scheme sets out policies and requirements for the use, development, subdivision and protection of land. The requirements and particular provisions for each zone are detailed within the COS Planning Scheme. The current zonings for the Shire were thematically mapped to assist Council with future development opportunities and identification of constraints in relation to DWM.

COS is seeking to maintain a relaxation of Guideline 1 of the Guidelines for Planning permit applications in open, potable water supply catchment areas (DSE, 2012) from the Water Corporations. When this relaxation is granted and a higher density of development within a DWSC is permitted, then one of the requirements that must still be adhered to in accordance with 'Planning permit applications in open, potable water supply catchment areas' is that the minimum lot size specified for that zone must be met. The planning scheme zones were summarised into the fifteen (15) following zones and are appended as a thematic map in Appendix A:

- General Residential;
- Neighbourhood Residential;
- Township;
- Low Density Residential;
- Farming;
- Rural Activity;
- Rural Conservation;
- Rural Living;
- Commercial (1 & 2);
- Industrial (1 & 3)
- Public Park and Recreation;
- Public Conservation and Resource;
- Public Use;
- Road; and
- Special Use.

The majority of the Shire is in three zonings; Farming Zone in the northern section of the municipality, Public Conservation and Resource Zone in the southern region (relative to the Otway Ranges) and Rural Conservation Zone along the coastline.

Along with sewerred lots, land zoned Road Zone, Public Park and Recreation Zone and Public Conservation and Resource Zone, was excluded from the cadastral dataset as the suitability of this land for on-site DWM is irrelevant. A vegetation informative map was generated to provide a visual distribution of the National Parks and State Forests within COS and is attached in Appendix A.

Existing land area and current zoning of the lots as per the COS Planning Scheme were used to determine whether existing lots complied with the minimum lot size as per the current zoning

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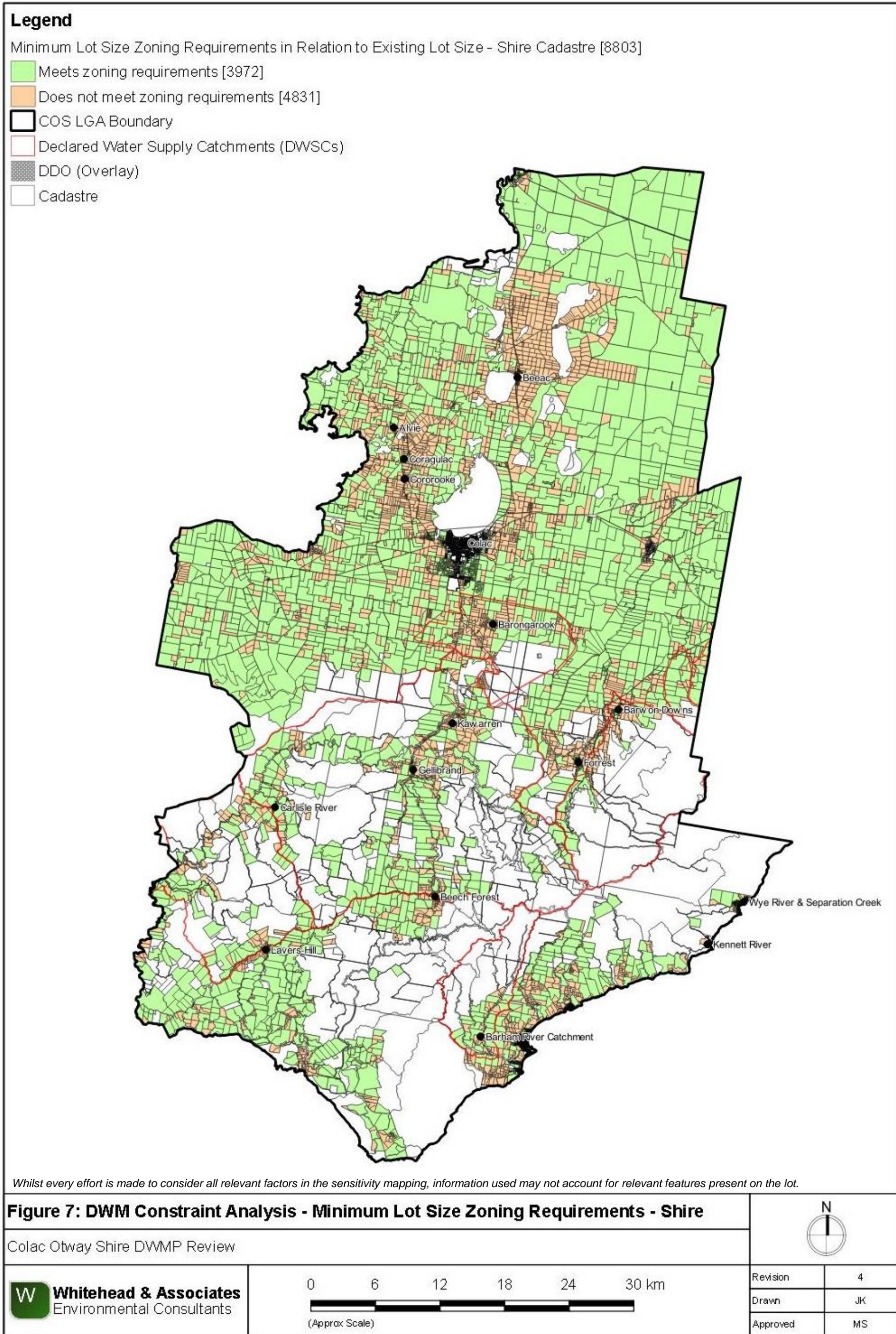
requirements. The existing lot size was compared with the minimum lot size specified for the prescribed zone for each lot to determine its compliance. The COS Planning Scheme (2021) details the minimum lot size for each following zone: Farming zone 80 ha north of Princes Hwy and east of Ballarat Rd and 40ha elsewhere; Low Density Residential Zone 0.4ha if unsewered; Rural Activity Zone 0.5ha and 2ha for Colac East and 40ha elsewhere; Rural Conservation Zone 40ha; and Rural Living Zone 1.2ha for Elliminyt and 23ha elsewhere.

Table 6 details the results of the minimum lot size compliance with the planning scheme zoning requirements for the Shire. The associated DWM discrete constraint map for the Shire is provided as Figure 7.

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Table 6: Current Planning Scheme Zone - Minimum Lot Size Compliance

	Total Lots	Total Number in Assigned Constraint Class	
		Non-Compliant	Compliant
Shire (Overall)	8,136 (750)	4,763 (243)	3,373 (507)
Alvie Town (Locality)	157 (4)	118(3)	39 (1)
Barham River (Apollo Bay) Settlement (Locality)	309 (83)	258 (6)	51 (77)
Barongarook Settlement (Locality)	260 (2)	248 (2)	12 (0)
Barwon Downs Town (Locality)	252 (8)	146 (4)	106 (4)
Beeac Town (Locality)	628 (14)	368 (6)	260 (8)
Beech Forest Town (Locality)	329 (3)	156 (1)	173 (2)
Carlisle River Town (Locality)	245 (1)	148 (0)	97 (1)
Coragulac Town (Locality)	175 (13)	127 (6)	48 (7)
Cororooke Town (Locality)	254 (31)	190 (8)	64 (23)
Forrest Town (Locality)	344 (5)	179 (0)	165 (5)
Gellibrand Town (Locality)	260 (5)	170 (2)	90 (3)
Kawarren Settlement (Locality)	212 (3)	188 (0)	24 (3)
Kennett River Town (Locality)	183 (0)	4 (0)	179 (0)
Lavers Hill Town (Locality)	189 (5)	88 (2)	101 (3)
Separation Creek Town (Locality)	129 (0)	12 (0)	117 (0)
Wye River Town (Locality)	376 (13)	22 (1)	354 (12)



6.2.5 Slope

The slope of the land affects what type, or even whether you can have, any wastewater disposal on the land. This is closely linked to the soil type and the soil's absorption capabilities.

AS/NZS 1547:2012 (Table K1) details a range of factors likely to limit the selection and applicability of land application systems, with slope gradient identified as one critical factor.

Steep slopes, particularly when combined with shallow or poorly drained soils, can lead to surface breakout of effluent downslope of the land application area. Conventional DWM systems are likely to be unsuitable and these lots will require a detailed site assessment and specific system design to produce a sustainable outcome. These steeply sloping sites are generally unsuitable for trenches and beds and can also be problematic for surface irrigation techniques. Conversely, flat and gently sloping sites are less likely to experience such problems and are considered lower risk.

Surface elevation for the Shire was gridded with a maximum cell size of 20m for the entire Shire and 5m for the localities (including the towns/settlements), with no vertical exaggeration to create a DEM. Where the 5m grids were derived, they took precedence over the 20m grid and an overall combined DEM was generated which is shown in Figure 8. The surface elevation for the Shire ranges from approximately 0m to 630m Australian Height Datum (AHD). Gridded slope data was derived from the DEM and combined with the cadastre data set to calculate the average slope as percent grade for each lot within the Shire. The average slope was based on the centroid of each lot. The slope ranged from 0 – 138%.

The following criteria were used to determine the DWM constraint classification on the average lot slope:

- High: lots that have an average slope greater than 12%;
- Moderate: lots that have an average slope, inclusive of, and between 8% and 12%; and
- Low: lots that have an average slope less than 8%.

For lots constrained by steep slope, it might be possible to mitigate this constraint by:

- Applying a lower soil (effluent) loading rate over a larger area;
- Designing an irrigation system to ensure even distribution of effluent over the slope; or
- Terracing to create a level LAA.

Table 7 details the results of the average lot slope constraint analysis for the Shire. The associated DWM discrete constraint map for the Shire is provided as Figure 9.

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Table 7: Average Lot Slope Constraint Map Summary

	Total Lots	Total Number in Assigned Constraint Class		
		High	Moderate	Low
		>12%	8 – 12%	<8%
Shire (Overall)	8,136 (750)	2,308 (93)	692 (69)	5,136 (588)
Alvie Town (Locality)	157 (4)	17 (0)	15 (0)	125 (4)
Barham River (Apollo Bay) Settlement (Locality)	309 (83)	267(18)	20 (21)	22 (44)
Barongarook Settlement (Locality)	260 (2)	15 (1)	48 (0)	197 (1)
Barwon Downs Town (Locality)	252 (8)	49 (0)	20 (2)	183 (6)
Beeac Town (Locality)	628 (14)	0 (0)	0 (0)	628 (14)
Beech Forest Town (Locality)	329 (3)	215 (1)	61 (1)	53 (1)
Carlisle River Town (Locality)	245 (1)	119 (1)	32 (0)	94 (0)
Coragulac Town (Locality)	175 (13)	1 (0)	1 (0)	173 (13)
Cororooke Town (Locality)	254 (31)	0 (0)	0 (0)	254 (31)
Forrest Town (Locality)	344 (5)	84 (0)	63 (0)	197 (5)
Gellibrand Town (Locality)	260 (5)	82 (2)	24 (0)	154 (3)
Kawarren Settlement (Locality)	212 (3)	58 (0)	74 (0)	80 (3)
Kennett River Town (Locality)	183 (0)	163 (0)	15 (0)	5 (0)
Lavers Hill Town (Locality)	189 (5)	95 (1)	53 (1)	41 (3)
Separation Creek Town (Locality)	129 (0)	111 (0)	5 (0)	13 (0)
Wye River Town (Locality)	376 (13)	362 (13)	7 (0)	7 (0)

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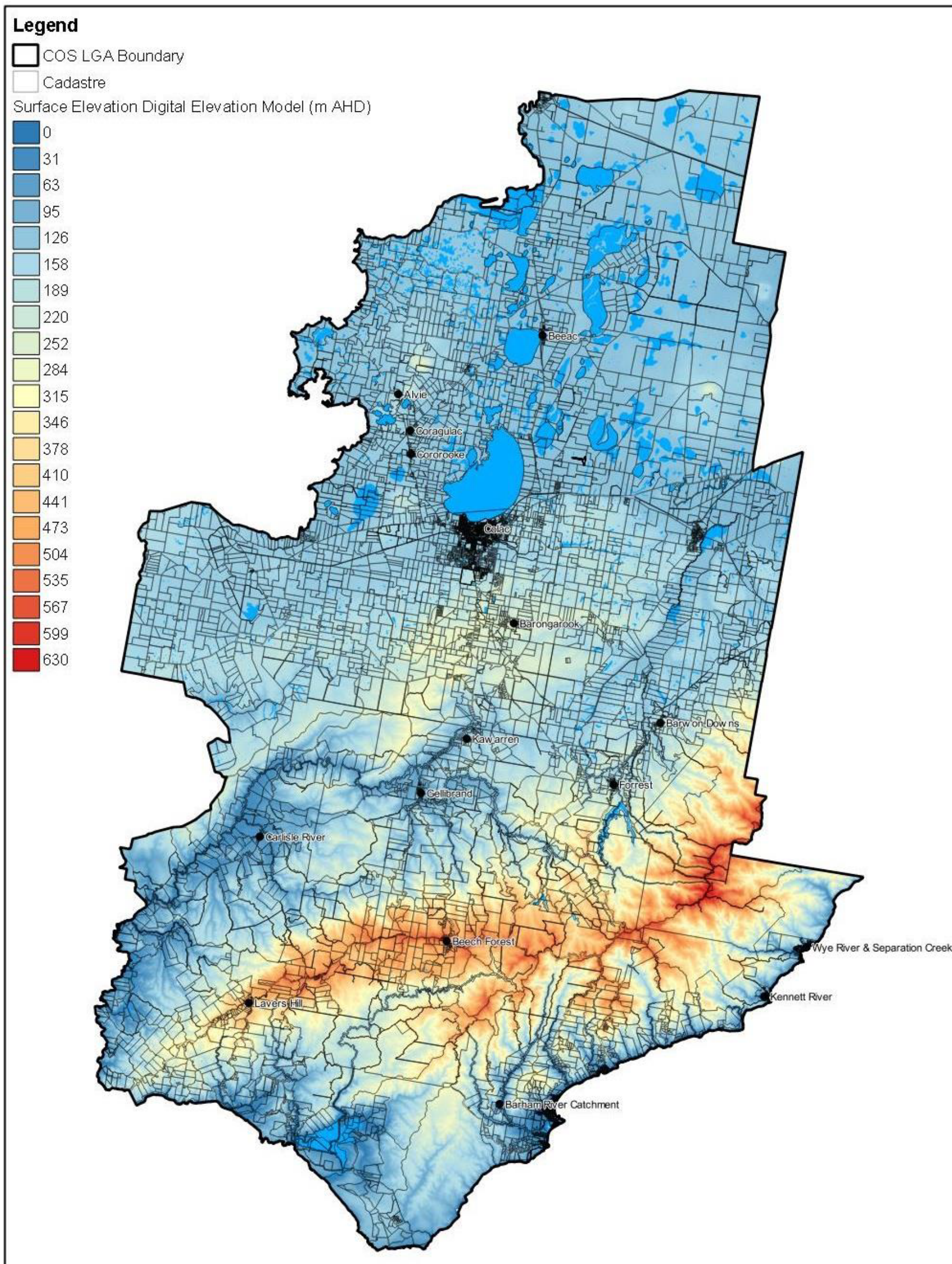
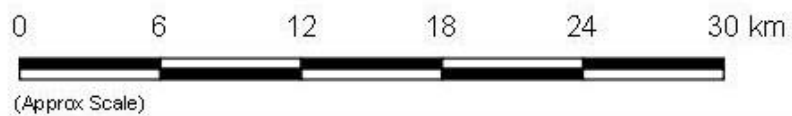
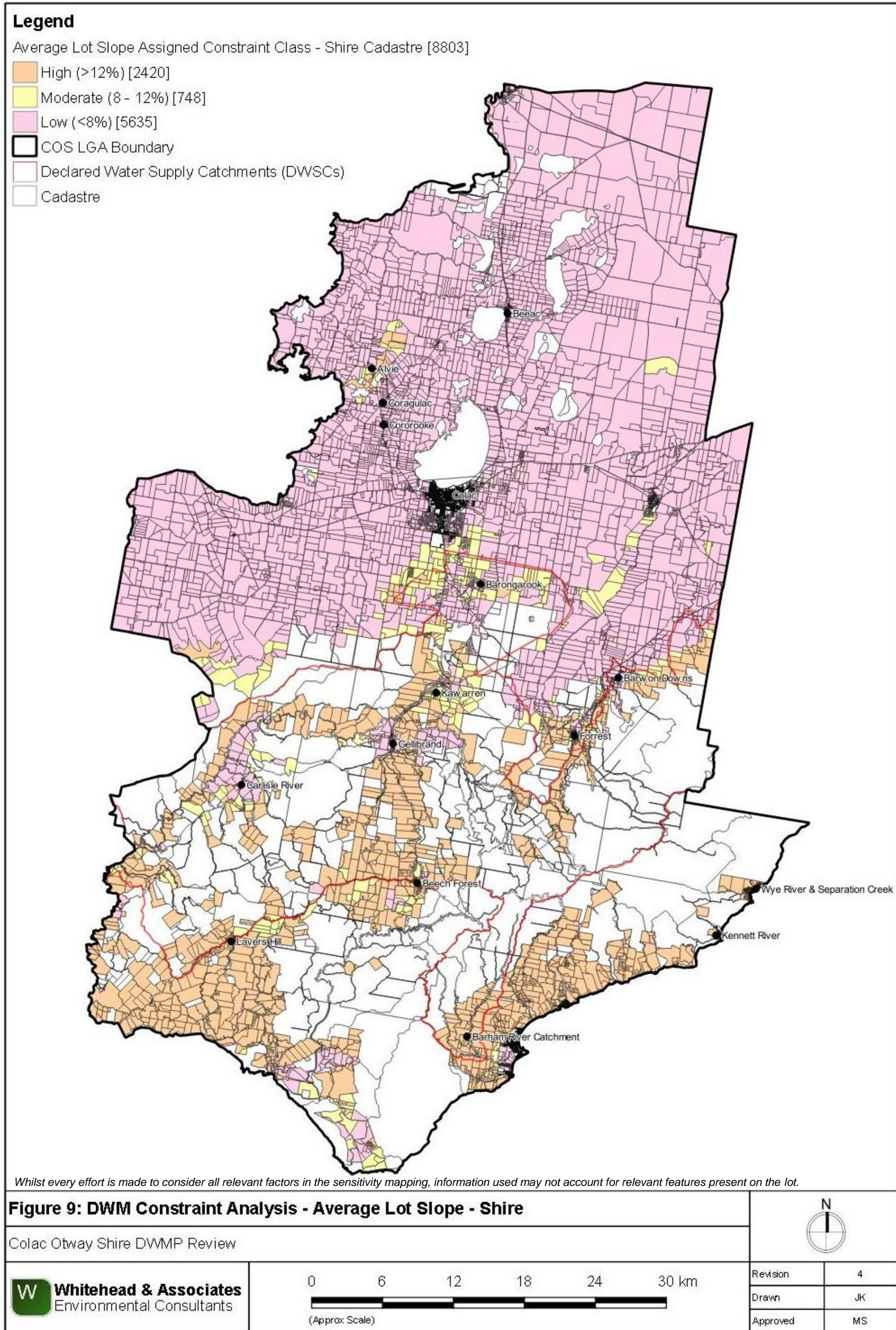


Figure 8: Surface Elevation Digital Elevation Model - Shire

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Approved	MS



6.2.6 Soil Suitability

Geology was also used as a reference towards the understanding of the soil and landform characteristics of the Shire.

The soil type and its absorption capabilities in this report refer to effluent treatment and what type of wastewater system is suitable. Soil that is not suitable for effluent treatment may be ideal for other uses such as farming and vice versa.

Soils and landform elements, along with associated lithology, play a vital role in the design, operation and performance of DWM systems. Key soil properties can be evaluated to assess a soil's capacity for absorption of wastewater, including soil texture, structure, depth, permeability, drainage characteristics, and depth to limiting layers such as bedrock, hardpans or watertables.

The surface geology of the Shire is shown in Figure 10 and the geological units were based on the 'Surface Geology of Victoria' dataset (1:250,000) that was obtained from GeoSciences Victoria (DEPI, 2011). The Shire is underlain by twenty-three (23) different surface lithological groups, with the northern region and the Otway Ranges underlain primarily by the Newer Volcanic Group and Eumeralla Formation, respectively.

The most current soil-landform unit datasets were obtained from DELWP. The most current dataset, 'A Land Resource Assessment (LRA) of the Corangamite Region' (Robinson *et al.*, 2003), was used as the basis for the determination of soil suitability for DWM. The LRA draws substantially on earlier geology mapping and soil surveys, in particular those of Maher and Martin (1987) and Pitt (1981). Industry specific site investigations for dairying and cropping, a survey on a gas pipeline, and regional extension activities have provided other soil profile data. The purpose for this LRA was to integrate, within a new geomorphic framework for Victoria, map units and boundaries published in the earlier surveys to derive a consistent report and mapping for the region. The data (1:100,000) can only be effectively used as a strategic mapping tool for regional targeting of resources based on the location of susceptibilities in conjunction with other factors.

The LRA dataset provided different information on various soil and landform characteristics of the region; including, landform elements, slope, vegetation, soil description (Australian Soil Classification), topsoil and subsoil texture, depth of soil profile, soil structure, soil chemical characteristics, and many other productivity and land degradation constraints. There were fifty-seven (57) different soil landform units identified within the Shire. Figure 11 thematically identifies the different soil landform units and their associated locations. Refer to the accompanying LCA reports⁴ for additional detailed descriptions on each of the soil landform units.

It is important to note that soil landform units are not homogeneous. Importantly, it should be noted that, at this mapping scale, soil attributes are expected to vary within soil landform units. Due to the degree of variance within each soil landform unit (e.g. due to the soil catena), the soil characteristics with the most dominant landform element proportion (e.g. greatest percentage) were used as a representation for that soil landform unit. Refer to the accompanying LCA reports for site specific data. Site specific investigations are required to confirm the broad scale assessment of the soil landform units, as the presence of a minor soil landform component could result in varying attributes to the predominant component used for the soil suitability constraint analysis.

⁴ <http://vro.depi.vic.gov.au/dpi/vro/vrosite.nsf/pages/soil-home>

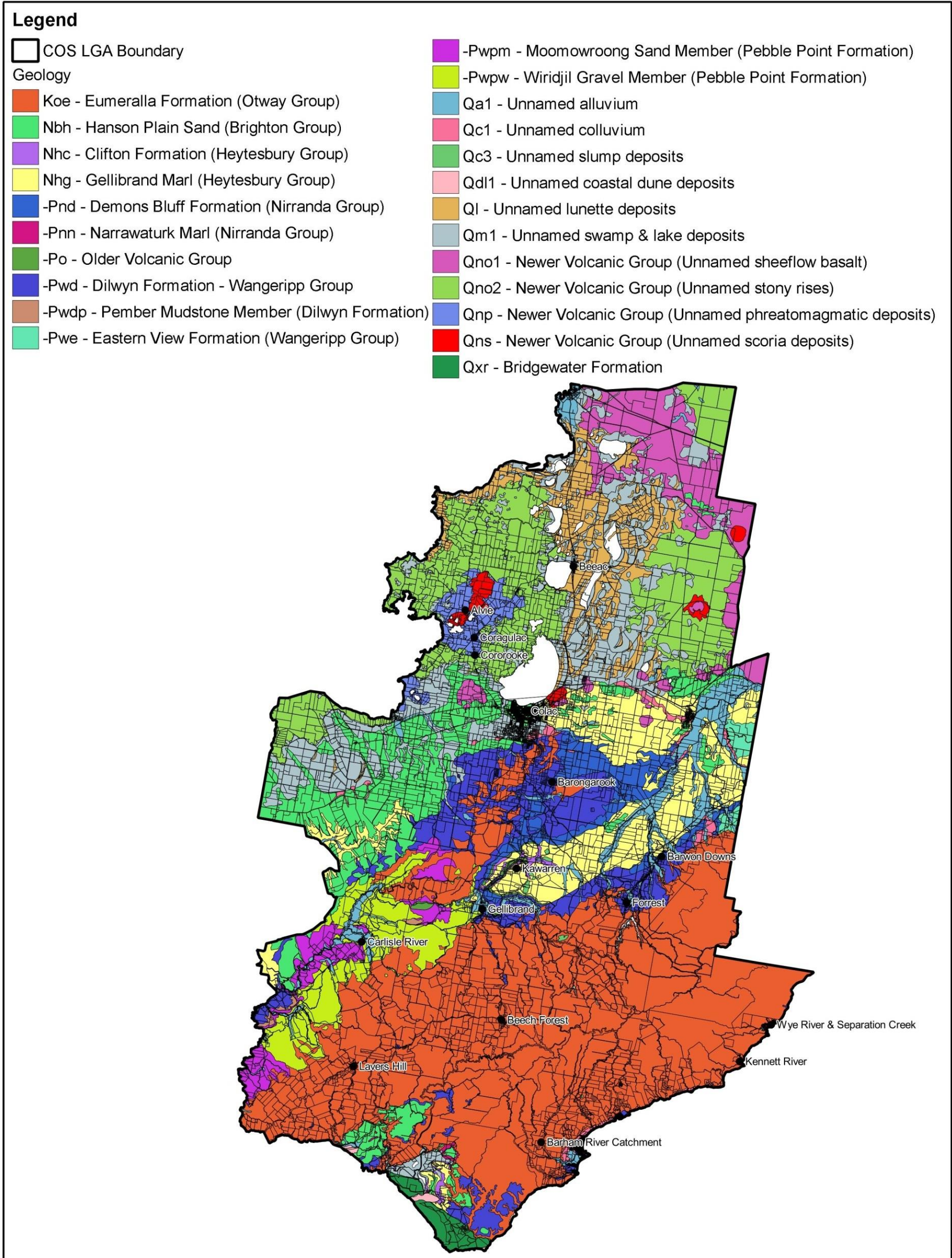
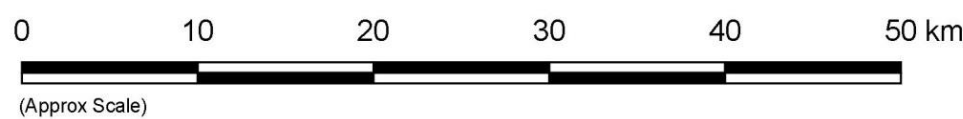


Figure 10: Geology - Shire

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Drawn	JK
Approved	MS

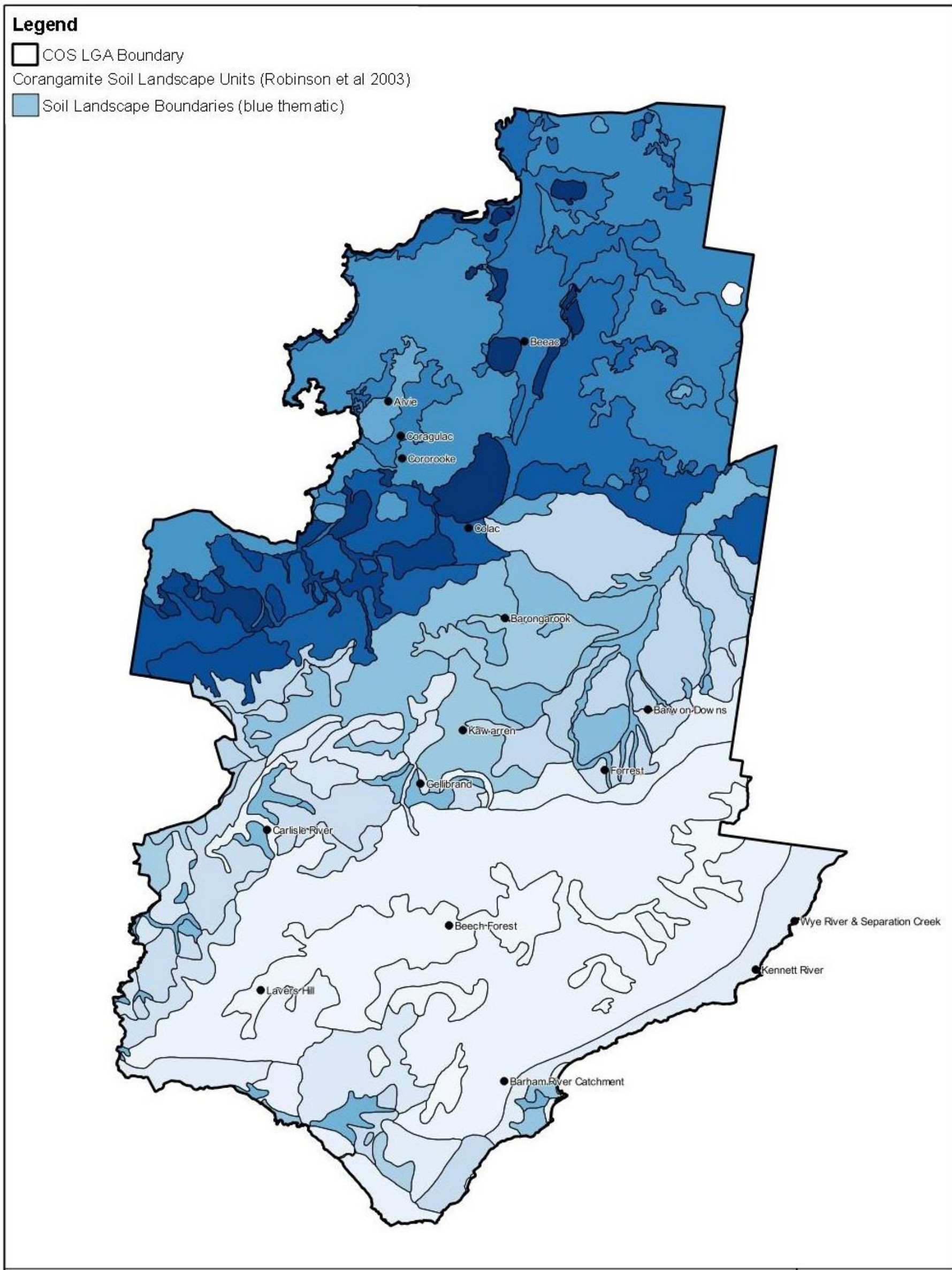


Figure 11: Soil Landscape Units - Shire

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	0 5 10 15 20 25 30 km	Revision	3
	(Approx Scale)	Drawn	JK
		Approved	MS

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The soil landform unit dataset was analysed to determine the key soil attributes that relate to soil suitability for DWM. There is a significant inter-relationship that exists between various soil attributes, resulting in depth, hydraulic and limitation hazards used to assess the final soil suitability with the Shire. The degree of constraint, or constraint class, was assigned to each soil landform unit within the Shire based on available data and the professional judgement, skills and experience of the project team. Reference was also to the *AS/NZS 1547:2012*, the current EPA Code of Practice, and the experience of the project team in the design and monitoring DWM systems.

Table 8 below outlines each of the hazards and the criteria used for the soil suitability constraint classifications.

The depth constraint of the soil was based on the depth of the soil profile to the limiting horizon, i.e. hardpan, groundwater or bedrock, for each soil landform unit. The depth constraint classes were determined based on the minimum depth requirements for sustainable DWM and taking into account the minimum separation requirements of 600mm (*AS/NZS 1547:2012*) from the base of the land application system to the limiting layer. This benchmark depth was based on the most constraining DWM application system, in terms of depth, absorption systems (trenches and beds). Soil absorption systems require 300 – 600mm depth from the surface for utilisation and also need to adhere to the minimum 600mm separation to the limiting layer requirements. Therefore, the minimum depth required for the sustainable installation of an absorption system is around 1m depth, based on an absorption system at 400mm depth. Greater depths of unsaturated soil provide increased treatment of effluent and reduced potential for lateral water movement.

The hydraulic constraint of the soil was determined based on limiting soil texture, structure and permeability. A DWM system should be sized according to the most limiting soil horizon to ensure that an appropriate effluent loading rate is applied. In most cases, this will be the subsoil horizon as the soils within COS predominantly consist of gradational and texture contrast soils with clay subsoils. The constraint criterion for the hydraulic hazard parameter was based on the soil category of the limiting soil horizon for each soil landform unit (as used in *AS/NZS 1547:2012*). Indicative permeability was taken from the EPA Code of Practice (Table 9, Appendix A), but this can be superseded if in situ permeability testing data can be provided.

A limitation constraint of the soil was also considered, which was based on qualitative descriptions provided within the individual soil landform unit reports. The limitations include both physical and chemical characteristics of the soil. Soil limitation is difficult to quantify, as most limitations can be overcome by amending the soil or introducing a management practice.

The following limitations were considered with regards to DWM; nutrient retention, soil stability and physical retention. Specifically, these limitations refer to whether the soil is any of the following; dispersive, sodic, restricted drainage (waterlogging, seasonally high watertables, mottling), low fertility, low p-sorb, shrink swell (self-mulching), coarse fragments (including hardpans), very acidic (aluminium toxicity) or hardsetting.

	Consequence for DWM			
	Low		Mod	High
Dispersive				
Sodic				
Restricted Drainage				
Low Fertility				
Low P-sorb				
Shrink Swell				
Coarse Fragments				
Very Acidic				
Hardsetting				

A significance weighting was applied to each of the soil constraint parameters to reflect the influence that each parameter has on the design, construction and operation of DWM systems. The significance weighting was determined through discussion with project team members and coordination with the Stakeholder Working Group. The following significance weightings were applied:

- Depth Hazard: 1.2;
- Texture Parameter: 1.2;
- Structure Parameter: 0.9;
- Indicative Permeability Parameter: 1;
- Limitation Hazard: 0.7.

Where soil landform unit information was not available or was incomplete, the characteristic was conservatively inferred using professional judgement and available information. This was only relevant for soil landform unit 92, as the type soil profile data was unavailable.

Most importantly, some of the soil landform units associated with the targeted localities and towns/settlements were cross referenced with site and soil investigations undertaken by both Whitehead & Associates and Robert Van de Graaff & Associates on two separate occasions. Generally the observed soil characteristics were the same as the literature documented in Robinson *et al.* (2003) LRA. However, where characteristics differed, the soil landform unit for the particular region around the test site was updated with the field specific data.

Although the soil suitability constraint for a particular soil landform unit may be high, it does not necessarily mean that wastewater could not be sustainably managed on-site. It gives guidance to the loading rate and type of system(s) that could be suitable. It is important to note that site specific investigation is still necessary to confirm the regional constraint assessment and to determine the appropriate method for sustainable DWM.

For lots constrained by unfavourable soil, it might be possible to mitigate this constraint by:

- Secondary treatment with an AWTS or sand filter;
- Applying a lower (soil) loading rate; or
- Improving soil by amelioration or importation of good quality soil.

Table 9 details the results of the soil suitability constraint analysis for the Shire. The associated DWM discrete constraint map for the Shire is provided as Figure 12. The soil suitability for lots

within the Shire predominantly resulted in moderate to high constraint ratings due to the presence of clay subsoils derived from the basaltic lithology as mentioned above.

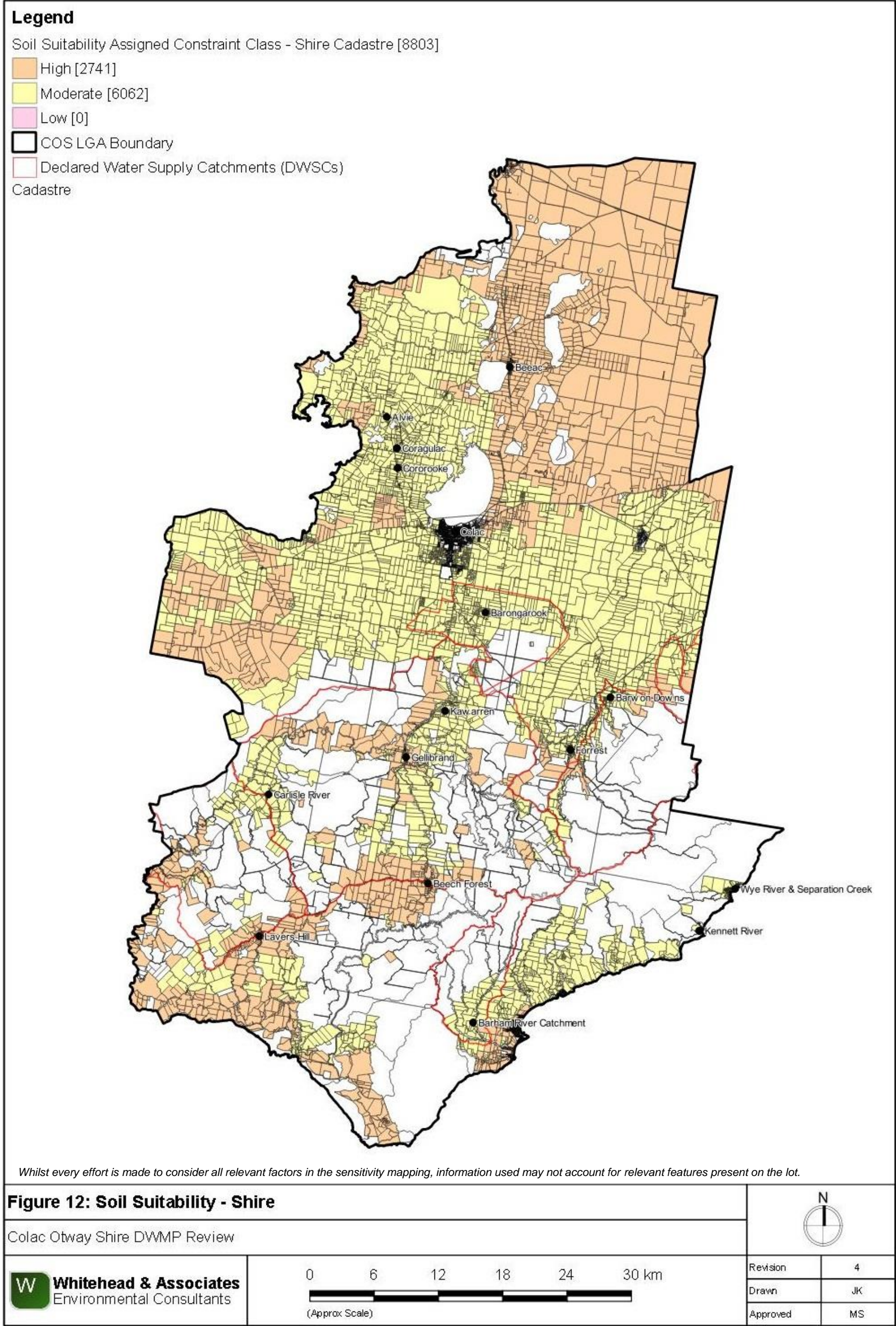
Table 8: Soil Suitability Constraint Classification Criteria

Hazard Type	Parameter	Class	Description	Significance Weighting (%)
Depth Hazard	Profile Depth	Low (1)	Greater than 2 metres profile depth	Greater depths of unsaturated soil provide increased treatment of effluent (renovation) and reduced potential for lateral water movement. A significance of 1.2 (120%) is applied to the depth hazard rating for each soil to reflect the substantial influence this parameter has on the design, construction and operation of DWM systems.
		Medium (2)	Greater than 1 metre to less than 2 metres profile depth	
		High (3)	Less than 1 metre profile depth	
Hydraulic Hazard	Texture	Low (1)	Soil Category 2 & 3 (per AS/NZS 1547:2012). Dominant Sandy Loam (SL) to Loam (L) soils.	Used (along with structure) primarily to infer properties of soil permeability, porosity and aeration. Excessively free-draining soils (Cat 1) can be just as problematic as excessively poor-draining soils (Cat 6) for DWM. Soil 'renovation' capacity also linked to textural classification (i.e. OM content, Fe/Al content). A significance of 1.2 (120%) is applied to the texture rating for each soil to reflect the influence this parameter has on the design, construction and operation of DWM systems.
		Medium - Low (2)	Soil Category 4 (per AS/NZS 1547:2012). Dominant Clay Loam (CL) soils.	
		Medium - High (3)	Soil Category 5 (per AS/NZS 1547:2012). Dominant Light Clay (LC) soils.	
		High (4)	Soil Category 1 or 6 (per AS/NZS 1547:2012). Dominant Gravel (G) or Sand (S) or Medium Clay (MC) to Heavy Clay (HC) soils.	
	Structure	Low (1)	Strongly structured soils (per AS/NZS 1547:2012) in the dominant horizon.	Refers to the general organisation and stability of 'natural' soils. The development and distinctness of individual soil units (peds) and the level of cohesion both within peds and between adjacent peds. Soil structure can be altered by anthropogenic activity (mechanical, chemical inputs etc.). Field assessment required, making quantification subjective. Used as a primary indicator of soil stability and secondary indicator of soil permeability (along with texture). A significance of 0.9 (90%) is applied to the structure rating for each soil to reflect the variability of reporting and interpretation.
		Medium - Low (2)	Moderately structured soils (per AS/NZS 1547:2012) in the dominant horizon.	
		Medium - High (3)	Weakly structured soils (per AS/NZS 1547:2012) in the dominant horizon.	
		High (4)	Single-grained or Massive structure (apedal) soils (per AS/NZS 1547:2012) in the dominant horizon.	
	Indicative Permeability (K _{sat})	Low (1)	Indicative K _{sat} within the range of 1.4m/d to 3.0m/d based on Soil Category 2b & 3a (per CoP 891.3, Table 9).	Initial values inferred from soil texture / structure (per CoP 891.3, Table 9) if no site-specific data available. In-situ permeability (permeameter) testing, per approved methods (i.e. AS/NZS 1547:2012) to be used if dedicated (site-specific) values are to be applied. A significance of 1.0 (100%) is applied to the indicative permeability rating for each soil.
		Medium (2)	Indicative K _{sat} greater than 3.0m/d or within the range of 0.5m/d to 1.4m/d based on Soil Category 1 & 2a or 3b & 4a (per CoP 891.3, Table 9).	
		High (3)	Indicative K _{sat} less than 0.5m/d based on Soil Category 4b, 4c, 5a, 5b, 5c, 6a, 6b & 6c (per CoP 891.3, Table 9).	
	Limitation Hazard	Nutrient Retention	Low	Soils with minor limitations; may include minor low fertility (CEC) or acidity.
Soil Stability		Medium	Non-sodic/dispersive soils; with low P-sorb, restricted drainage, shrink swell or coarse fragments; may include minor low fertility (CEC) or acidity.	
		High	Soils with dispersiveness and/or sodicity; may include minor low fertility (CEC), low P-sorb, restricted drainage, shrink swell, coarse fragments or acidity.	

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Table 9: Soil Suitability Constraint Map Summary

	Total Lots	Total Number in Assigned Constraint Class		
		High	Moderate	Low
Shire (Overall)	8,136 (750)	2,533 (177)	5,603 (573)	0
Alvie Town (Locality)	157 (4)	15 (0)	142 (4)	0 (0)
Barham River (Apollo Bay) Settlement (Locality)	309 (83)	76 (63)	233 (20)	0 (0)
Barongarook Settlement (Locality)	260 (2)	0 (0)	260 (2)	0 (0)
Barwon Downs Town (Locality)	252 (8)	19 (0)	233 (8)	0 (0)
Beeac Town (Locality)	628 (14)	592 (13)	38 (1)	0 (0)
Beech Forest Town (Locality)	329 (3)	285 (3)	44 (0)	0 (0)
Carlisle River Town (Locality)	245 (1)	42 (1)	203 (0)	0 (0)
Coragulac Town (Locality)	175 (13)	0 (0)	175 (13)	0 (0)
Cororooke Town (Locality)	254 (31)	0 (1)	254 (30)	0 (0)
Forrest Town (Locality)	344 (5)	28 (0)	316 (5)	0 (0)
Gellibrand Town (Locality)	260 (5)	123 (1)	137 (4)	0 (0)
Kawarren Settlement (Locality)	212 (3)	13 (0)	199 (3)	0 (0)
Kennett River Town (Locality)	183 (0)	0 (0)	183 (0)	0 (0)
Lavers Hill Town (Locality)	189 (5)	177 (5)	12 (0)	0 (0)
Separation Creek Town (Locality)	129 (0)	0 (0)	129 (0)	0 (0)
Wye River Town (Locality)	376 (13)	0 (0)	376 (13)	0 (0)



6.3 Sensitivity Overlay

A sensitivity overlay for landslip hazard and depth to groundwater has been generated for use by Council in conjunction with the final Risk Assessment map to determine if any additional constraints may impact on sustainable DWM at any given location within the Shire. These sensitivity overlays will be applied at Council's discretion upon reviewing any given lot.

6.3.1 Landslip Hazard

COS contains areas which are susceptible to landslip, including land throughout the Otway Ranges. The Otway Group, or Eumeralla Formation, is considered to be one of the most landslip prone geological units within the Shire. Landslips occur in both the rock and soil materials, even where the rock is not significantly weathered.

A number of geotechnical studies have been undertaken within COS by various public agencies, including 'Landslip Risk Management in Colac Otway Shire' and 'Landslip Risk Management Related to Wastewater Disposal' both undertaken by Dalhaus Environmental Geology Pty Ltd.

All land included in the Erosion Management Overlay (EMO1 - COS Planning Scheme) has been identified as having a sufficiently high risk of potential instability to warrant specific review of these risks prior to works as detailed in Schedule 1 to the EMO (COS Planning Scheme).

The landslip prone regions are shown in informative Figure A5, attached in Appendix A. The figure shows that the primary regions of landslip are found south of Lavers Hill, Beech Forest, Forrest and Gellibrand towns and along the coastline and hinterlands around the Apollo Bay, Kennett River, Wye River and Separation Creek towns. Council may request additional supporting documentation to be provided with regards to DWM in these regions.

6.3.2 Groundwater Depth

If the soil is saturated and the groundwater depth is shallow, then there is a greater possibility of contaminating groundwater and increasing surface water runoff. This is particularly important in selecting the type of DWM system.

The depth to groundwater has direct implications on future development opportunities and can constrain the use of a DWM system. The location and type of land application system that can be installed on an individual lot will be limited by the depth to groundwater at the site. If applied effluent moves into saturated soils, i.e. shallow groundwater located beneath a LAA, then potential contamination of the groundwater, aquifer and/or surface waters could occur. Saturated subsurface conditions are considered to be the most conducive to pathogen transport.

The current EPA Code of Practice states that a minimum depth of 1.5m must remain between the base of the land application system and the seasonal watertable. The greatest depth to groundwater from the natural ground surface would be required for trenches and beds, which are generally built to 600mm depth. Therefore, the minimum required depth to groundwater from the natural ground surface would be 2.1m. If this buffer cannot be maintained, a detailed DWM system design would be required. This calculated minimum depth to groundwater vertical setback distance is conservative; however, soil type would be the defining characteristic. For example, if the soil beneath the base of the LAA is sand, then the associated hydraulic conductivity would be high, with treated effluent reaching the groundwater table at a much quicker rate than if the soil was clay. Therefore, site specific DWM design is required in regions where the depth to groundwater may be an issue, and the appropriateness of the required vertical setback distance to groundwater will need to be assessed.

Groundwater depth within the Shire was inferred from the groundwater bore data from the WMIS Database Interface as managed by DELWP; this is the same dataset used for the proximity to groundwater bores constraint analysis. A total of 294 groundwater bores (as at 2015), located within and around the vicinity of the Shire based on the WMIS DEPI data, were used in the depth to groundwater analysis. The depth of groundwater from the natural surface was time-series monitored for each of these bores as part of the State Observation Bore Network (SOBN). The average reduced water level of the time-series data for the groundwater depth was assigned to each bore. The groundwater bores and associated depths to groundwater were then spatially mapped as point data using GIS. The point data was gridded with no vertical exaggeration (maximum cell size of 20m) to create a Digital Elevation Model (DEM). The groundwater depths are summarised along a thematic colour gradient from surface water (negative values) (deep blue) to 245m (red), with an average depth of 21.5m. Gridded groundwater depth data was derived from the DEM and combined with the cadastre data set for the centroid of each lot. This interpolates an average depth to groundwater for each lot within the Shire which is covered by the extent of the DEM.

The following criteria were used to determine the DWM constraint classification for the depth to groundwater (based on the centroid of each lot):

- Non-Compliant (high risk): lots that have an average groundwater depth less than the minimum vertical separation distance of 2.1m as stipulated by the current EPA Code of Practice; and
- Compliant (low risk): lots that have an average groundwater depth more than the minimum vertical separation distance of 2.1m as stipulated by the current EPA Code of Practice.

The resultant groundwater depth and groundwater depth compliance maps are attached as informative Figures A6 and A7, respectively, in Appendix A. The depth to groundwater compliance mapping showed that there were 4,542 compliant and 1,496 non-compliant lots within COS based on available data.

Due to the limited number of groundwater bores with water level information, there are regions within the Shire that were not able to be included in the analysis, particularly in the southern half of the Shire. There were lots throughout the Shire, primarily in the southern region, that was not covered by the DEM and were excluded from the depth to groundwater analysis due to lack of data. These are shown as white in the respective map. Due to lack of available data, the depth to groundwater compliance is to be used for informative purposes only and site specific investigations will be necessary to determine the depth of groundwater in the regions with no available data or for those lots that are non-compliant.

For lots constrained by groundwater depth (shallow groundwater), it might be possible to mitigate this constraint by:

- Secondary treatment with an AWTS or sand filter; or
- Increasing separation distance between point of land application and watertable by constructing a raised bed or sand mound.

6.3.3 Vegetation

The National Parks and State Forests within COS have also been mapped and are presented as an informative map as Figure A7 in Appendix A. The Otway Ranges within the DWSCs is dominated by protected vegetated regions, which are also extensive along the Great Ocean Road extending into the north of the Apollo Bay, Wye River and Separation Creek localities. Great

Otway National Park and Otway Forest Park form the primary classified vegetative areas within this region. The Otway Forest Park includes the mountain and foothill forest of the northern fall of the Otway Ranges, adjacent to the Great Otway National Park. The northern region of COS includes protected lakes of the Western Volcanic Plains.

6.4 Risk Assessment Summary

It is evident that variability in constraint exists between the targeted localities and towns/settlements within the Shire. Further detailed studies into the performance of existing on-site DWM systems within each of the targeted unsewered localities and towns/settlements is recommended to verify the findings of this broad-scale risk assessment, to provide a more detailed study on maximum lot development density and hence minimum lot size in proposed development areas. This will aid Council in ensuring future development will not adversely impact environmental and public health. The Sensitivity Analysis, which consolidates the individual constraints, is detailed in Section 4.1 of the Operational Plan.

7 Land Application System Sizing Tables (Water Balance)

7.1 Overview

Water balance modelling was undertaken to determine the minimum footprint areas for a broad range of effluent land application systems that could be used in unsewered properties in the Shire. The effluent land application systems that have been sized and included in the Sizing Tables include subsurface irrigation, conventional absorption trenches and beds, ETA trenches and beds, LPED irrigation systems, and wick trenches. No Sizing Tables for Mounds are given as they will require site-specific design by a suitably qualified person. Explanations for these land application systems are detailed in Appendix A of the DWMP Operational Document (2015 as amended).

All six of the *AS1547:2012* soil categories were used in the modelling, for three household sizes (based on number of bedrooms and likely maximum occupancy rate, for domestic dwellings). The results are provided in the System Sizing Tables (in the Locality Reports in Appendix B), which summarise the minimum basal (or 'wetted') area and the likely minimum total footprint area (including minimum spacing for trenches and beds) for different systems.

The Sizing Tables are suitable for designing land application systems for Low and Moderate Risk properties only. If your locality is not provided as a Locality Report in Appendix B, you can use the System Sizing Tables for the nearest locality (i.e. Colac/Elliminyt can utilise Barongarook).

Where the EPA Code of Practice states that the system type is not suitable for the type of soil, or the soil and climate characteristics of the location render the system type unsuitable, 'not applicable' (NA) is shown in the Sizing Table. 'Impractical' is noted when the system type can be used, but the resultant size of the land application area would not be practical primarily due to associated costs of construction.

7.2 Water Balance Methodology

A water balance is a means of incorporating the impact of rainfall, evapotranspiration and plant and soil moisture fluxes into the design of effluent land application systems (from trenches to irrigation systems). Water balance is a critical factor in the effective design and operation of effluent land application systems. This is particularly relevant for the higher rainfall areas in the southern half of the Shire.

A simplistic water balance is expressed by the following equation:

$$\text{Precipitation} + \text{Applied Effluent} = \text{Evapotranspiration} + \text{Percolation} + \text{Runoff}$$

On the left hand side of the equation are the water INPUTS, factors that add to the moisture within an irrigation field. On the right hand side of the equation are the water LOSSES, factors that reduce the moisture content within an irrigation field. For a land application area to be balanced hydraulically the INPUTS should be equal to or less than the LOSSES, otherwise hydraulic overloading and failure may result if the inherent moisture storage capacity of the irrigation field is subsequently exceeded.

Rainfall data can be obtained from the Bureau of Meteorology and commonly water balances are undertaken using conservative monthly rainfall data for a local weather station. Pan evaporation (Class A Pan) is less readily available, and usually is only available for selected weather stations.

Evapotranspiration is the combination of evaporation and transpiration of moisture from the soil through the open pores in the leaves of plants. Evapotranspiration rates vary with changes to soil and air moisture as well as season, but can be estimated by applying appropriate monthly crop factors to pan evaporation data.

Percolation is equivalent to the rate of deep drainage of both rainfall and applied effluent through the soil and is controlled mainly by soil properties, but also in part by slope and other factors. The runoff factor allows for the fact that not all rainfall that falls on a ground surface will actually infiltrate the irrigation field and so contribute to soil moisture. During periods of high rainfall, the soil becomes saturated and excess rainfall runs off as it cannot percolate into the soil.

If all factors in the water balance are expressed in terms of millimetres (mm) per month, then it is possible to solve the equation to determine a minimum land application area (footprint) such that the LOSSES match or exceed the INPUTS. This is usually done using pre-prepared spreadsheets to simplify the numerous calculations involved in running the balance for each month of the year.

The water balance methodology used for the Sizing Tables is the same as that described in the MAV Land Capability Assessment Framework (2014) and the specific inputs are discussed below.

7.3 Water Balance Inputs

7.3.1 Daily Wastewater Load

The daily wastewater load is the product of the design occupancy rate and the wastewater generation in L/person/day.

The current EPA Code of Practice specifies that the design occupancy rate is the number of bedrooms (including any rooms that could be used as a bedroom with a closable door, such as a study or library) plus one (number of bedrooms +1). For example, a four bedroom home is expected to accommodate up to 5 persons in the normal course of events (this does not include accommodation, businesses or holiday homes). This takes into account the future potential occupancy, not just the current occupancy (which may be much smaller).

Table 4 of the EPA Code of Practice (2016) specifies a wastewater generation rate of 180L/person/day for households with standard water fixtures. The water balance uses this figure. However, where it can be demonstrated that full-reduction fixtures have been, or will be, installed in the household and will remain in place, then a design loading rate of 150L/person/day, in accordance with *AS1547:2012* can be adopted for a site-specific DWM design. Alternatively, if tank water is the only water source onsite, then a design loading rate of 120L/person/day, can be used in accordance with *AS1547:2012*, and the results in the System Sizing Tables will not apply.

The design wastewater loads used in water balance modelling are shown in Table 10a-c below.

Table 10a: 180L/p/day - Design Wastewater Loads for Water Balance Modelling

No. Bedrooms	Design Occupancy	L/person/day	L/household/day
2	3	180	540
3	4	180	720
4	5	180	900
5	6	180	1,080

Table 11b: 150L/p/day - Design Wastewater Loads for Water Balance Modelling

No. Bedrooms	Design Occupancy	L/person/day	L/household/day
2	3	150	450
3	4	150	600
4	5	150	750
5	6	150	900

Table 12c: 120L/p/day - Design Wastewater Loads for Water Balance Modelling

No. Bedrooms	Design Occupancy	L/person/day	L/household/day
2	3	120	360
3	4	120	480
4	5	120	600
5	6	120	720

7.3.2 Climate Data

For this project, interpolated rainfall and evapotranspiration data for each unsewered locality has been obtained from SILO and BoM databases, as discussed in Section 6.2.2 above. 70th percentile rainfall and average evapotranspiration data were used to create unique water balances for each system type for each locality. The data point closest to the town/settlement was used for the water balance, and in some cases more than one town/settlement shares the same climate data point due to proximity to that data point.

7.3.3 Runoff Factor

Conservative annual runoff factors of 10% (90% infiltration of rainfall) have been adopted for soil absorption systems (e.g. trench, bed etc.) and 20% (80% infiltration) for drip and spray irrigation systems in the Shire, which is likely to be an underestimate for the higher rainfall areas on and around the Otways.

7.3.4 Soil Type and Design Loading Rate or Design Irrigation Rate (DLR or DIR)

The DLRs and DIRs for the commonly used EPA-accepted methods of land application of effluent (as listed in Appendix A, Table 9, of the EPA Code of Practice, 2013) were used as the basis of water balance modelling and the sizing of the land application areas for all systems. All listed systems except for mounds were modelled, as mounds require a site-specific design which accounts for site factors (including, but not limited to ground slope). For simplicity, every soil

category (and subcategories depending on soil structure), have been modelled, regardless of whether they are observed in the locality. It is noted that most towns will only have two or three soil types, and that the system sizing's provided for the other soil types are irrelevant for that location (unless a significant amount of topsoil is imported for the construction of the land application system, which is not common).

The DLR or DIR should be selected for the most limiting soil layer (usually the heavier-textured subsoil horizons). Where data was absent from the current EPA Code of Practice, average values were selected from *AS1547:2012* (Table 5.2). For instance, the current EPA Code of Practice does not specify DLRs for absorption or evapotranspiration (ETA) beds for gravels, sands or weakly structured sandy loams, but acknowledges that these systems may be appropriate if the soil does not have a high perched or seasonal groundwater table.

7.4 Implications for High Rainfall Areas

The water balance is **highly** sensitive to the Design Loading Rate (DLR) or Design Irrigation Rate (DIR) selected. The DLR and DIR are considered to be conservative or 'safe' deep drainage percolation rates for land application systems that are sustainable for the long term. However, deep drainage percolation in DWM land application areas is not widely understood and the high variability of soil dynamics across regions means that a 'one size fits all' approach may not be the most appropriate method for designing a land application system for a particular site.

If the selected DLR or DIR, taken from the EPA Code of Practice, 2016 (Appendix A: Table 9), is low due to heavy-textured soils and the site is in a high rainfall region, then the required minimum land application area is proportionately large. This can pose difficulties for design and installation, particularly for systems that use gravity dosing (which is far less effective for large systems compared to pumped dosing). LAAs that were deemed as not likely to be practical are highlighted in the Sizing Tables.

Some locations within the Shire feature areas of particularly high rainfall and low winter evapotranspiration, which presents a case whereby the water balance, is unresolvable and therefore cannot produce consequential data. For these areas, Lavers Hill, Beech Forest, and the Barham River catchment (known as 'Paradise'), the water balance method as described above cannot be used to predict the minimum required area for effluent land application, and a site-specific, detailed system design is required. As a result of the water balance, the majority of properties in these localities are likely to be rated as High or Very High Risk, and therefore the Sizing Tables are not applicable. There may be lots in high rainfall areas that also have an unresolvable water balance in addition to the above mentioned localities.

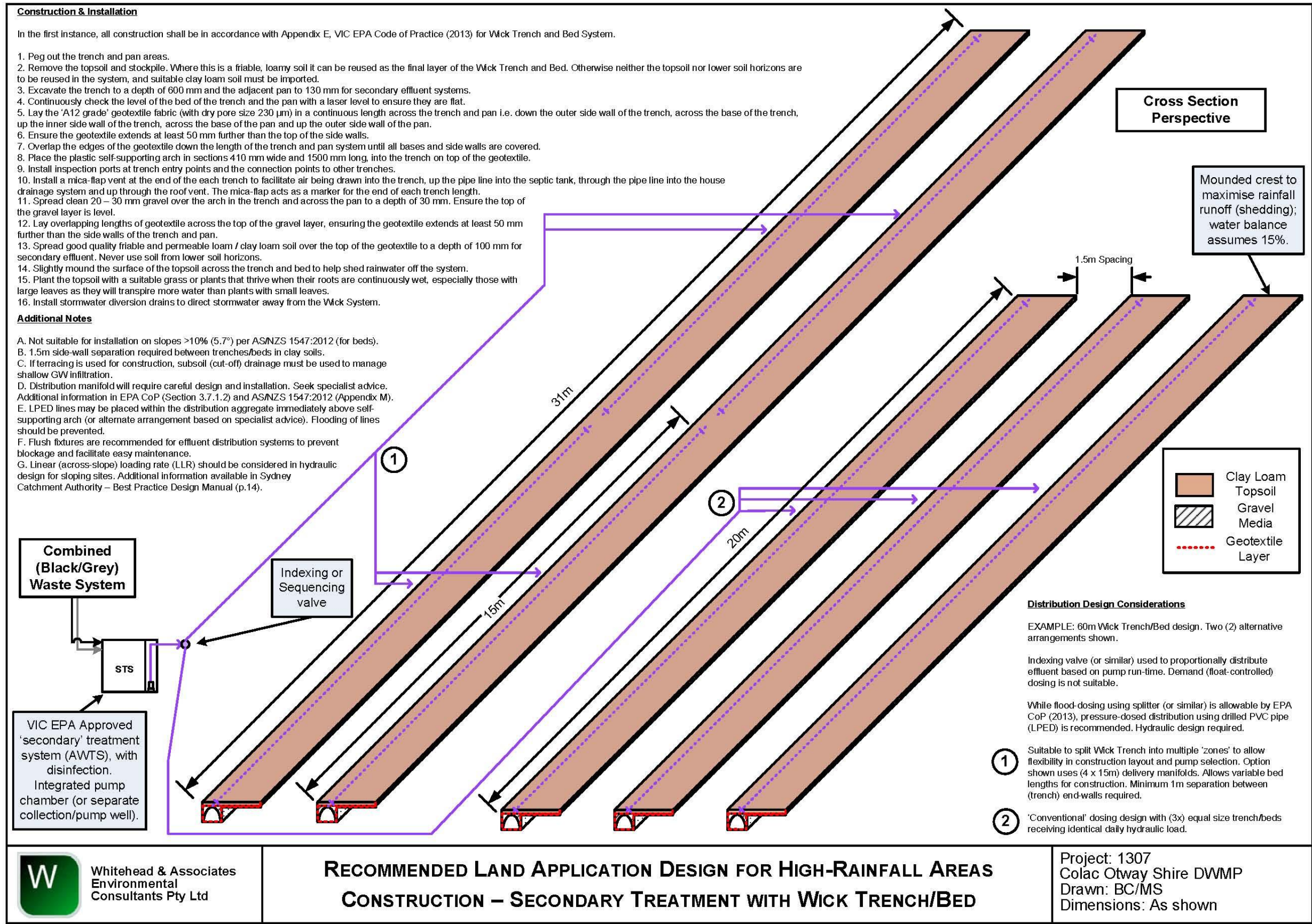
The Bureau of Meteorology (BoM) website shows five rainfall stations on the Otway Ridge; Lavers Hill, Weeaprounah, Barramunga, Beech Forest and Wyelangta, with the latter two still actively recording rainfall. 70th percentile monthly rainfall from the active station that is closest to the Otway Ridge location being assessed should be used in any water balance; e.g. for Lavers Hill, the 70th percentile monthly rainfall from the Wyelangta BoM rainfall station should be used. The 70th percentile monthly rainfall from the Wyelangta and Beech Forest BoM rainfall stations is tabulated in Appendix C.

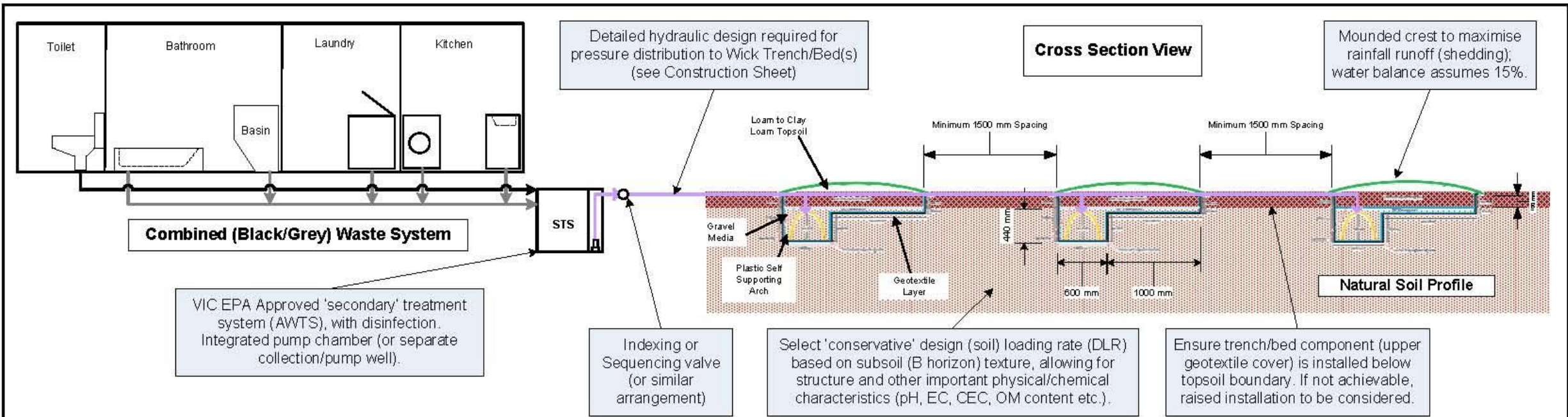
Furthermore, the water balance and prescribed DLRs and DIRs do not take into consideration the possibility that the soil and/or bedrock in some high rainfall areas may have a natural permeability that is higher than that assumed from its textural category. In such instances, the DLR or DIR could be sustainably increased, thereby allowing for a smaller system footprint. A site-specific water balance would require detailed soil testing (including constant-head permeameter testing)

to clearly demonstrate that the soil can sustainably accommodate a higher effluent loading, year-round. This approach is suitable for properties that are rated as Low, Moderate or High Risk.

In these high rainfall areas, site-specific design to select and size an appropriate DWM system and effluent disposal method is required to ensure that DWM is sustainable with no off-lot discharge. Innovative designs may be required and overarching measures to assist in managing the wastewater in these regions may include minimising wastewater generation, increasing reuse and increasing the land application footprint. It should be noted that there may be cases in which an appropriate solution cannot be devised or in which costs are prohibitive.

Council engaged W&A to undertake a detailed design for a recommended alternative LAA design for the high rainfall areas. The following standard drawings and sizing tables can be used for the high rainfall areas.





Beech Forest/Ferguson/Weeaprounah - Wick Trench Option (8mm/day)						
Number of Bedrooms	Load (L/Day)	Required Length (m)	Design Basal Area (m ²)	Maximum Storage Depth (mm)	Maximum (In-soil) storage Volume (m ³)	Effluent Application Area Footprint (m ²) - including interbed spacing
3	720	280	237	277	65,500	880
4	900	356	301	260	78,300	1,140
5	1,080	425	360	264	94,900	1,400

Lavers Hill/Wyelangta - Wick Trench Option (8mm/day)						
Number of Bedrooms	Load (L/Day)	Required Length (m)	Design Basal Area (m ²)	Maximum Storage Depth (mm)	Maximum (In-soil) storage Volume (m ³)	Effluent Application Area Footprint (m ²) - including interbed spacing
3	720	343	290	273	78,900	1,140
4	900	425	360	277	99,650	1,400
5	1,080	520	440	265	116,350	1,660

Beech Forest/Ferguson/Weeaprounah - Wick Trench Option (10mm/day)						
Number of Bedrooms	Load (L/Day)	Required Trench Length (m)	Design Basal Area (m ²)	Maximum Storage Depth (mm)	Maximum (In-soil) storage Volume (m ³)	Effluent Application Area Footprint (m ²) - including interbed spacing
3	720	168	142	288	40,850	555
4	900	213	180	264	47,450	685
5	1,080	255	216	264	56,950	815

Lavers Hill/Wyelangta - Wick Trench Option (10mm/day)						
Number of Bedrooms	Load (L/Day)	Required Trench Length (m)	Design Basal Area (m ²)	Maximum Storage Depth (mm)	Maximum (In-soil) storage Volume (m ³)	Effluent Application Area Footprint (m ²) - including interbed spacing
3	720	190	161	270	43,350	620
4	900	237	201	271	54,400	750
5	1,080	285	241	272	65,500	945

Beech Forest/Ferguson/Weeaprounah - Wick Trench Option (12mm/day)						
Number of Bedrooms	Load (L/Day)	Required Trench Length (m)	Design Basal Area (m ²)	Maximum Storage Depth (mm)	Maximum (In-soil) storage Volume (m ³)	Effluent Application Area Footprint (m ²) - including interbed spacing
3	720	121	102	284	28,950	425
4	900	151	128	275	35,100	490
5	1,080	182	154	268	41,300	620

Lavers Hill/Wyelangta - Wick Trench Option (12mm/day)						
Number of Bedrooms	Load (L/Day)	Required Trench Length (m)	Design Basal Area (m ²)	Maximum Storage Depth (mm)	Maximum (In-soil) storage Volume (m ³)	Effluent Application Area Footprint (m ²) - including interbed spacing
3	720	131	111	274	30,350	425
4	900	164	139	270	37,550	555
5	1,080	197	167	268	44,750	620

Beech Forest/Ferguson/Weeaprounah - Wick Trench Option (20mm/day)						
Number of Bedrooms	Load (L/Day)	Required Trench Length (m)	Design Basal Area (m ²)	Maximum Storage Depth (mm)	Maximum (In-soil) storage Volume (m ³)	Effluent Application Area Footprint (m ²) - including interbed spacing
3	720	57	48	264	12,650	165
4	900	71	60	264	15,850	230
5	1,080	85	72	264	19,000	295

Lavers Hill/Wyelangta - Wick Trench Option (20mm/day)						
Number of Bedrooms	Load (L/Day)	Required Trench Length (m)	Design Basal Area (m ²)	Maximum Storage Depth (mm)	Maximum (In-soil) storage Volume (m ³)	Effluent Application Area Footprint (m ²) - including interbed spacing
3	720	59	50	250	12,500	165
4	900	73	62	281	17,500	230
5	1,080	89	75	250	18,750	295



RECOMMENDED LAND APPLICATION DESIGN FOR HIGH-RAINFALL AREAS
DESIGN – SECONDARY TREATMENT WITH WICK TRENCH/BED

Project: 1307
 Colac Otway Shire DWMP
 Drawn: BC/MS
 Dimensions: As shown

7.5 Footprint Area of Land Application Systems

The size of a land application system depends not only on the volume of the effluent to be applied, the quality of the soil and on local rainfall, but also on how the system is laid out and on the spacing of components (e.g. trenches) and the width of mandatory setbacks.

In a subsurface irrigation system, the drip-lines are often closely spaced and the land may be considered to have an even loading. Therefore, the total land application area is the required area as specified by the water balance (plus any setbacks which must be maintained). Irrigation systems can be designed to best fit the most suitable area, provided that the pump is capable of delivering effluent evenly throughout the entire system.

For absorption and ETA trenches and beds, wick trenches and Low Pressure Effluent Distribution (LPED) systems, a minimum spacing between trenches or beds must be observed to prevent overloading of the soil between them. The current EPA Code of Practice or *AS1547:2012* specifies minimum spacing's, which have been used to estimate a typical footprint area of the system, on the assumption that the longest acceptable trench or bed length has been used. These values are provided in the individual model spreadsheets for each system type. It is highlighted that the 'typical footprint' is indicative only, and is likely to represent the minimum footprint for a well-laid out system. The final area must be determined by the system designer/installer as part of the final DWM design (for all risk category lots).

8 Sub-catchment Analysis

The Minister for Water's (2012) Guidelines for planning permit applications in potable water supply catchments specify that, to avoid the blanket application of a 1 in 40 hectare dwelling density in DWSCs, a DWMP must include consideration of the broader cumulative impact of DWM systems within a catchment. Aggregated 'cumulative' risk is area dependant, therefore it is important to delineate manageable areas for investigation and analysis. The DWSCs were therefore divided into smaller 'sub-catchments' so that the cumulative risk could be identified and to assist in prioritising further assessment and management resources. Sub-catchments are delineated based on areas of concern; whether that refers to offtake points, water quality sampling points or towns/settlements. The aim is to identify areas of concern that may pose a potential impact on water quality.

The sub-catchments were delineated using the TauDEM Sub-catchment Delineation tool in QGIS™. The Digital Elevation Model (DEM) developed in Section 6.2.5 and Water Corporation identified offtake and discharge points were used to inform the delineation of the sub-catchment boundaries. There are 9 identified Barwon Water offtakes, 5 identified Wannon Water offtakes and 10 identified discharge points. The Barwon Downs Wellfield Intake offtake points (seven in total) that refer to groundwater and multiple North Otway Wannon Water offtake points that are located in the same locality are not included in the sub-catchment analysis. For the purposes of this analysis, a sub-catchment is an area of terrain with one single outflow point. The residual regions were subdivided into a number of larger sub-catchments based on their discharge points.

Sub-catchment analysis can be applied at a variable scale. In addition to delineating the sub-catchments based on offtake and discharge points, smaller sub-catchments were delineated based on the town/settlement boundaries for the targeted unsewered towns/settlements located within the DWSC. The aim is to prioritise both the towns/settlements and sub-catchments within the DWSCs and to determine the relative contribution of risk of the town/settlement development within the larger sub-catchment.

Figure 13 shows the delineated sub-catchments and towns/settlements within the DWSC and the relative offtake and discharge points. The sub-catchment analysis resulted in the delineation of 24 individual sub-catchments, with 13 of these sub-catchments delineated based on offtake points. There were seven town/settlement sub-catchments identified. It is important to ensure that a high level of environmental health is maintained within these 13 sub-catchments in order to ensure that the drinking water supply is protected.

Section 4.4 of the Operational Plan details the prioritisation of both sub-catchments and towns/settlements based on cumulative Sensitivity Ratings. Figure 14 outlines the Sensitivity Rating mapping for the DWSCs.

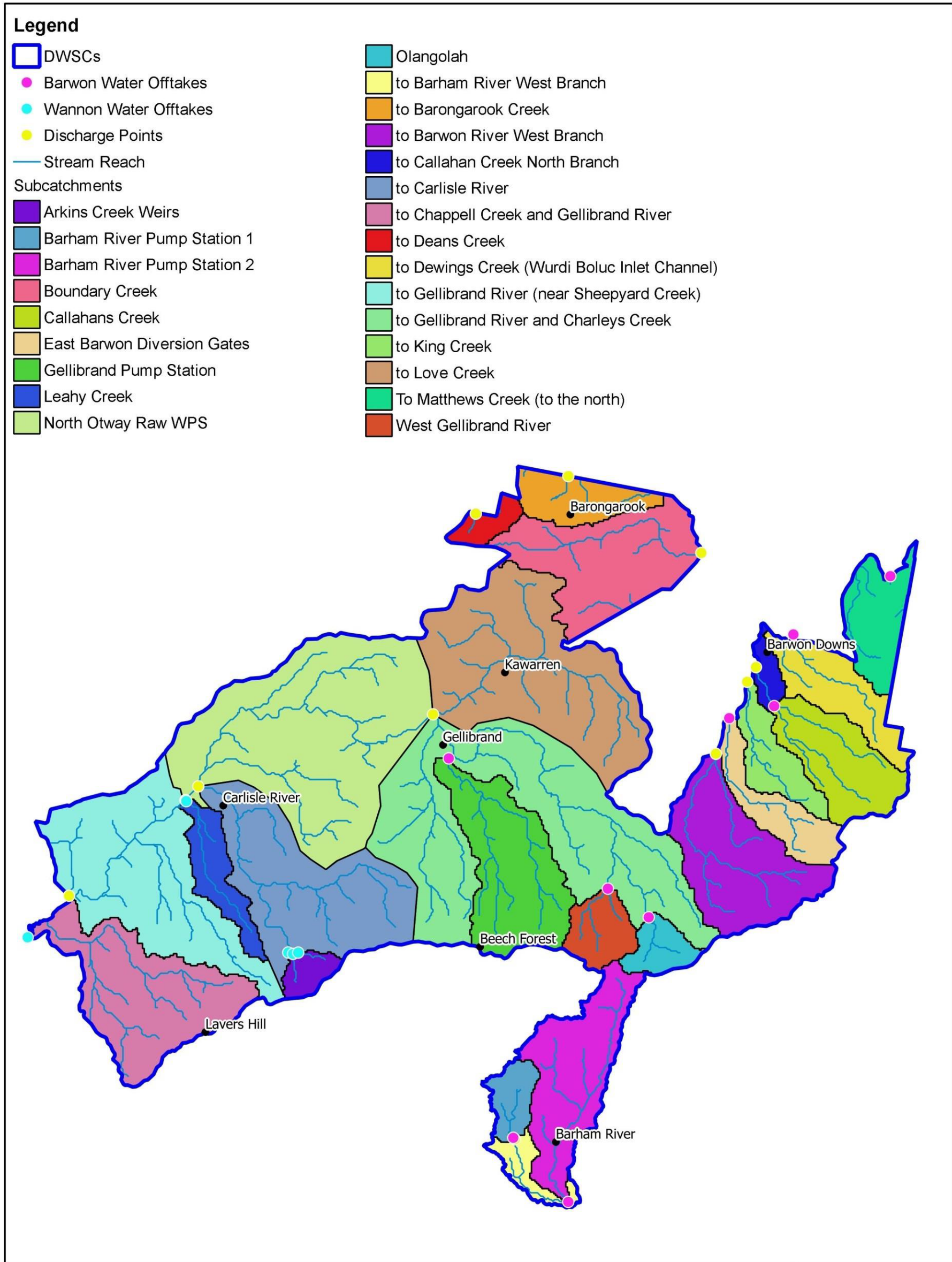
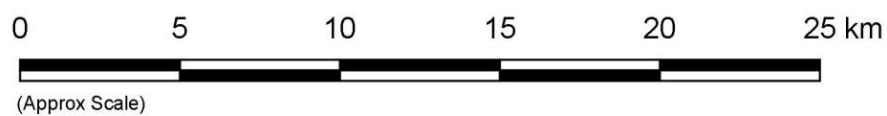


Figure 13: Subcatchments within DWSC

1307 Colac Otway Shire DWMP Revision



Revision	3
Drawn	JK
Approved	MS

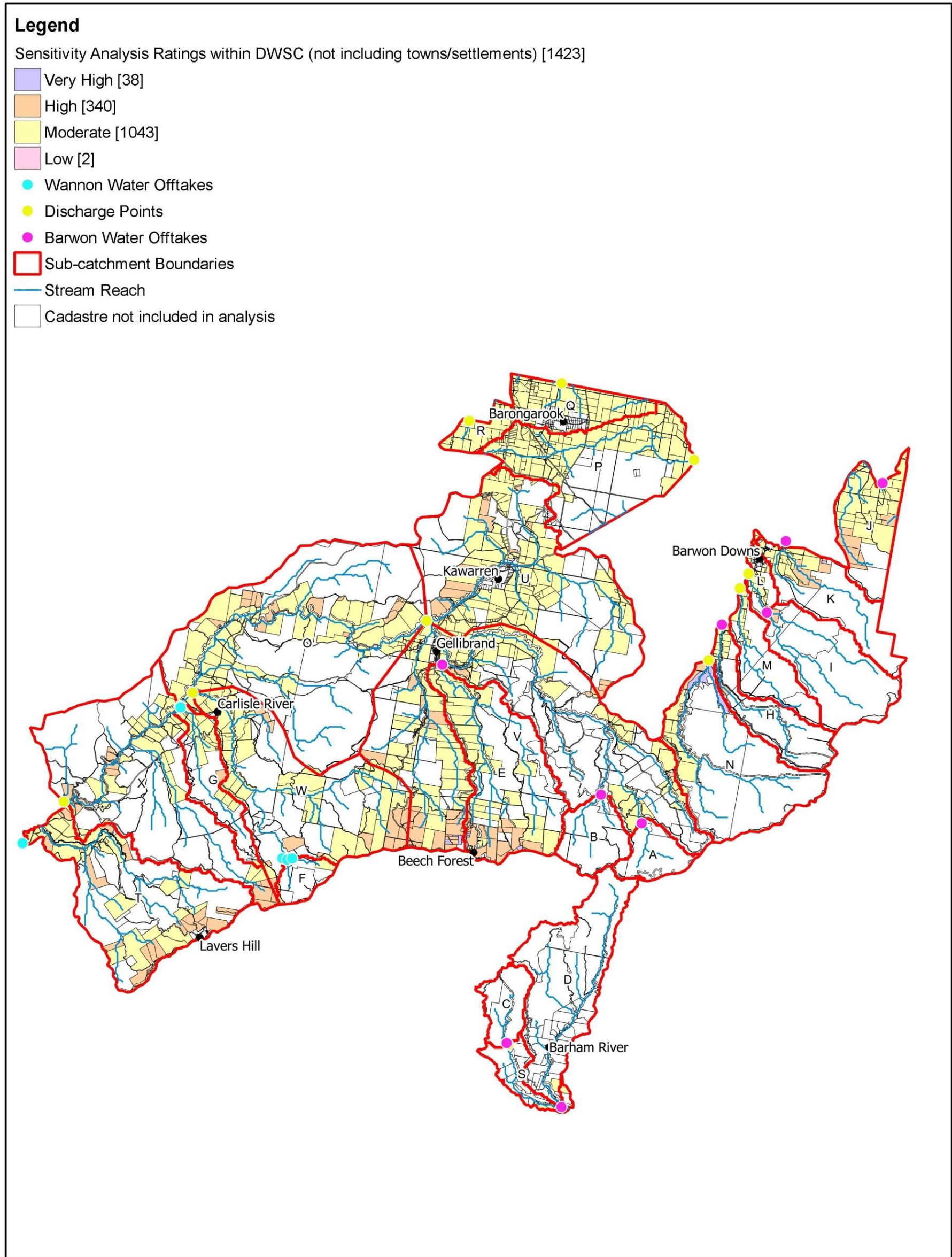


Figure 14: Sub-catchments & Associated Sensitivity Analysis within DWSC

1307 Colac Otway Shire DWMP Revision

	0	5	10	15	20	25 km	Revision	3
	(Approx Scale)						Drawn	JK
							Approved	MS

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9 Glossary of Terms

Term	Definition
Aerobic treatment	Biological treatment processes that occur in the presence of oxygen (i.e. aerobic bacteria digest wastewater contaminants). Aerobic bacteria are organisms that require oxygen to survive and grow.
Anaerobic treatment	Biological treatment processes that occur in the absence of oxygen.
Blackwater	Wastewater grossly contaminated with faeces (i.e. from a toilet).
Desludging	Removal of the semi solid waste from a tank.
Effluent	Water discharged from a treatment plant.
Evapotranspiration	Transfer of water from the soil to the atmosphere through evaporation and plant transpiration. Calculated using the FAO Penman-Monteith method to derive (ET ₀).
Organic Matter	Material that comes from the tissues of organisms (plants, animals, or microorganisms) that are currently or were once living.
Greywater	Wastewater from showers, baths, sinks, washing machines, dish washers.
Hardpan	A hardened, compacted and/or cemented horizon.
Locality	The broader locality surrounding a town (place name within mapped boundaries).
Non-Potable	Water not suitable for human consumption.
Parcel	The smallest unit of land able to be transferred within Victoria's cadastral system, usually having one proprietor or owner (land.vic.gov.au). For the purposes of this DWMP, parcel and lot are given to have the same meaning.
Peds	An aggregate of soil particles.
Permeability	The ability of the soil to allow water to pass through.
P-sorb	Phosphorus adsorption capacity of soil.
Property	Land under common occupation (land.vic.gov.au). May include multiple parcels.
Sensitivity	The 'likely' consequence of off-site (DWM) impacts based on the cumulative effect of individual lot constraints (soil suitability, slope, useable lot area, climate and location) and variables affecting the specific land capability and associated limitations of the lot to sustainably manage wastewater in compliance with SEPP objectives.
Settlement	An area of residential development within the Rural Living Zone (Barongarook and Kwarren) or Rural Conservation Zone (Barham River).
Sewage	Solid and liquid wastewater conveyed through sewers.
Sewerage	A system of sewers.
Town	The town servicing a locality, which is predominantly zoned Township Zone. It contains both residential and commercial development.

10 References

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Appendix A

Informative Maps

Legend

- COS LGA Boundary
- Declared Water Supply Catchments (DWSCs)
- Cadastre
- Watercourses
- Surface Waterways
- Wannon Water Offtake Points
- SRW Offtake Points (within DWSC)
- Barwon Water Offtake Points

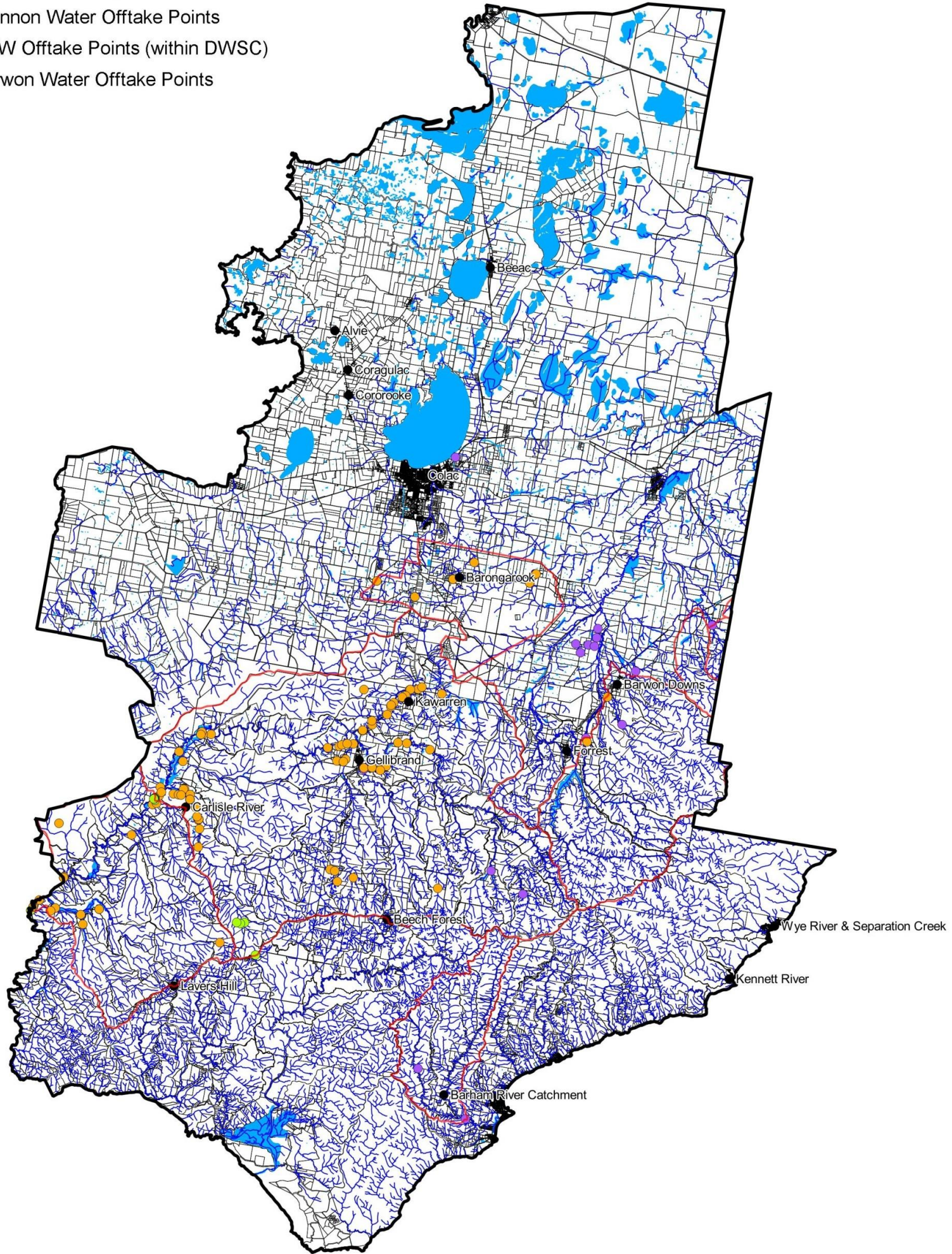


Figure A1: Surface Waters & Associated Buffers - Shire

Colac Otway Shire DWMP Review



0 6 12 18 24 30 km



(Approx Scale)

Revision	5
Drawn	JK
Approved	MS

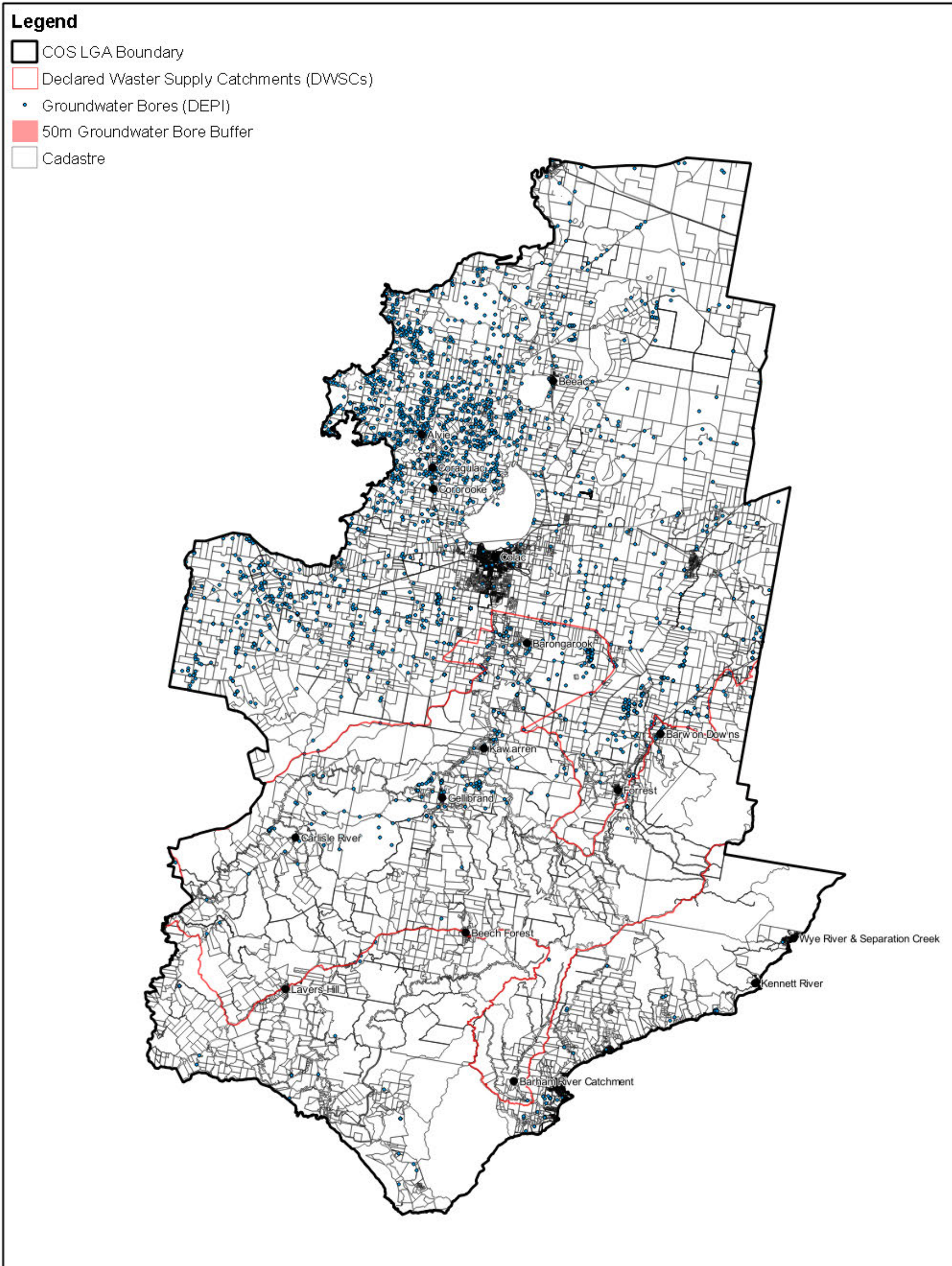


Figure A2: Groundwater Bores & Associated Buffers - Shire

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

Legend

- Land Subject to Inundation Overlay
- COS LGA Boundary
- Declared Water Supply Catchments (DWSCs)
- Cadastre

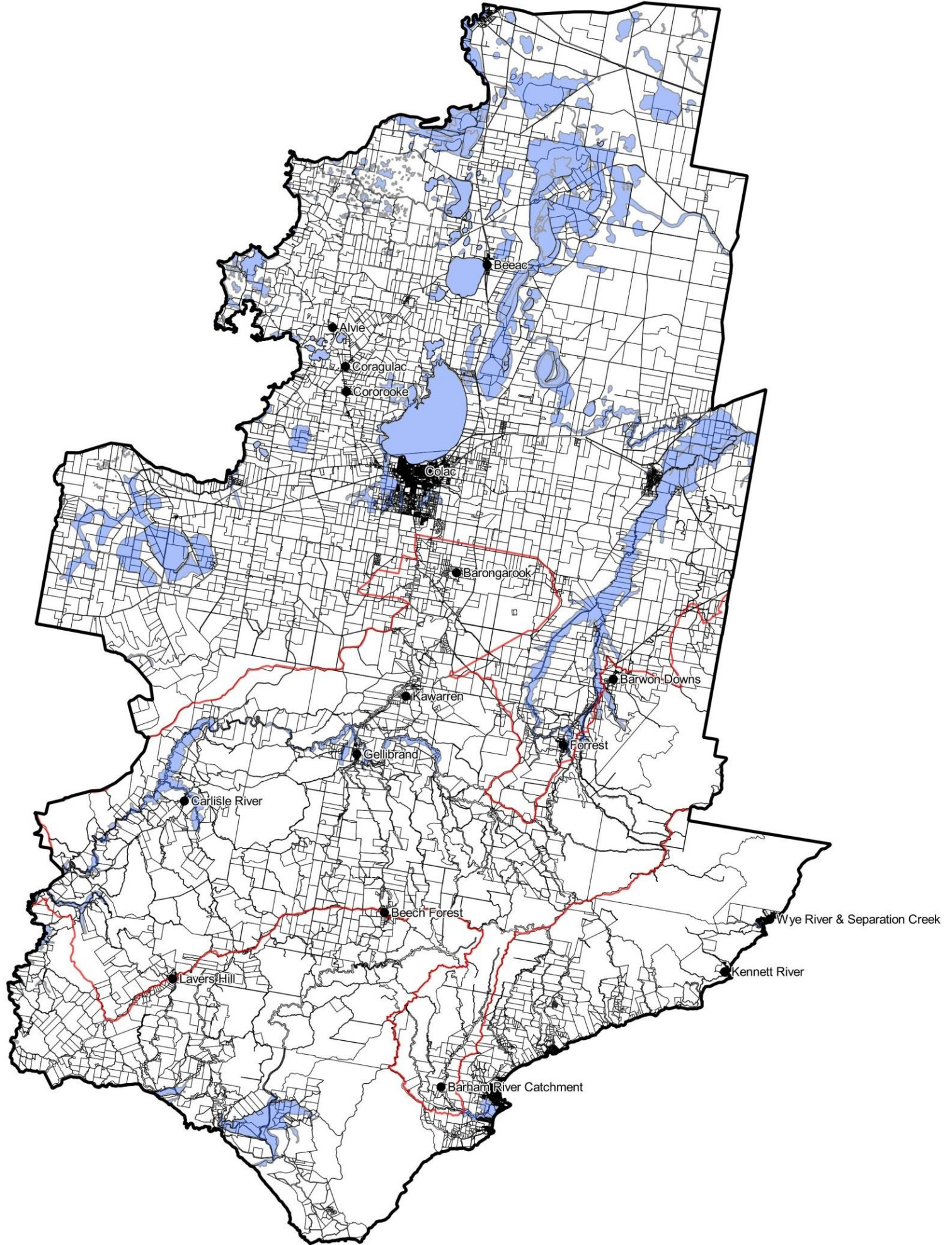


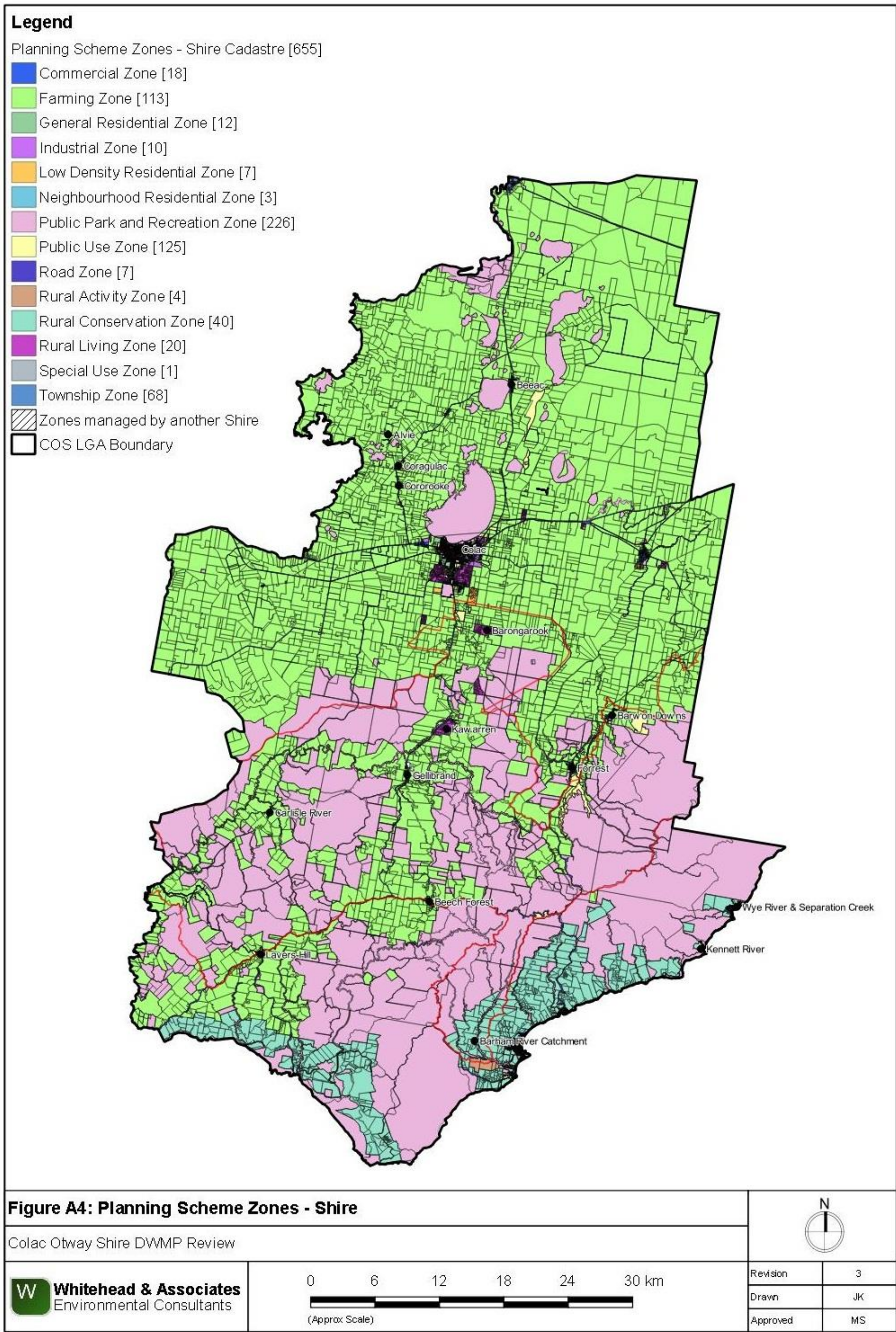
Figure A3: Land Subject to Inundation - Shire

Colac Otway Shire DWMP Review



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Drawn	JK
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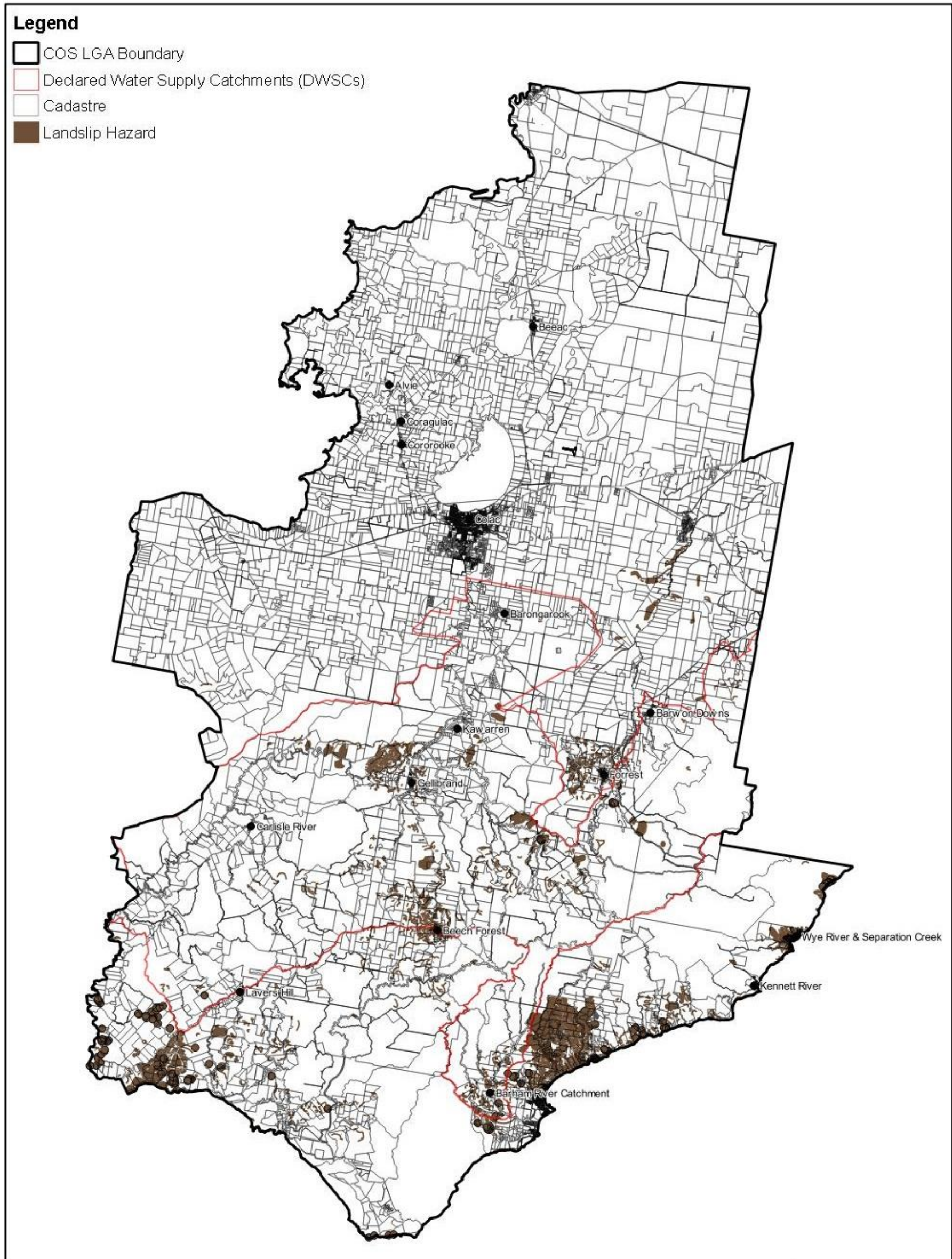
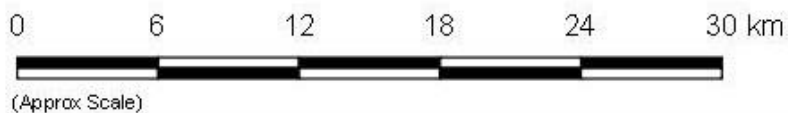


Figure A5: Sensitivity Overlay - Landslide Hazard - Shire

Colac Otway Shire DWMP Review



Revision	3
Drawn	JK
Approved	MS

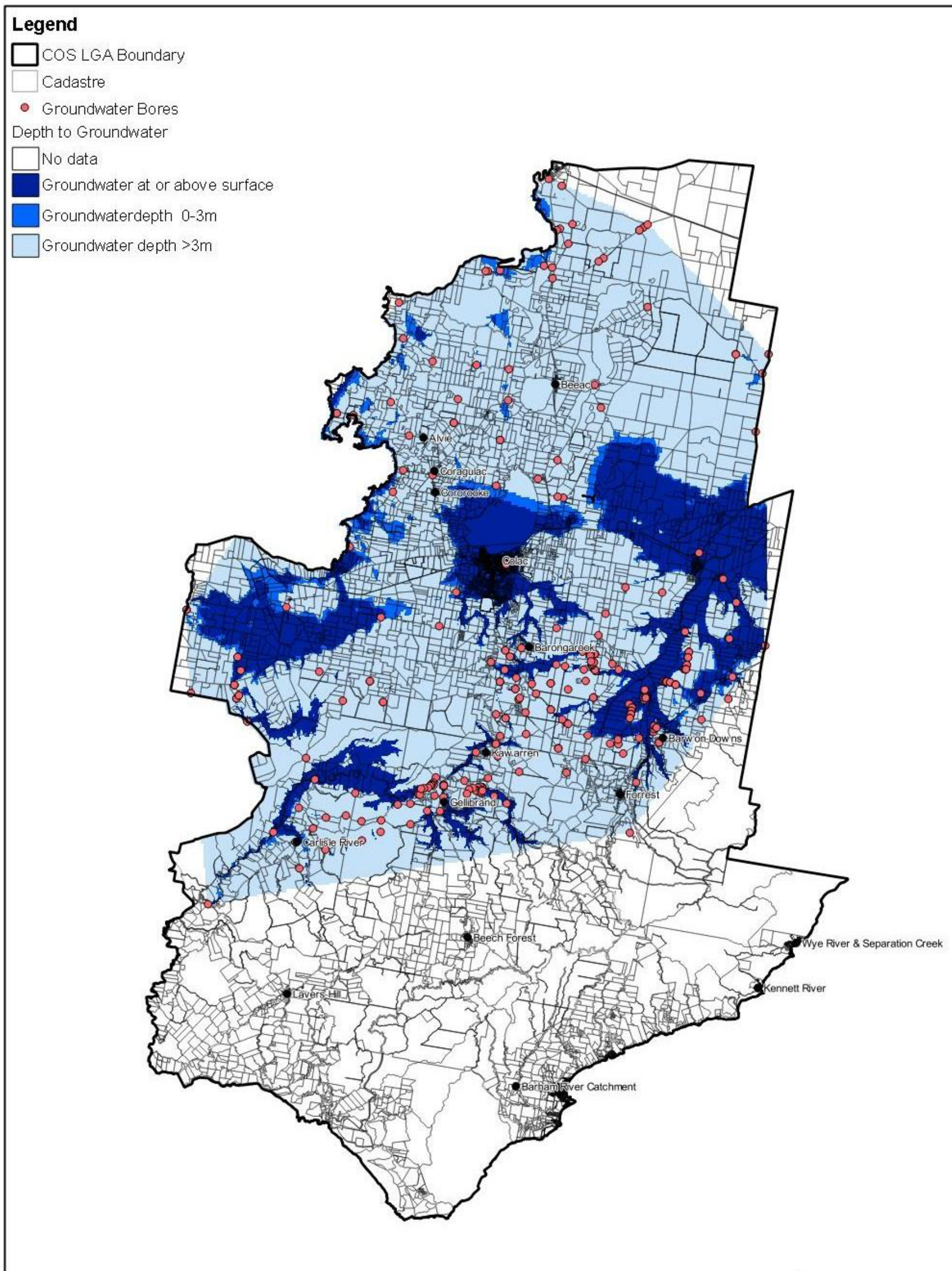


Figure A6: Depth to Groundwater - Shire

Colac Otway Shire DWMP Review



0 6 12 18 24 30 km



(Approx Scale)



Revision	3
Drawn	JK
Approved	MS

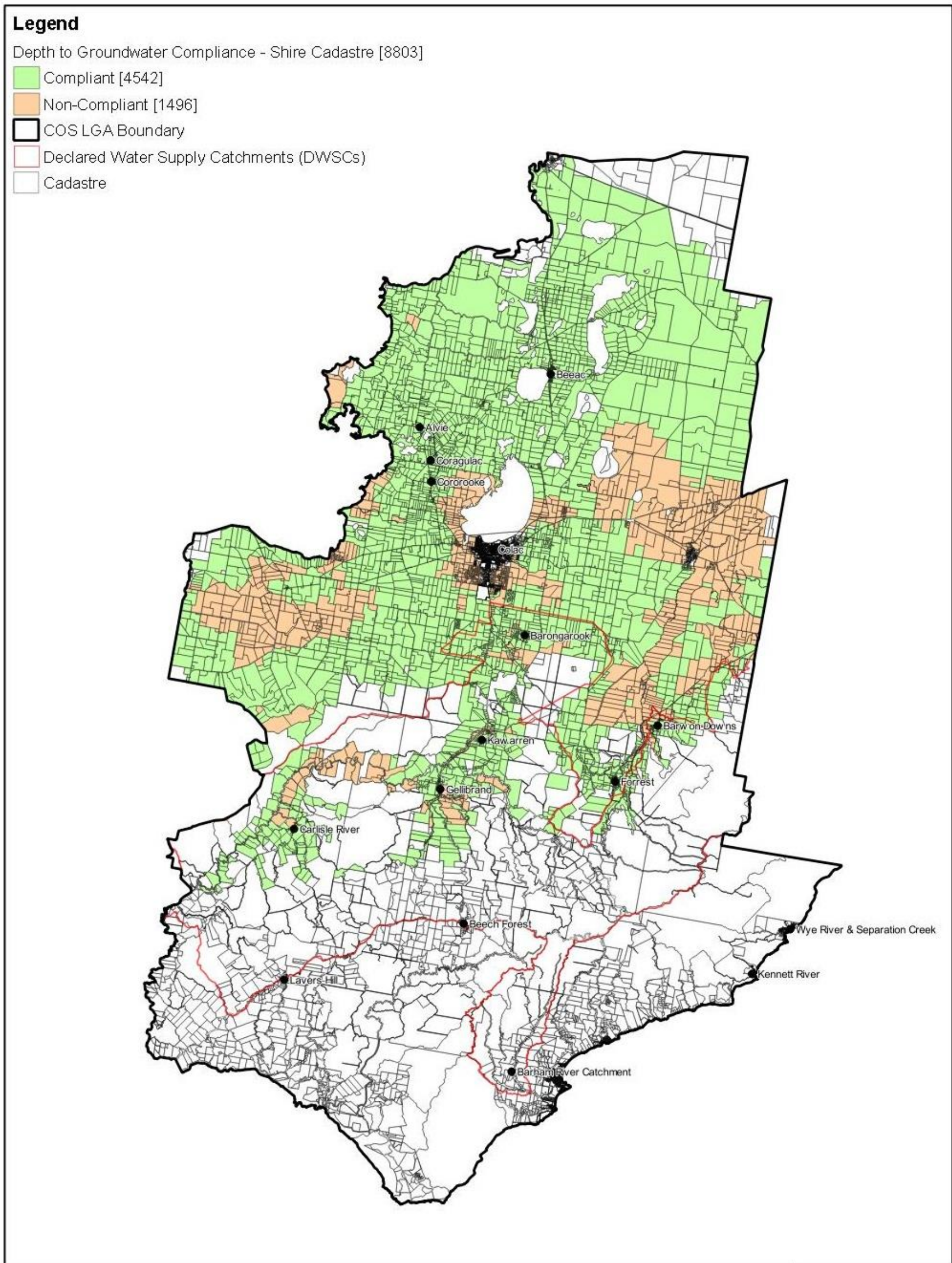


Figure A7: Depth to Groundwater Compliance - Shire

Colac Otway Shire DWMP Review

			Revision 3
			Drawn JK
			Approved MS

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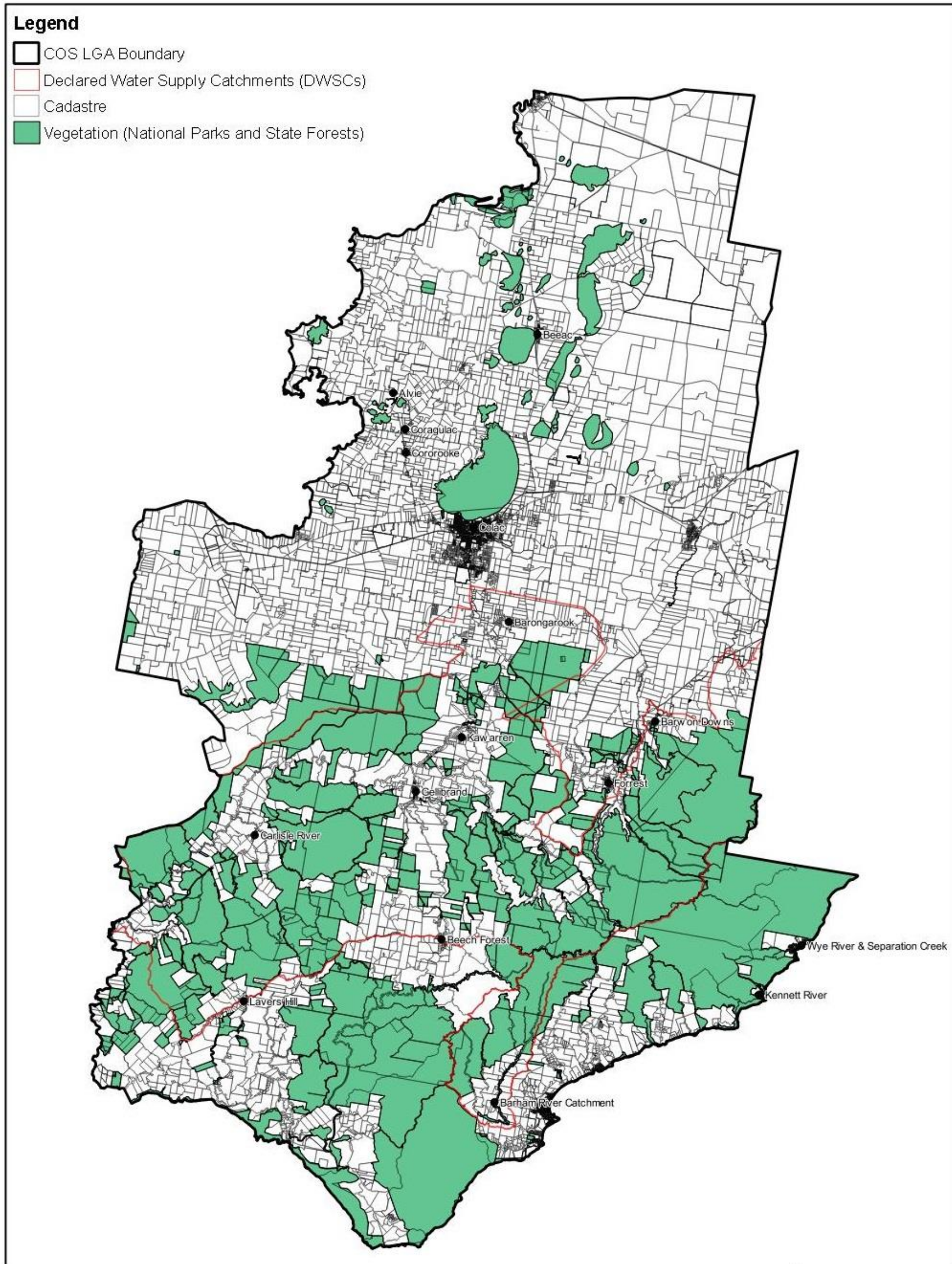
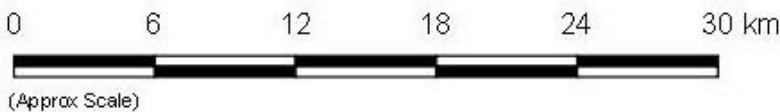


Figure A8: Sensitivity Overlay - Vegetation - Shire

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Revision	3
Drawn	JK
Approved	MS

Appendix B

Locality Reports

If your locality is not provided as a Locality Report in Appendix B, you can use the System Sizing Tables for the nearest locality (i.e. Colac/Elliminyt can utilise Barongarook).

Note: words have the following meanings in the DWMP (refer to glossary for further definition):

‘Town’ means the developed area/town which services the wider locality. ‘Towns’, which contain both residential and commercial development, are predominantly zoned Township zone.

‘Settlement’ refers to residential areas in Barham River, Barongarook and Kawarren, which are in the Rural Living Zone and Rural Conservation Zone.

‘Locality’ means the wider geographical area, inclusive of the town/settlement.

The white cadastre regions shown on the locality and town/settlement Sensitivity Rating maps refers to regions excluded from the study. Refer to Section 5 for more detail.

Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

A. Alvie Locality Report

1a. Introduction

Alvie is a rural locality located approximately 12km northwest of Colac on the western side of Lake Corangamite within the Western Volcanic Plain landscape and Red Rock region. Alvie lies at the foot of the Red Rock Scenic Reserve, an old scoria formation that formed due to violent volcanic eruptions, which is a popular tourist attraction.

The locality has a population of approximately 132 residents (ABS Census, 2016). There are approximately 161 and 33 unsewered lots located within the Alvie locality and town respectively. There were 4 new lots with DWM systems within the locality from June 2015-2021. There are 30 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Alvie locality are summarised as follows:

- 3 AWTs (1 subsurface irrigation, 2 unknown);
- 20 septic tanks (6 trenches and 14 unknown);
- 2 worm farm (1 subsurface irrigation, 1 unknown); and
- 5 unknown (2 trenches and 3 unknown).

No site investigations were conducted within the Alvie locality as part of the 2014 field assessments; however, soil investigations were conducted to confirm the soil type.

2a. Background Documentation

Refer to the following documents for additional detail specifically regarding the locality:

- Red Rock Region Community Infrastructure Plan (September, 2013);
- COS Planning Scheme; and
- Rural Living Strategy (2011)

3a. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 2.
Surface waterways & catchments	Alvie contains a number of lakes, predominantly in the region to the south of the locality, that have formed within the Western Volcanic Plains; including Lake Coragulac (southeast near town), Lake Wernwrap, Lake Purdiguluc and Lake Gnalinegurk.
Groundwater	Proximity to groundwater bores: significant throughout the locality with a high density of groundwater bores.
Land subject to inundation	To the south of the town around the lakes.
Useable lot area	High: 12 (22)

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Characteristic	Description
Town (Locality)	Moderate: 11 (22) Low: 10 (105) Compliant: 0 (12)
Minimum lot size compliance with Planning Scheme Zoning	The town is predominantly zoned as Township, with some Public Use Zone. Land in the wider locality area is predominantly in the Farming Zone, with land associated with the lakes in the Public Conservation and Resource Zone. Compliance is variable throughout the locality, with the majority of the town compliant. Compliant: 28 (40) Non-compliant: 5 (121)
Slope Town (Locality)	High: 1 (17) (higher towards Lake Coragulac) Moderate: 7 (15) Low: 25 (129)
Geology	Northwest region – unnamed stony rises of Newer Volcanic Group; Town – unnamed phreatomagmatic deposits (tuff rings) of Newer Volcanic Group; Eastern and southern regions – unnamed scoria deposits (scoria cones and agglutinated spatter rims) of Newer Volcanic Group; and Some unnamed non-marine swamp, lake and estuarine deposits.
Soil suitability Town (Locality)	High: 0 (15) Moderate: 33 (146) Low: 0 (0) The town consists of soil landscape unit '101' (moderate rating) which forms in the undulating low hills of the Western Volcanic Plains and consists of friable mottled black texture contrast soil and neutral black gradational soils to depths less than 1.5m. The soils consist of moderately structured clay loam over strongly structured medium clay to heavy clay. Limitations include restricted drainage. The western and surrounding regions of the locality consists of soil landscape unit '114' (moderate rating) which forms in the undulating basalt plains and stony rises and consists of gradational and friable mottled textured contrast soils to depths of less than 1.5m. The soils consist of strongly structured clay loam over strongly structured medium clay. There are some landform depressions to the north of the town.

Characteristic	Description
Sensitivity Overlay	Depth to Groundwater Compliance: all compliant. Landslip: Nil. Vegetation: Red Rock Scenic Reserve and lakes to the south (Coragulac, Werowrap, Corangamite, and Gnalinegurk).
Sensitivity Analysis Rating Town (Locality)	Very High: 0 (0) High: 3 (8) Moderate: 22 (73) Low: 8 (76)

4a. Sensitivity Analysis (Maps)

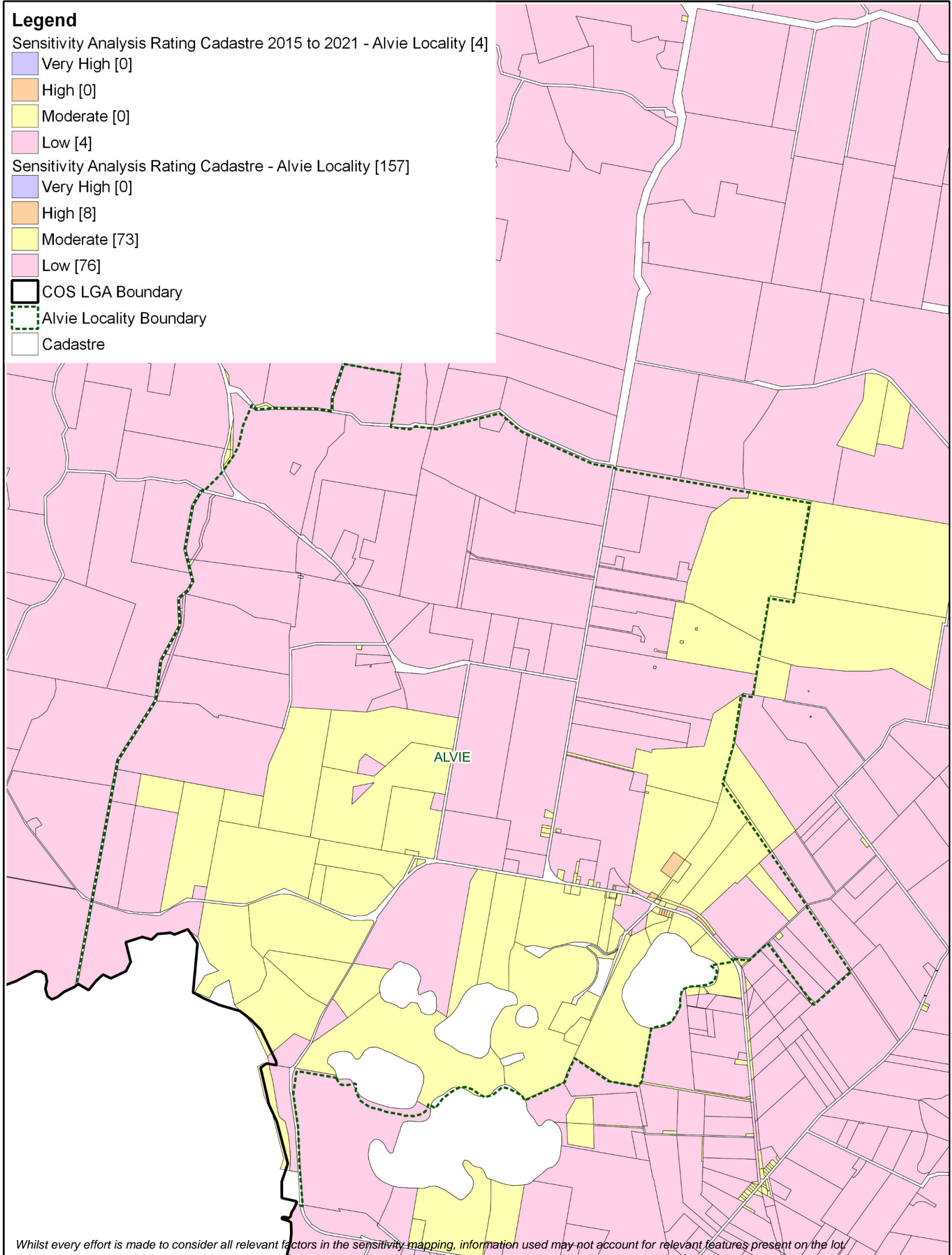
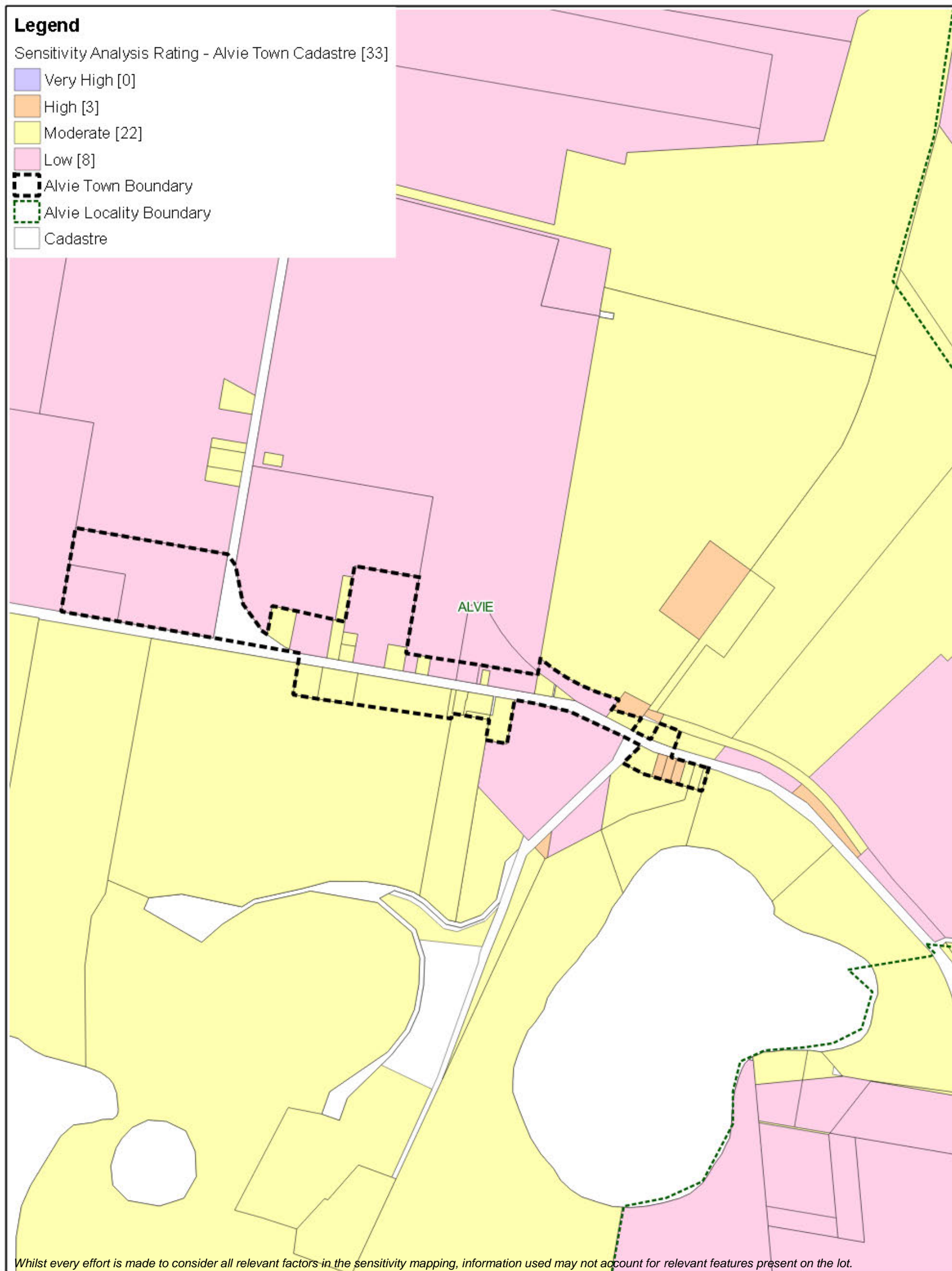


Figure a1: Sensitivity Analysis - Alvie Locality

Colac Otway Shire DWMP Review



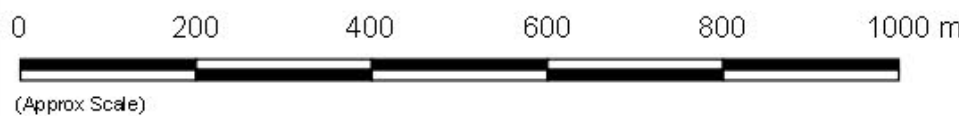
Revision	6
Drawn	JK
Approved	MS



Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure a2: Sensitivity Analysis - Alvie Town

Colac Otway Shire DWMP Review



Revision	3
Drawn	JK
Approved	MS

5a. System Selection

Due to the dominance of heavy-textured soils in the Alvie area, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays). The System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

6a. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall and average evapotranspiration data for Alvie was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as 'Not Applicable' for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as 'Not Applicable' for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed 'Not Applicable' in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Alvie locality are provided below.

7a. General Conclusion

The lots within Alvie have been predominantly assigned a Moderate or Low Sensitivity Rating to sustainable DWM. Predominantly, both Standard and Council LCAs will be required, with the use of System Sizing tables deemed appropriate. The constraints within Alvie are quite low in comparison to other localities, with particular attention directed towards ensuring that the quality of the groundwater resources is maintained and the correct decommissioning of groundwater bores occurs where necessary.

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Alvie and Beeac									
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)		
	DIR (mm)	5	5	4	3.5	3	2		
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²) not including spacing and setbacks							
5 + bedroom residence	1,080	268		356	426	530	1,039		
4 bedroom residence	900	223		297	355	442	866		
1-3 bedroom residence	720	127		237	284	353	693		
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012									
Conventional Absorption Trenches and Beds - Primary or Secondary Treated Effluent									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Massive Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)
	DLR (mm)	Not supported (Alternative Land Application System Required)							
Development Type	Daily (L/day)								
5 + bedroom residence	1,080								
4 bedroom residence	900								
1-3 bedroom residence	720								
Evapotranspiration-Absorption Trenches and Beds - Primary or Secondary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only
	DLR (mm)	20*	20*	15	10	12	8	5	5
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing and setbacks							
5 + bedroom residence	1,080	58		78	123	100	128	281	
4 bedroom residence	900	48		65	102	83	132	234	
1-3 bedroom residence	720	39		52	82	67	106	188	
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012									
LPED Irrigation Systems - Primary or Secondary Treated Effluent									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)		
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	3	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)		
Development Type	Daily (L/day)		Total min. basal or 'wetted' area required (m ²)†						
5 + bedroom residence	1,080		379	460	584				
4 bedroom residence	900		316	383	487				
1-3 bedroom residence	720	253	307	390					
† required for zero wet weather storage (m ²) not including spacing & setbacks									
Wick Trenches and Beds - Secondary Treated Effluent Only									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)
	DLR (mm)	25	30	20	10	12	8	8	5
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing and setbacks							
5 + bedroom residence	1,080	46	38	58	123	100	128	281	
4 bedroom residence	900	38	32	48	102	83	132	234	
1-3 bedroom residence	720	31	25	39	82	67	106	188	

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B. Barham River Catchment (Apollo Bay) Locality Report

1b. Introduction

Barham River (also known informally as 'Paradise') is a rural settlement located in the hinterlands of the Apollo Bay locality on the south-eastern coast of COS. On maps, it is officially within the broader Apollo Bay locality, but it is distinguished by low density, unsewered residential properties primarily extending along Barham River Road and other minor roads. Many properties are rural-residential (including hobby farms). The landform consists of dissected low hills and alluvial terraces abutting rivers and streams at the base of the Otway Ranges. The entire Barham River ('Paradise') Catchment settlement is located within the Barham River DWSC as indicated by the surface water informative map A1, Appendix A.

Because it does not fit within specific Census locality boundaries, it is difficult to estimate the residential population of the Barham River Catchment settlement. The broader Apollo Bay locality (which includes the Barham River Catchment settlement) has a population of approximately 1,598 residents (ABS Census, 2016) which reaches up to 15,000 in the peak holiday season.

The settlement of Apollo Bay is sewerred, with approximately 392 and 78 unsewered lots located within the Apollo Bay locality and Barham River Catchment settlement, respectively. There are 83 new lots with DWM systems within the locality from June 2015-2021. There are 161 DWM system permits that have been inspected by COS to date within the Barham River Catchment settlement/ Apollo Bay locality (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method are summarised as follows:

- 62 AWTS (7 subsurface irrigation, 16 drip irrigation, 8 irrigation, 3 trenches and 28 unknown);
- 1 secondary treatment system (1 unknown);
- 2 composting toilets (1 drip irrigation);
- 63 septic tanks (27 trenches and 36 unknown);
- 3 worm farms (2 trenches and 1 unknown);
- 1 sand filter (1 unknown); and
- 30 unknown (11 trenches, 1 reln drain, 1 subsurface irrigation, and 17 unknown).

2b. Background Documentation

Refer to the following documents for additional detail specifically regarding the locality:

- Apollo Bay Structure Plan (April 2007);
- Barham River Confluence Land Management Plan (February 2012);
- COS Planning Scheme; and
- Rural Living Strategy (2011)

3b. Site Assessment Results

The following table summarises the results from the representative audits conducted by Consultant staff in September 2014.

Characteristic	Description
Land use	The Barham River Catchment settlement comprises a range of land uses, including rural living, small farms, and tourism.
Occupancy rates	2 (as per Apollo Bay Gazetted Locality, ABS Census, 2011).
Typical soils	Sandy clays and clay loams over clay or weathered shallow bedrock as determined during field investigations.
AS/NZS 1547:2012 soil categories	4 (Clay Loams), 5 (Light and Sandy Clays) and 6 (Medium to Heavy Clays).
Existing Systems	<p>Separate Blackwater and Greywater</p> <p>Of the three systems inspected during field investigations, one (33%) was assumed to comprise separate blackwater treatment in a septic tank, with direct greywater diversion within the lot boundary. The septic tank was not accessed, as it could not be found. Time since last pump out was not determined.</p> <p>It was assumed that septic effluent is discharged to conventional absorption trenches; however, the LAA was not identified.</p> <p>Combined Blackwater and Greywater</p> <p>Two systems (67%) inspected have a combined wastewater treatment system, or were assumed to have based on layout of pipework and age of dwelling. The time since last pump-out was generally unknown (partly due to owner not being home to ascertain).</p> <p>Septic effluent discharged to one or more conventional absorption trenches (or was assumed to if trenches could not be identified). The trench dimensions were generally unclear, and it is likely that they were undersized for the number of bedrooms. The majority of trenches or/and available LAAs were located on land of less than 8% slope and appeared to be parallel with contours.</p>

4b. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 3.
Surface waterways & catchments	Approximately half of the broader Apollo Bay locality is within a DWSC. The entirety of the Barham River ('Paradise') Catchment settlement is located in the Barham River DWSC, which is the drinking water supply for connected properties in Apollo Bay. Barham River (east and west branches) is the major watercourse and has tributaries throughout the catchment.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Characteristic	Description
	Barham River confluences with the Southern Ocean between the settlements of Marengo and Apollo Bay.
Groundwater	Proximity to groundwater bores: primarily around semi-rural lots on the outskirts (west and northwest) of Apollo Bay settlement. No depth to groundwater data.
Land subject to inundation	Along the lower coastal creek reaches, particularly at the Barham River confluence with the Southern Ocean.
Useable lot area Settlement (Locality)	High: 16 (106) Moderate: 7 (22) Low: 54 (258) Compliant: 1 (6)
Minimum lot size compliance with Planning Scheme Zoning	The Barham River ('Paradise') Catchment settlement is primarily zoned Rural Conservation Zone and is located to the west and northwest of the Apollo Bay town, in the foot slopes of the Otway Ranges. Compliance is variable throughout the broader Apollo Bay locality, with a greater density of non-compliant lots located to the south, west and north of the Apollo Bay settlement. Compliant: 21 (128) Non-compliant: 57 (264)
Slope Settlement (Locality)	High: 73 (285) (particularly around the Otway Ranges foot slopes) Moderate: 3 (41) Low: 2 (40)
Geology	Sedimentary Eumeralla Formation (early Cretaceous), fluvial braided stream deposits, unnamed Quaternary sedimentary (non-marine) colluvium and gully alluvium, and alluvial floodplain deposits. It differs along the coastline near the town of Apollo Bay.
Soil suitability Settlement (Locality)	High: 1 (139) Moderate: 77 (253) Low: 0 (0) Northern region/hinterland region consists of soil landscape unit '61' (moderate rating) which forms in the deeply dissected hills of the Otway Ranges and consists of brown gradational soils to 1.2m depth. The soils consist of moderately structured silty loam over clay loam. Limitations include restricted drainage and very acidic soil.

Characteristic	Description
	<p>The western region of the Apollo Bay locality and extending northeast along the coastline towards Skenes Creek consists of soil landscape unit '64' (moderate rating) which forms in the similar landscape as detailed in '61'. It consists of brown texture contrast soils to 0.9m depth. The soils consist of weakly structured clay sand over strongly structured clay loam.</p> <p>The northern half of the Apollo Bay locality consists of soil landscape unit '62' (high rating) which forms in the alluvium, alluvial terraces, floodplains and coastal plains of the Sedimentary Western Plains and elevated longitudinal coastal dunes at Cape Otway and consists of red-yellow calcareous sand soils to 1.9m depth. The soils consist of apedal loamy sand over weakly structured sandy clay. Limitations include low fertility and coarse fragments.</p> <p>The southern half of the Apollo Bay locality consists of soil landscape unit '91' (high rating) which forms in the deeply dissected and uplifted plains with coastal cliffs and consists of grey sand soils with hardpans to more than 2m depth. The soils consist of weakly structured loamy sand over apedal sand. Limitations include low fertility and coarse fragments.</p> <p>There is a small region in the southwest of the locality that consists of medium clay deep grey gradational soils.</p>
Sensitivity Overlay	<p>No depth to groundwater data</p> <p>Landslip: extensive within the eastern (coastal) section of locality, significant in the foot slopes of the Otway Ranges.</p> <p>Vegetation: Great Otway National Park in the northwest.</p>
Sensitivity Analysis Rating Settlement (Locality)	<p>Very High: 0 (12)</p> <p>High: 21 (146)</p> <p>Moderate: 57 (234)</p> <p>Low: 0 (0)</p>

5b. Sensitivity Analysis (Maps)

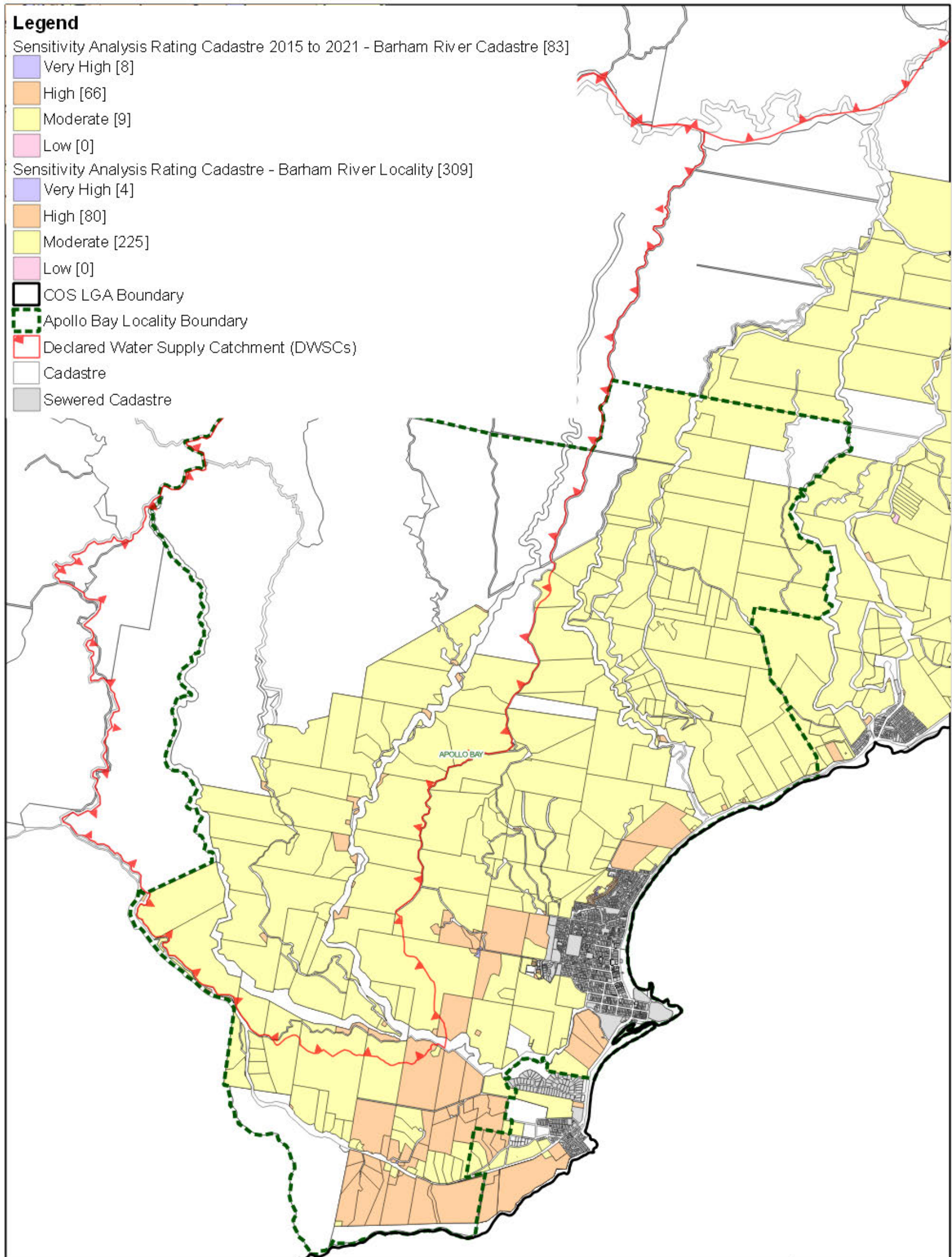


Figure b1: Sensitivity Analysis - Apollo Bay Locality

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

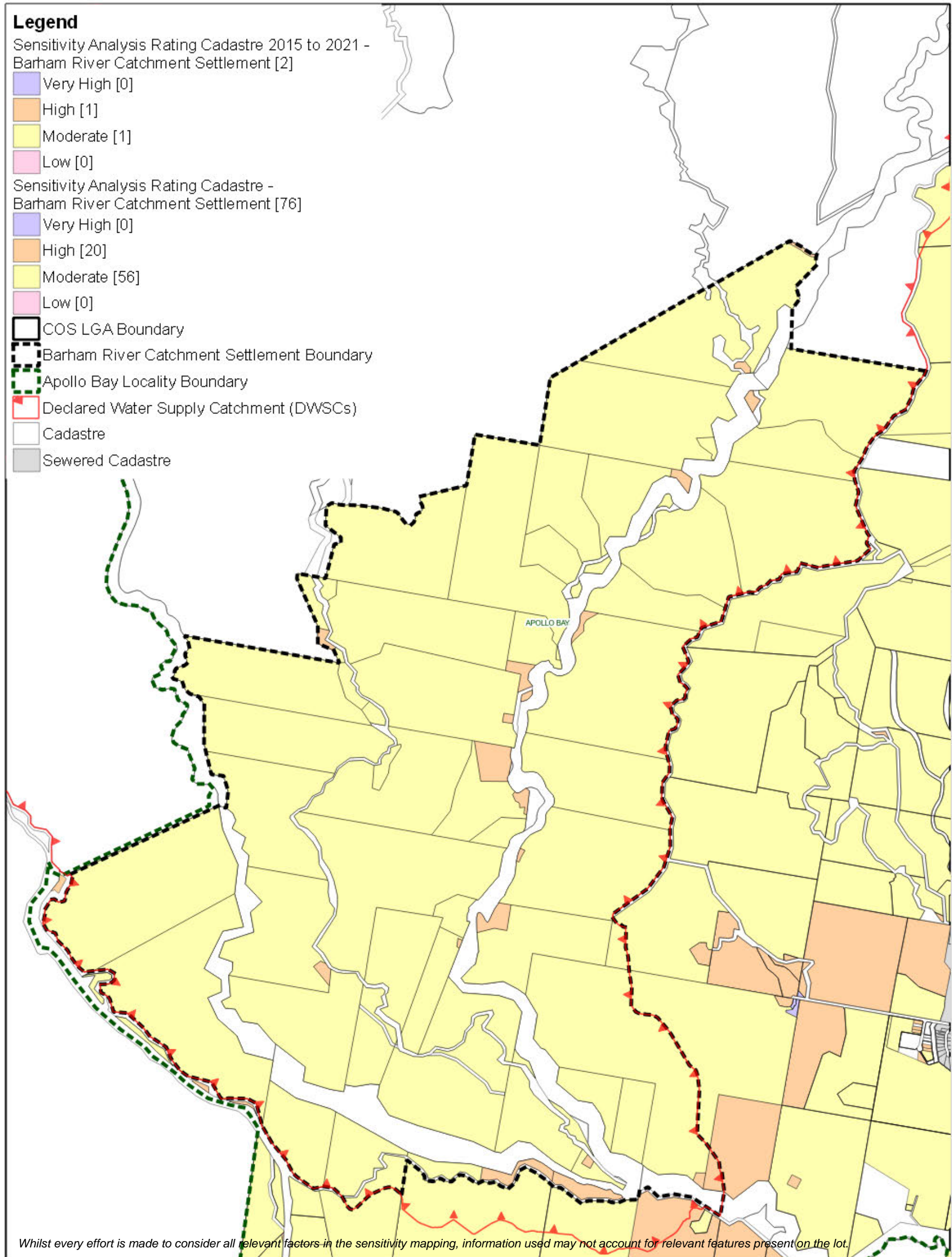


Figure b2: Sensitivity Analysis - Barham River Catchment Settlement

Colac Otway Shire DWMP Review



0 500 1,000 1,500 2,000 2,500 m



(Approx Scale)



Revision	5
Drawn	JK
Approved	MS

6b. System Selection

Due to the dominance of heavy-textured soils in the Barham River Catchment settlement, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays).

The wet climate of the Barham River Catchment settlement makes it a higher risk for DWM and site-specific, detailed design will be required for unsewered lots in this area. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

EPA Code of Practice (2013) (Section 2.2.2) identifies secondary treatment standard (or better) followed by subsurface pressure-compensating irrigation as current best-practice in Victoria for substantially reducing the risk associated with unsewered development. Further, the Code describes a "Wick trench/bed" land application option that may be incorporated with secondary treatment for consideration on sites constrained by climate or lot 'useable area', particularly within the DWSCs. Any variation from this best-practice approach must be provided with detailed supporting information to demonstrate suitability.

The Sizing Tables (discussed below) are not applicable for the Barham River Catchment settlement.

7b. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA (2014). 70th percentile monthly rainfall exceeds average monthly evapotranspiration in eight months of the year in the Barham River area. As a result, there is a month-to-month surplus of hydraulic inputs and subsequently the monthly water balance does not resolve itself and cannot produce meaningful results for land application area sizing.

Site-specific detailed design is required for the Barham River Catchment settlement.

8b. General Conclusion

The majority of the lots within the locality have been assigned a Moderate or High Sensitivity Rating to sustainable DWM. Predominantly, both Standard and Detailed LCAs will be required, with site-specific design a necessity due to the higher rainfall associated with this region. System Sizing Tables were not generated and a monthly water balance will need to be generated for system sizing for the Standard LCA. Particular attention needs to be directed towards ensuring that setbacks from surface waterways are maintained and that the systems selected are appropriate for steeper slopes with correct construction.

C. Barongarook Locality Report

1c. Introduction

Barongarook is located in the centre of COS approximately 9km south of Colac. The landform consists of dissected low hills and alluvial terraces abutting a stream on the northern foothills of the Otway Ranges. Notably, the entire settlement and surrounding locality is located within a DWSC, predominantly Barwon Downs Wellfield Intake DWSC and Gellibrand River DWSC in the southwest, as indicated by the surface water informative map, Appendix A.

Barongarook has two main settlement areas; a large one to the north and a smaller rural living settlement to the south. Barongarook locality has a population of approximately 434 residents (ABS Census, 2016). There are approximately 262 and 101 unsewered lots located within the Barongarook locality and settlements, respectively. There are 2 new lots with DWM systems within the locality from June 2015-2021. There are 130 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Barongarook locality are summarised as follows:

- 21 AWTS (5 subsurface irrigation, 4 drip irrigation, 1 irrigation and 10 unknown);
- 2 sand filters (1 subsurface irrigation and 1 drip irrigation);
- 1 secondary treatment system (1 unknown);
- 66 septic tanks (11 trenches, 1 subsurface irrigation and 54 unknown); and
- 40 unknown (12 trenches, 3 subsurface irrigation, 3 irrigation, and 22 unknown).

No field investigations were conducted in the Barongarook locality as part of the 2014 field assessments; however, soil investigations were conducted to confirm the soil type.

2c. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Barongarook Covenant Reserve Land Management Plan (February, 2012);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3c. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 3.
Surface waterways & catchments	The locality is located entirely within the Barwon Downs Wellfield Intake (Geelong) DWSC and Gellibrand River DWSC in the south. Boundary Creek is located to the south of the settlement, traversing southwest-northeast. Ten Mile Creek and Dividing Creek are also located to the south of the settlement. Tributaries of the Barongarook Creek West Branch flow into the surrounding region from the north into the settlement.

Characteristic	Description
Groundwater	Proximity to groundwater bores: distributed throughout.
Land subject to inundation	Nil
Useable lot area Settlement (Locality)	High: 18 (26) Moderate: 6 (16) Low: 77 (213) Compliant: 0 (7)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominately in the Farming Zone with some Public Conservation and Resource Zone to the southeast. The settlements (one in the south and the other in the north) are zoned Rural Living. Lots are predominantly non-compliant, including both settlement areas. Compliant: 0 (12) Non-compliant: 101 (250)
Slope Settlement (Locality)	High: 1 (16) Moderate: 16 (48) Low: 84 (198)
Geology	Dilwyn Formation of the Wangeripp Group (Eocene age) which consists of shallow marine, coastal barrier and back beach lagoonal deposits. Intertwined with Demons Bluff formation of the Niranda Group which consists of shallow marine and minor lagoonal deposits, with some alluvial and fluvial deposits associated with the Eumeralla Formation.
Soil suitability Settlement (Locality)	High: 0 (0) Moderate: 101 (262) Low: 0 (0) Variable soil landscapes (four). The majority of the locality and southern region of the northern settlement area consists of soil landscape unit '88' which forms along the rolling plains in the western part of the Barwon catchment and northern parts of the Gellibrand catchment and consists of grey sand soils to more than 2m depth. The soils consist of apedal sandy loam to sand over weakly structured sandy clay. Limitations include low fertility and coarse fragments. The northwest region of the locality consists of soil landscape unit '92' (moderate rating) which forms in the undulating plain in the north part of the Gellibrand River Catchment and consist of mottled yellow and red

Characteristic	Description
	<p>gradational soil to more than 2m depth. The soils consist of moderately structured sandy loam over light clay. Limitations include low fertility and low p-sorb.</p> <p>Around Bushbys Road in the northwest consists of soil landscape unit '93' (moderate rating) which forms in the gently undulating plain in the western parts of Barwon Catchment and consist of mottled gradational soil to more than 2m depth. The soils consist of weakly structured loam over moderately structured medium clay. Limitations include low fertility, p-sorb and coarse fragments.</p> <p>The southwest region of the locality consists of soil landscape unit '90' which forms on the rolling hills in the northern upper reaches of the Gellibrand catchment and consists of mottled gradational soil to more than 2m depth. The soil consists of apedal fine sandy loam over weakly structured silty clay loam. Limitations include low p-sorb, low fertility and restricted drainage.</p>
Sensitivity Overlay	<p>Depth to Groundwater Compliance: variable compliancy; predominantly compliant, except for the middle of the locality and a few lots in the northern settlement.</p> <p>Landslip: minimal.</p> <p>Vegetation: Otway Forest Park and Great Otway National Park to the south to southeast.</p>
Sensitivity Analysis Rating Settlement (Locality)	<p>Very High: 0 (0)</p> <p>High: 2 (7)</p> <p>Moderate: 99 (255)</p> <p>Low: 0 (0)</p>

4c. Sensitivity Analysis (Maps)

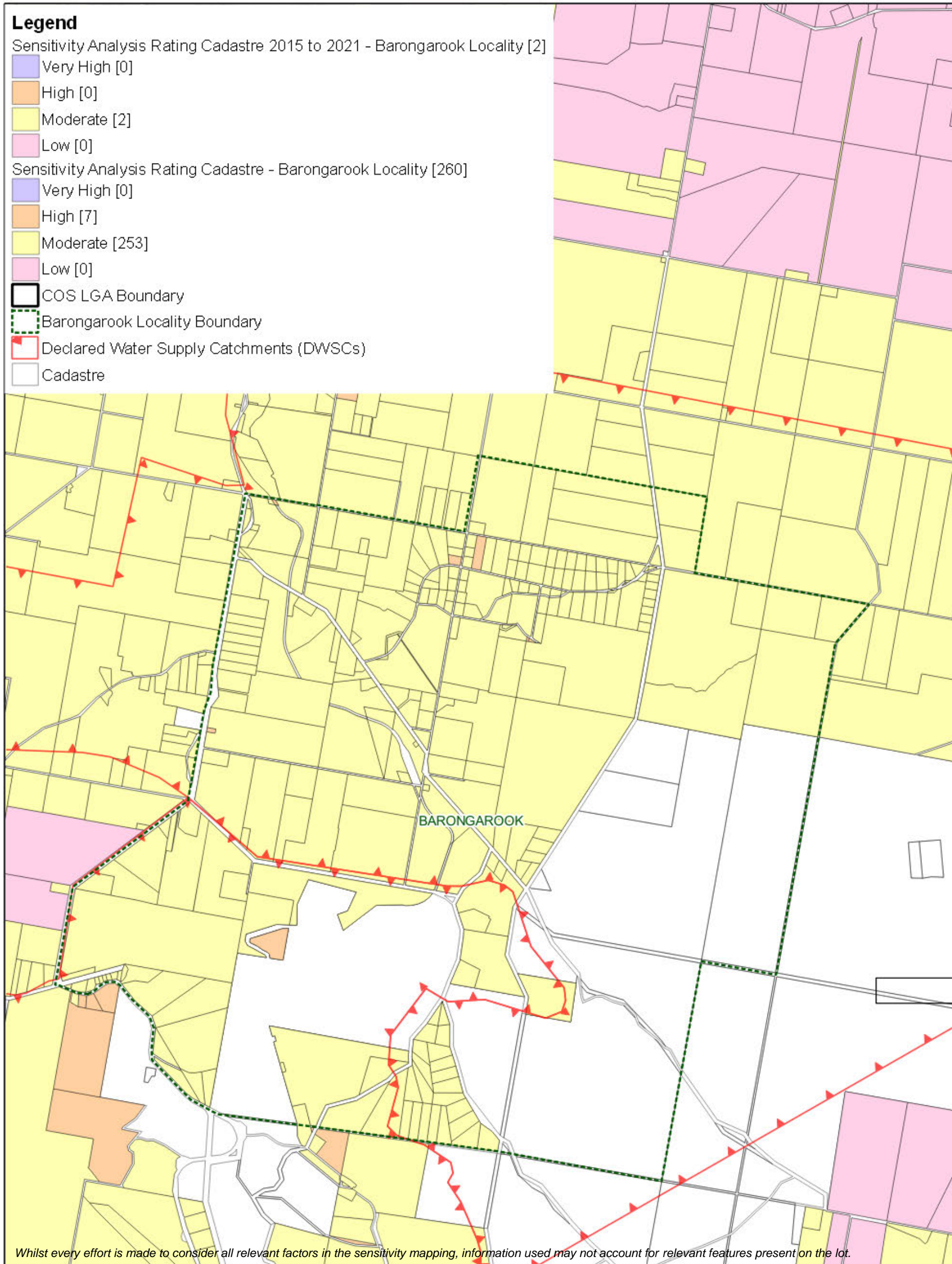


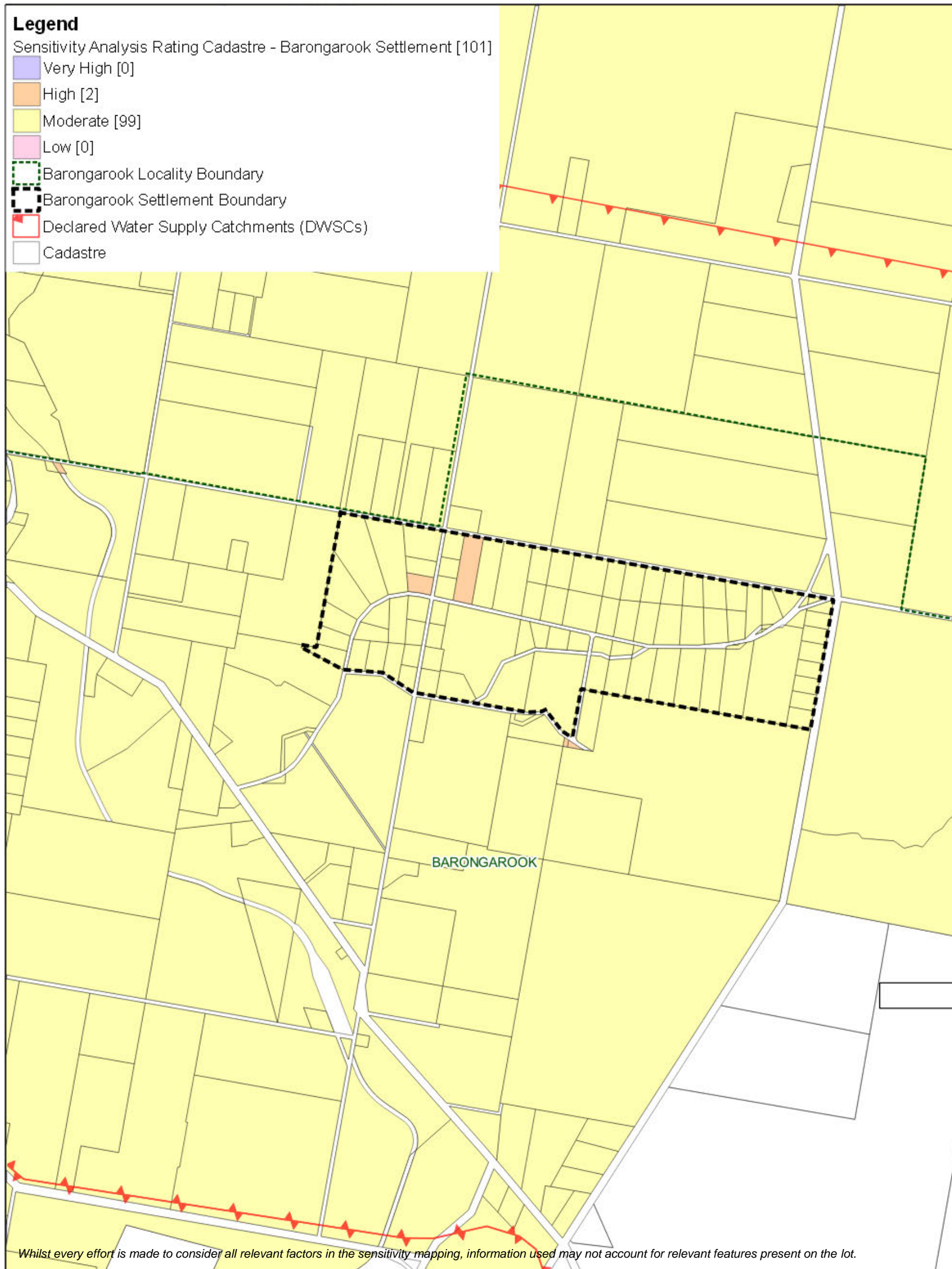
Figure c1: Sensitivity Analysis - Bargonarook Locality

Colac Otway Shire DWMP Review

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0 1 2 3 4 5 km (Approx Scale)

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Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure c2: Sensitivity Analysis - Barongarook Settlement

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

5c. System Selection

Due to the dominance of heavy-textured soils in the Barongarook locality, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays).

EPA Code of Practice (2013) (Section 2.2.2) identifies secondary treatment standard (or better) followed by subsurface pressure-compensating irrigation as current best-practice in Victoria for substantially reducing the risk associated with unsewered development. Further, the Code describes a “Wick trench/bed” land application option that may be incorporated with secondary treatment for consideration on sites constrained by climate or lot ‘useable area’, particularly within the DWSCs. Any variation from this best-practice approach must be provided with detailed supporting information to demonstrate suitability.

The System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

6c. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall and average evapotranspiration data for Barongarook was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed ‘Not Applicable’ in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for Barongarook are provided below.

7c. General Conclusion

The lots within the locality have predominantly been assigned a Moderate Sensitivity to sustainable DWM, with some lots assigned a Low or High Sensitivity Rating. Predominantly, the Standard LCA will be required, with use of the System Sizing tables deemed appropriate. The Low Sensitivity Rating lots within a DWSC are required to complete a Standard LCA as per the current EPA Code of Practice’s requirements. Particular attention needs to be directed towards assessing cumulative impact of DWM systems on the environment to ensure that the DWSCs are protected and that groundwater resources are preserved.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Barongarook										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	5	5	4	3.5	3	2			
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²)†					N/A (Alternative Land Application System Required)			
5 + bedroom residence	1,080	386		600	831	1,350				
4 bedroom residence	900	322		500	693	1,125				
1-3 bedroom residence	720	258		400	554	900				
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
† not including spacing and setbacks										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
	DLR (mm)	Not supported (Alternative Land Application System Required)								
Development Type	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
	DLR (mm)	20*	20*	15	10	12	8	5	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	62		87	145	115	199		441	
4 bedroom residence	900	52		73	121	96	166		368	
1-3 bedroom residence	720	42		58	97	77	133		294	
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)			
Development Type	Daily (L/day)		Total min. basal or 'wetted area' (m ²)†							
5 + bedroom residence	1,080		744	1,135						
4 bedroom residence	900		620	946						
1-3 bedroom residence	720	496	757							
† required for zero wet weather storage (m ²) not including spacing & setbacks										
Wick Trenches and Beds - Secondary Treated Effluent Only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
	DLR (mm)	25	30	20	10	12	8	8	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	49	40	62	145	115	199		441	
4 bedroom residence	900	41	33	52	121	96	166		368	
1-3 bedroom residence	720	33	27	42	97	77	133		294	

D. Barwon Downs Locality Report

1d. Introduction

The Barwon Downs locality is located on the northern slopes of the Otway Ranges, with the town located on the northern foothills. The landform consists of dissected hills abutting rivers and streams, and alluvial terraces with relatively flat topography. The majority (approximately 80%) of the region is located within a DWSC, with the town located within the Upper Barwon DWSC. The region to the northeast of the town also falls within the Gosling Creek DWSC.

The locality has a population of approximately 131 residents (ABS Census, 2016). There are approximately 260 and 85 unsewered lots located within the Barwon Downs locality and town, respectively. There are 8 new lots with DWM systems within the locality from June 2015-2021. There are 72 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Barwon Downs region are summarised as follows:

- 11 AWTS (4 subsurface irrigation, 1 trench and 6 unknown);
- 1 composting toilet (1 unknown);
- 3 secondary treatment system (3 unknown);
- 10 sand filters (10 subsurface irrigation);
- 33 septic tank (6 trenches and 27 unknown);
- 5 worm farms (3 trenches and 2 unknown); and
- 9 unknown (3 trenches and 6 unknown).

2d. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Barwon Downs Township Master Plan Report (June, 2006);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3d. Site Assessment Results

The following table summarises the results from the representative audits conducted by Consultant staff in September 2014.

Characteristic	Description
Land use	Barwon Downs comprises a range of land uses, including dairy, forestry, rural living and tourism.
Occupancy rates	2.3 (Barwon Downs State Suburb, ABS Census, 2011).
Typical soils	Yellow mottled duplex soil with very deep (60 cm) silt loam grading to silty clay loam surface and subsurface over strongly mottled clay

Characteristic	Description
	subsoil; between 25-60 cm the subsurface was saturated (25 July 2014). Drainage is generally poor and permeability is generally low.
AS/NZS 1547:2012 soil categories	5 (Light Clays) and 6 (Medium to Heavy Clays)
Existing Systems	<p>Separate Blackwater and Greywater</p> <p>Of the eight systems inspected during field investigations, seven systems (88%) comprised separate blackwater treatment in a septic tank or composting toilet, with direct greywater diversion to an adjacent paddock, street drain, trench or AWTS. Where discharged to paddocks or neighbouring vacant lots, greywater was typically ponded near the diversion outlet pipe, and often in areas trampled by livestock (cattle and sheep).</p> <p>The blackwater septic tanks were typically 40+ years old and the time since last pump-out was unknown for the majority (due to owners not being home to ascertain). Septic effluent discharged to one or more conventional absorption trenches (or was assumed to if trenches could not be identified). The trench dimensions were generally unclear, and it is likely that most trenches were undersized for the number of bedrooms. The majority of trenches or/and available LAAs were located on land of less than 4% slope and appeared to be parallel with contours.</p> <p>One greywater diversion system was pumped with a home-made pump-well, with moveable sprinklers around fruit trees. The AWTS had not been serviced since installation approximately 4 years ago and the sprinkler heads periodically become blocked. Setback distances from boundaries were inadequate for this system.</p> <p>Combined Blackwater and Greywater</p> <p>One of the eight systems (13%) inspected was assumed to have a combined wastewater treatment system, based on layout of pipework and age of dwelling. Septic effluent discharged to a series of conventional absorption trenches which appeared to be working well and were adequately sized.</p>

4d. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Majority within Zone 3.
Surface waterways & catchments	The locality consists of an extensive drainage network. It is located within the DWSCs of Upper Barwon, Gosling Creek and a small part of Matthew Creek in the northeast. The locality is predominantly located within a DWSC, except for approximately 1km north of the most northern extent of the town. The major waterways include: Denn Creek

Characteristic	Description
	to the east of the town, Callahan Creek North and South Branches and Barwon River East Branch to the west and south of the town, Dewing Creek, Seymour Creek, Kind Creek, and Mackie Creek.
Groundwater	Proximity to groundwater bores: primarily located around the town and north-western region of the locality.
Land subject to inundation	Along Barwon River East Branch and Callahan Creek.
Useable lot area Town (Locality)	High: 43 (77) Moderate: 23 (28) Low: 19 (148) Compliant: 0 (7)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Farming Zone to the north and Public Conservation and Resource Zone to the south. The town is zoned as Township Zone. Compliance is variable throughout the locality, with the town predominantly compliant. Compliant: 80 (110) Non-compliant: 5 (150)
Slope Town (Locality)	High: 0 (49) (in southern region) Moderate: 1 (22) Low: 84 (189)
Geology	Eumeralla Formation of the Otway Group is predominant in the east, intertwined with the Dilwyn Formation of the Wangeripp Group (Eocene age) which consists of shallow marine, coastal barrier and back beach lagoonal deposits. Intertwined with Demons Bluff formation of the Niranda Group which consists of shallow marine and minor lagoonal deposits, with some unnamed alluvium flood plain deposits along waterways. The northwest corner is underlain by Gellibrand Marl from the Heytesbury Group continental shelf deposit.
Soil suitability	High: 0 (19) Moderate: 85 (241) Low: 0 (0) Variable soil throughout the locality (7 different units); however, it is noted that the locality is spatially expansive.

Characteristic	Description
	<p>The town consists of soil landscape units '78' and '73' which form on the undulating plain inland of Otway Range and steep rolling hills on the northern periphery of the Otway Range and consists of texture contrast soils with ironstone to 2m depth. The soils consist of weakly structured sandy loam over strongly structured medium to heavy clay. Limitations include low fertility, low p-sorb, sodic, dispersive, restricted drainage and coarse fragments.</p> <p>The central west region consists of soil landscape unit '76' which form on the undulating plains and consist of grey sand soils to more than 2m depth. The soils consist of weakly structured loamy sand over apedal sand. Limitations include low fertility.</p> <p>The northeast to southwest transversing region consists of soil landscape unit '63' which forms on deeply dissected hills of the Otway Ranges and consists of brown texture contrast soils to 0.9m depth. The soils consist of weakly structured loam over strongly structured heavy clay. Limitations include sodicity and very acidic.</p> <p>The southern region consists of soil landscape unit '61' which also form on the deeply dissected hills of the Otway Ranges and consist of brown gradational soils to 1.2m depth. The soils consist of moderately structured silty loam over clay loam. Limitations include acidity and restricted drainage.</p> <p>The regions adjacent to the river consist of soil landscape unit '95' which forms on the alluvial floodplain of the Barwon River and its tributaries with numerous cut-off meanders. The soil consists of a moderately structured fine sandy clay loam over medium clay to more than 2m depth. Limitations include restricted drainage and dispersive.</p>
Sensitivity Overlay	<p>Depth to Groundwater Compliance: predominantly compliant, except to the north and west of the town along Barwon River East Branch.</p> <p>Landslip: some to the south</p> <p>Vegetation: Great Otway National, Otway Forest Park, and Barwon Downs bushland reserve.</p>
Sensitivity Analysis Rating Town (Locality)	<p>Very High: 0 (1)</p> <p>High: 24 (57)</p> <p>Moderate: 61 (201)</p> <p>Low: 0 (1)</p>

5d. Sensitivity Analysis (Maps)

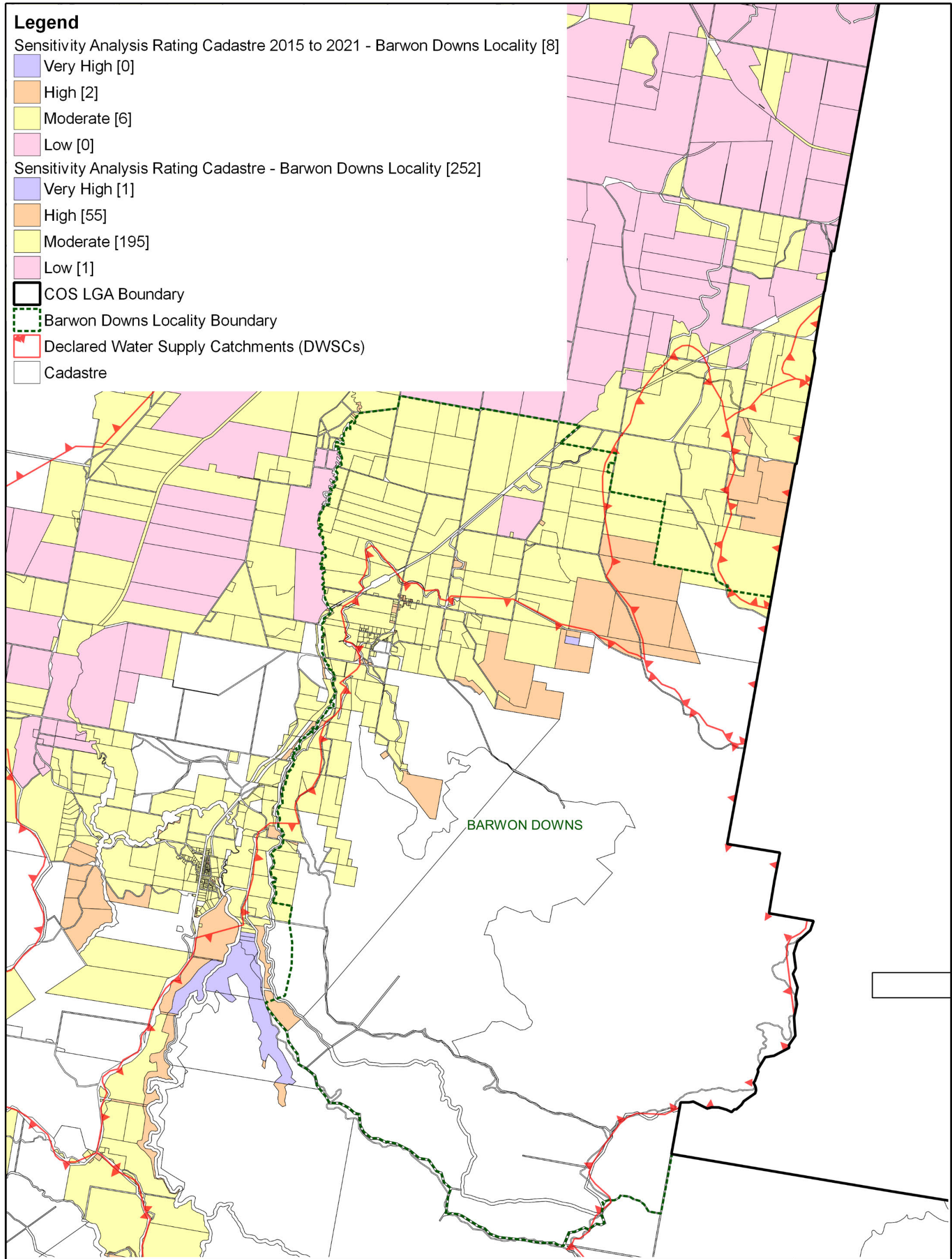
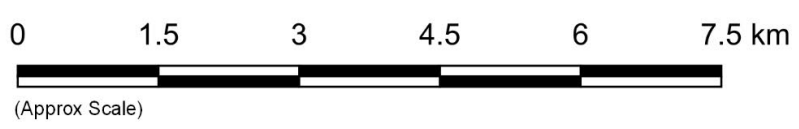


Figure d1: Sensitivity Analysis - Barwon Downs Locality

Colac Otway Shire DWMP Review



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Drawn	JK
Approved	MS

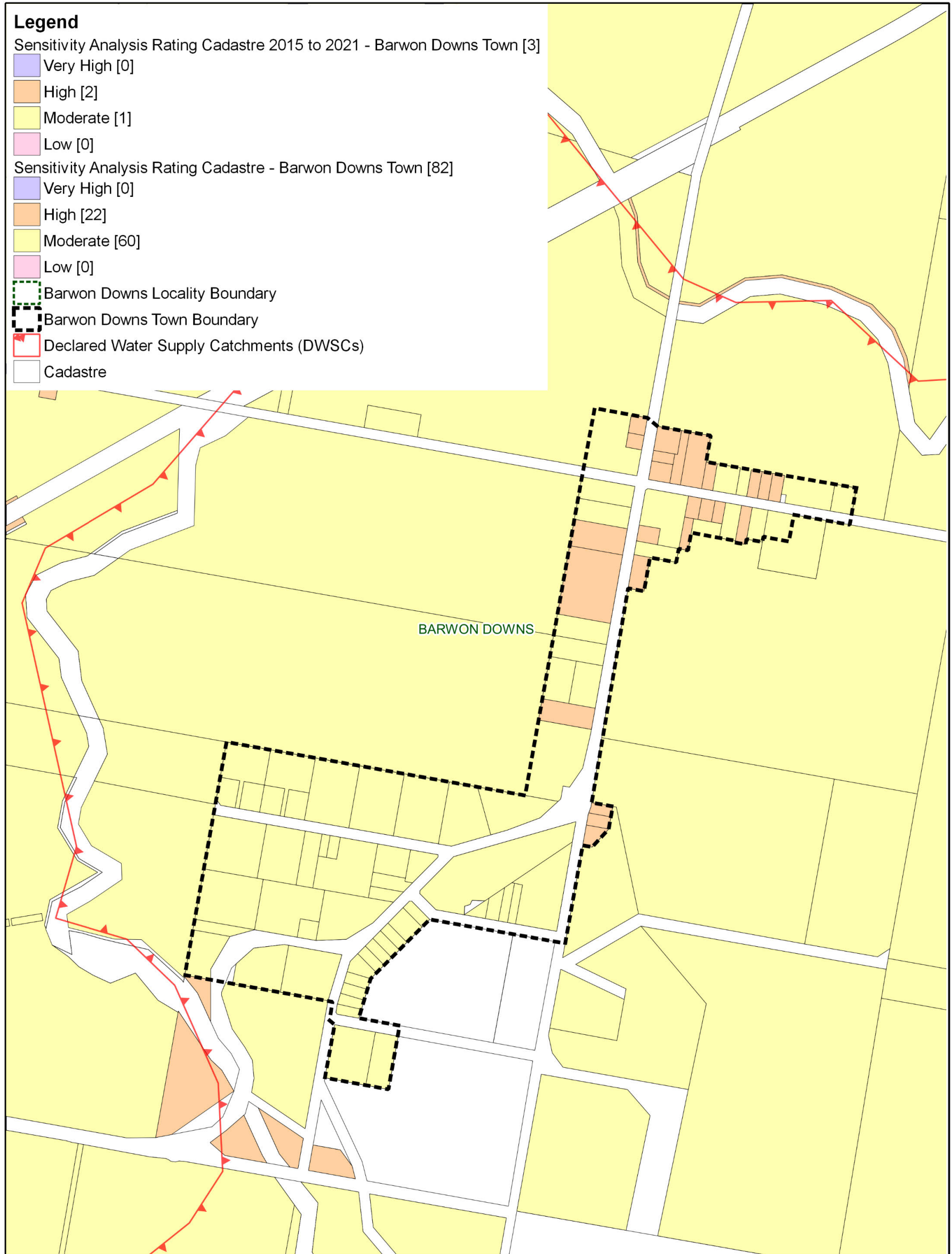
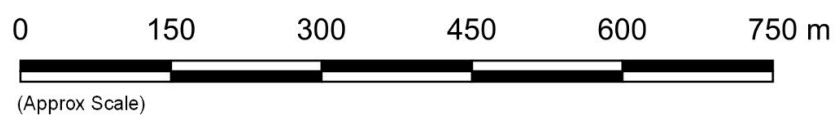


Figure d2: Sensitivity Assessment - Barwon Downs Town

Colac Otway Shire DWMP Review

W Whitehead & Associates
Environmental Consultants



Revision	4
Drawn	JK
Approved	MS

6d. System Selection

Due to the dominance of heavy-textured soils in the Barwon Downs locality, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays). Current best-practice is for effluent to be treated to a secondary standard or better, particularly within the DWSCs. Any variations to this must be provided with detailed evidence and explanations to demonstrate its suitability.

The System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

7d. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall and average evapotranspiration data for Barwon Downs was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as 'Not Applicable' for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as 'Not Applicable' for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed 'Not Applicable' in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Barwon Downs locality are provided below.

8d. General Conclusion

The lots within Barwon Downs, including the entire town, have predominantly been assigned a Moderate Sensitivity Rating to sustainable DWM. Predominantly, Standard LCAs will be required, with the use of System Sizing Tables deemed appropriate. The Low Sensitivity Rating lots within a DWSC are required to complete a Standard LCA as per the current EPA Code of Practice's requirements. Particular attention needs to be directed towards ensuring that the soil stability and appropriate setbacks to surface waterways and groundwater bores are maintained.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Barwon Downs										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	5	5	4	3.5	3	2			
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²) not including spacing or setbacks								
5 + bedroom residence	1,080	419		684	1,000	1,863	2,556			
4 bedroom residence	900	349		570	834	1,552	2,130			
1-3 bedroom residence	720	280		456	667	1,242	1,704			
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
	DLR (mm)	Not supported (Alternative Land Application System Required)								
Development Type	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
	DLR (mm)	20*	20*	15	10	12	8	5	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing or setbacks								
5 + bedroom residence	1,080	63		89	150	118	208	488		
4 bedroom residence	900	53		74	125	98	173	407		
1-3 bedroom residence	720	42		59	100	79	139	326		
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	N/A	N/A	N/A	N/A	N/A	N/A			
Development Type	Daily (L/day)	(Alternative Land Application System Required)								
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
† required for zero wet weather storage (m ²) not including spacing or setbacks										
Wick Trenches and Beds - Secondary Treated Effluent Only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
	DLR (mm)	25	30	20	10	12	8	8	N/A (Alternative Land Application System Required)	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing or setbacks								
5 + bedroom residence	1,080	49	40	63	150	118	208			
4 bedroom residence	900	41	34	53	125	98	173			
1-3 bedroom residence	720	33	27	42	100	79	139			

E. Beeac Locality Report

1e. Introduction

Beeac is a rural town located on the northern side of Lake Beeac, approximately 19km north of Colac. The landform features undulating agricultural land on the Western Volcanic Plains.

The locality has an estimated permanent population of approximately 370 residents (ABS Census, 2016). There are approximately 642 and 256 unsewered lots located within the Beeac locality and town, respectively. There are 14 new lots with DWM systems within the locality from June 2015-2021. There are 99 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Beeac locality are summarised as follows:

- 25 AWTs (3 subsurface, 1 trench, 5 drip irrigation, 16 unknown);
- 3 sand filters (1 subsurface irrigation and 2 unknown);
- 47 septic tanks (11 trenches, 1 irrigation and 35 unknown); and
- 24 unknown (6 trenches, 1 subsurface irrigation, and 17 unknown).

No field investigations were conducted within Beeac locality as part of the 2014 field assessments; however, soil investigations were conducted to confirm the soil type. There have been noted issues with the earthen stormwater drains; particularly with regards to odour and amenity with standing water which could also contain wastewater in the form of greywater or combined wastewater. These earthen stormwater drains flow into Lake Beeac.

2e. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Urban Design Framework Plans for Beeac (2006/2007);
- Lake Beeac Catchment Plan (1998);
- Beeac Cemetery and Grasslands Land Management Plan (February, 2012);
- Colac Otway Domestic Wastewater Management Plan (2007);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3e. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 2.
Surface waterways & catchments	The locality has an extensive coverage of lakes, with Lake Beeac forming the largest waterbody to the southwest of the town. Other waterbodies include: Lake Cunadare to the northwest, Thomas Lake, Cemetery Lake, Butchers Lake, Calvert Lough and constructed drainage network to the east of the town.

Characteristic	Description
Groundwater	Proximity to groundwater bores: primarily located within the western half of the locality. Groundwater is seasonally high at some sites but depth hasn't been ascertained.
Land subject to inundation	Extensive, particularly to the east of the town and around Lake Beeac.
Useable Lot Area Town (Locality)	High: 187 (242) Moderate: 60 (83) Low: 9 (303) Compliant: 0 (14)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Farming Zone, with some land around the lakes in the Public Conservation and Resource Zone. The town is zoned as Township Zone. Compliance is variable throughout the locality; the Farming Zoned lots are generally non-compliant to the east of the town and the town is compliant. Compliant: 249 (268) Non-compliant: 7 (374)
Slope Town (Locality)	High: 0 (0) Moderate: 0 (0) Low: 256 (642)
Geology	Beeac is underlain by unnamed stony rises and hummocky lava flows of Newer Volcanic Group and unnamed non-marine sediments comprising swamp, lake deposits of clay, silt, sand and humic soil that is moderately sorted and unconsolidated. Northeast section has hills with gentle crests and flat plains located on lunette, lake and beach deposits of clay, quartz sand, coxiella shells and minor swamp deposits.
Soil suitability Town (Locality)	Soil has moderate to poor drainage and consists predominantly of shallow silty loam or sandy grey silt topsoil, followed by moist dark grey to brown silty clay, over moist grey or grey/yellow clay. Soil permeability 0.08-0.06m/day High: 256 (605) Moderate: 0 (37) Low: 0 (0)

Characteristic	Description
	<p>The town and majority of the locality consists of soil landscape unit '148' which forms on the gently undulating plains with low rises and lunettes, swamps and lakes and consists of texture contrast soils to less than 2m depth. The soil consists of strongly structured medium clay over heavy clay. Limitations include restricted drainage, dispersive, very acidic, coarse fragments and sodic.</p> <p>Surrounding soil landscape '148' and to the east consists of soil landscape unit '153' which forms on gently undulating plains with swamps, lunettes and lakes and consists of textured contrast soils to less than 2m depth. The soils consist of strongly structured fine sandy clay loam over light to heavy clay. Limitations include restricted drainage, dispersive, very acidic, sodic and coarse fragments.</p> <p>The land to the west of the town consists of soil landscape unit '114' which forms on undulating basalt plains and stony rises. The soil consists of strongly structured clay loam to medium clay to less than 1.5m depth. Limitations include restricted drainage and coarse fragments.</p>
Sensitivity Overlay	<p>Depth to Groundwater Compliance: all compliant.</p> <p>Landslip: Nil.</p> <p>Vegetation: Lake Beeac to the south/southwest of town is an internationally important habitat for waterbirds, Lough Calvert Drainage Scheme (central), Lake Cundare, Cockatoo and Cemetery to the north of Lake Beeac.</p>
Sensitivity Analysis Rating Town (Locality)	<p>Very High: 0 (0)</p> <p>High: 187 (241)</p> <p>Moderate: 69 (355)</p> <p>Low: 0 (46)</p>

4e. Sensitivity Analysis (Maps)

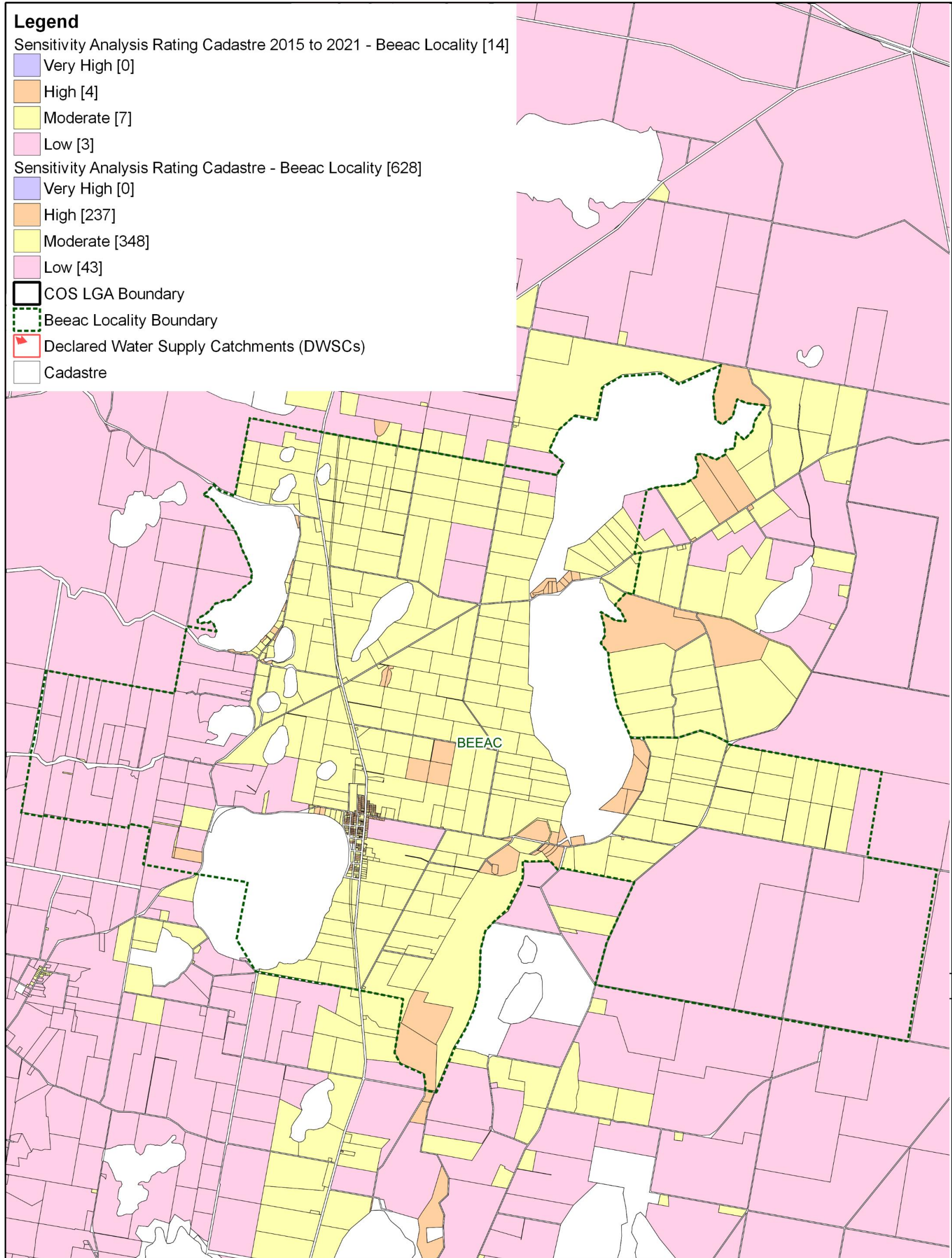


Figure e1: Sensitivity Analysis - Beeac Locality

Colac Otway Shire DWMP Review



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Drawn	JK
Approved	MS

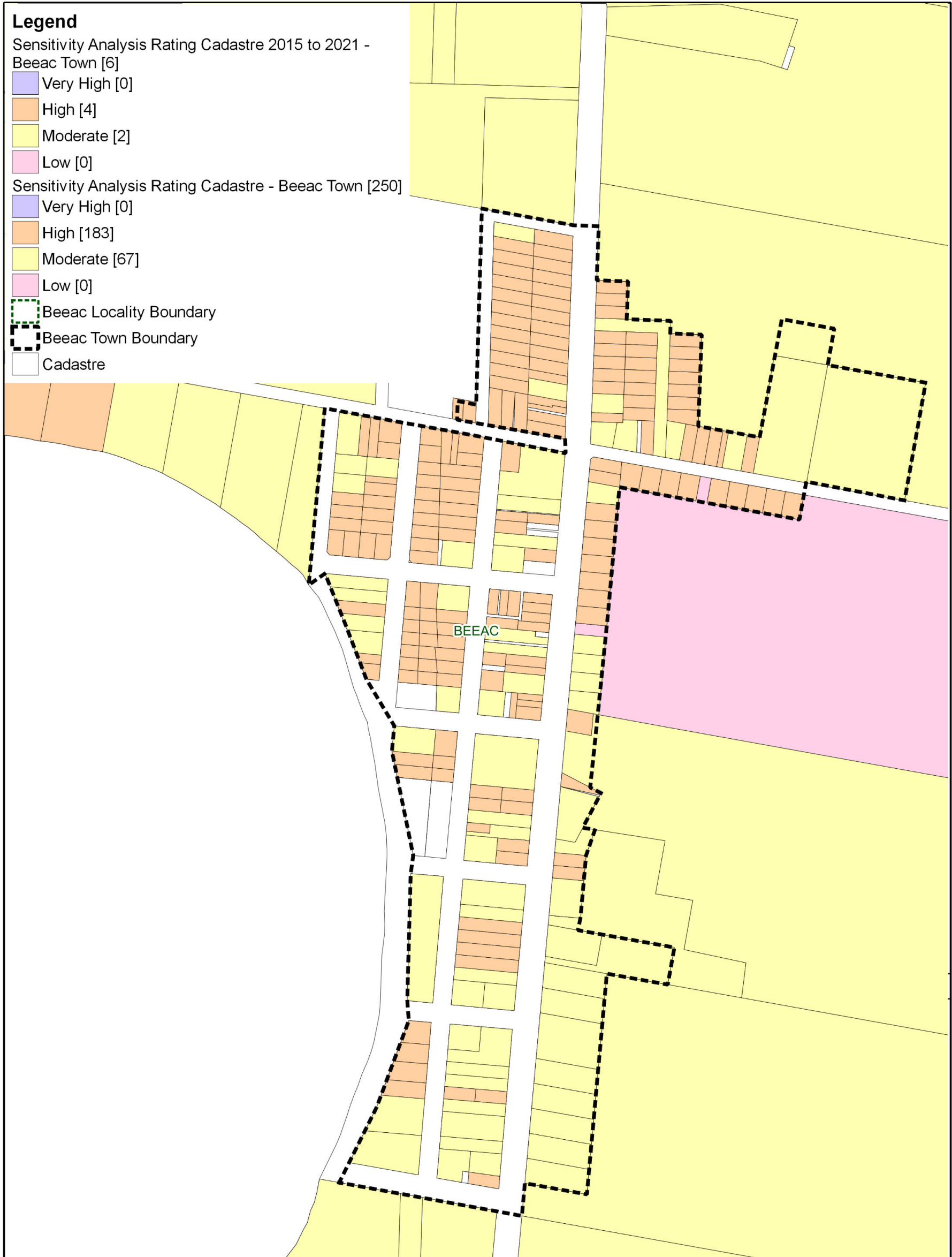
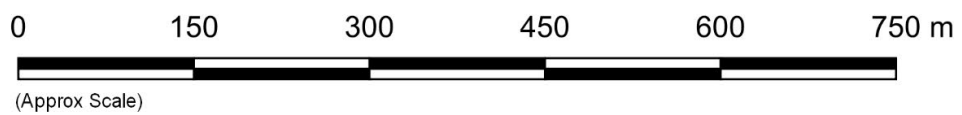


Figure e2: Sensitivity Analysis - Beeac Town

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

5e. System Selection

Due to the dominance of heavy-textured soils in the Beeac locality, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays). The System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

6e. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. The water balances used monthly 70th percentile rainfall and average evapotranspiration data for Alvie, as it was compared with that of Beeac and found to be very similar, with very little size differences in water balance results. The climate data for Alvie was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as 'Not Applicable' for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as 'Not Applicable' for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed 'Not Applicable' in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Beeac locality are provided below.

7e. General Conclusion

The Sensitivity Rating with regards to sustainable DWM varied throughout the Beeac locality. Council, Standard and Detailed LCAs will be required, with the use of the Sizing Tables deemed appropriate except for the Detailed LCA which requires site-specific design. Particular attention needs to be directed towards ensuring that systems are sized based on the most limiting soil horizon, that the amenity of the Lakes is maintained, that the minimum depth from the base of the land application area and the watertable are maintained, and that DWM system components and land application areas are constructed above the COS Planning Schemes land subject to inundation overlay.

Alvie and Beeac									
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)		
	DIR (mm)	5	5	4	3.5	3	2		
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²) not including spacing and setbacks							
5 + bedroom residence	1,080	268		356	426	530	1,039		
4 bedroom residence	900	223		297	355	442	866		
1-3 bedroom residence	720	127		237	284	353	693		
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012									
Conventional Absorption Trenches and Beds - Primary or Secondary Treated Effluent									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Massive Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)
	DLR (mm)	Not supported (Alternative Land Application System Required)							
Development Type	Daily (L/day)								
5 + bedroom residence	1,080								
4 bedroom residence	900								
1-3 bedroom residence	720								
Evapotranspiration-Absorption Trenches and Beds - Primary or Secondary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only
	DLR (mm)	20*	20*	15	10	12	8	5	5
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing and setbacks							
5 + bedroom residence	1,080	58		78	123	100	128		281
4 bedroom residence	900	48		65	102	83	132		234
1-3 bedroom residence	720	39		52	82	67	106		188
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012									
LPED Irrigation Systems - Primary or Secondary Treated Effluent									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)		
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	3	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)		
Development Type	Daily (L/day)		Total min. basal or 'wetted' area required (m ²)†						
5 + bedroom residence	1,080		379	460	584				
4 bedroom residence	900		316	383	487				
1-3 bedroom residence	720	253	307	390					
† required for zero wet weather storage (m ²) not including spacing & setbacks									
Wick Trenches and Beds - Secondary Treated Effluent Only									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)
	DLR (mm)	25	30	20	10	12	8	8	5
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing and setbacks							
5 + bedroom residence	1,080	46	38	58	123	100	128		281
4 bedroom residence	900	38	32	48	102	83	132		234
1-3 bedroom residence	720	31	25	39	82	67	106		188

F. Beech Forest Locality Report

1f. Introduction

Beech Forest is located approximately 43km south of Colac on the northern edge of the Otway Ranges. The landform consists of rolling hills and crests of the Otway Ranges. Approximately half of the locality is located within a DWSC; with the northern region located within Gellibrand River DWSC and the southeast region located within Barham River DWSC. The main road through the town runs along a ridgeline that forms the DWSC boundary as indicated by the surface water informative map A1, Appendix A.

The locality has an estimated permanent population of approximately 82 residents (ABS Census, 2016). There are approximately 332 and 142 unsewered lots located within the Beech Forest locality and town, respectively. There are 3 new lots with DWM systems within the locality from June 2015-2021. There are 41 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Beech Forest locality are summarised as follows:

- 14 AWTs (1 irrigation, 3 drip irrigation, 2 trenches, and 8 unknown);
- 1 sand filter (1 drip irrigation);
- 12 septic tanks (4 trenches, 8 unknown);
- 1 worm farm (1 trench); and
- 13 unknown (6 trenches, 1 subsurface irrigation and 6 unknown).

2f. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Beech Forest Township Master Plan Report (May, 2004);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3f. Site Assessment Results

The following table summarises the results from the representative audits conducted by Consultant staff in September 2014.

Characteristic	Description
Land use	Beech Forest comprises a range of land uses, including dairy, forestry, rural living and tourism.
Occupancy rates	2.3 (Beech Forest State Suburb, ABS Census, 2011).
Typical soils	Gradational profile of dark grey brown sandy clay loam grading to dark brown silty clay loam between 10-25cm, grading to dark brown to dark reddish brown sandy clay loam with excellent structure and fairly common small rock fragments. Drainage and permeability are variable depending on slope and position.

Characteristic	Description
AS/NZS 1547:2012 soil categories	4 (Clay Loams) and 5 (Light Clays)
Existing Systems	<p>Separate Blackwater and Greywater</p> <p>Of the six systems inspected during field investigations, just one (17%) comprised separate blackwater treatment in a septic tank, with direct greywater diversion to the ground surface within the lot boundary.</p> <p>The blackwater septic tank was 40+ years old and had been pumped out more than 15 years ago. Septic effluent discharged to one conventional absorption trench of approximately 3m length, on land of less than 4% slope and parallel with contours. There was no evidence of blackwater effluent surcharging to the surface. Soils were typically soft or boggy, mainly due to recent high rainfall.</p> <p>Combined Blackwater and Greywater</p> <p>Five of the six systems (83%) inspected had combined wastewater treatment systems or were assumed to have combined systems, based on layout of pipework and/or age of dwelling. One of these five systems is an Aerated Wastewater Treatment System (AWTS), for a commercial property. It is likely that the proportion of combined systems in Beech Forest is likely to be less than this; however, this should be confirmed by ongoing inspections by Council.</p> <p>Septic tank effluent discharged to one or more conventional absorption trenches, or was assumed to when the LAA could not be identified. Generally, trenches were undersized for the number of bedrooms or there was inadequate suitable space for an appropriately sized LAA.</p> <p>The AWTS effluent discharged to a subsurface irrigation system of approximately 480m².</p>

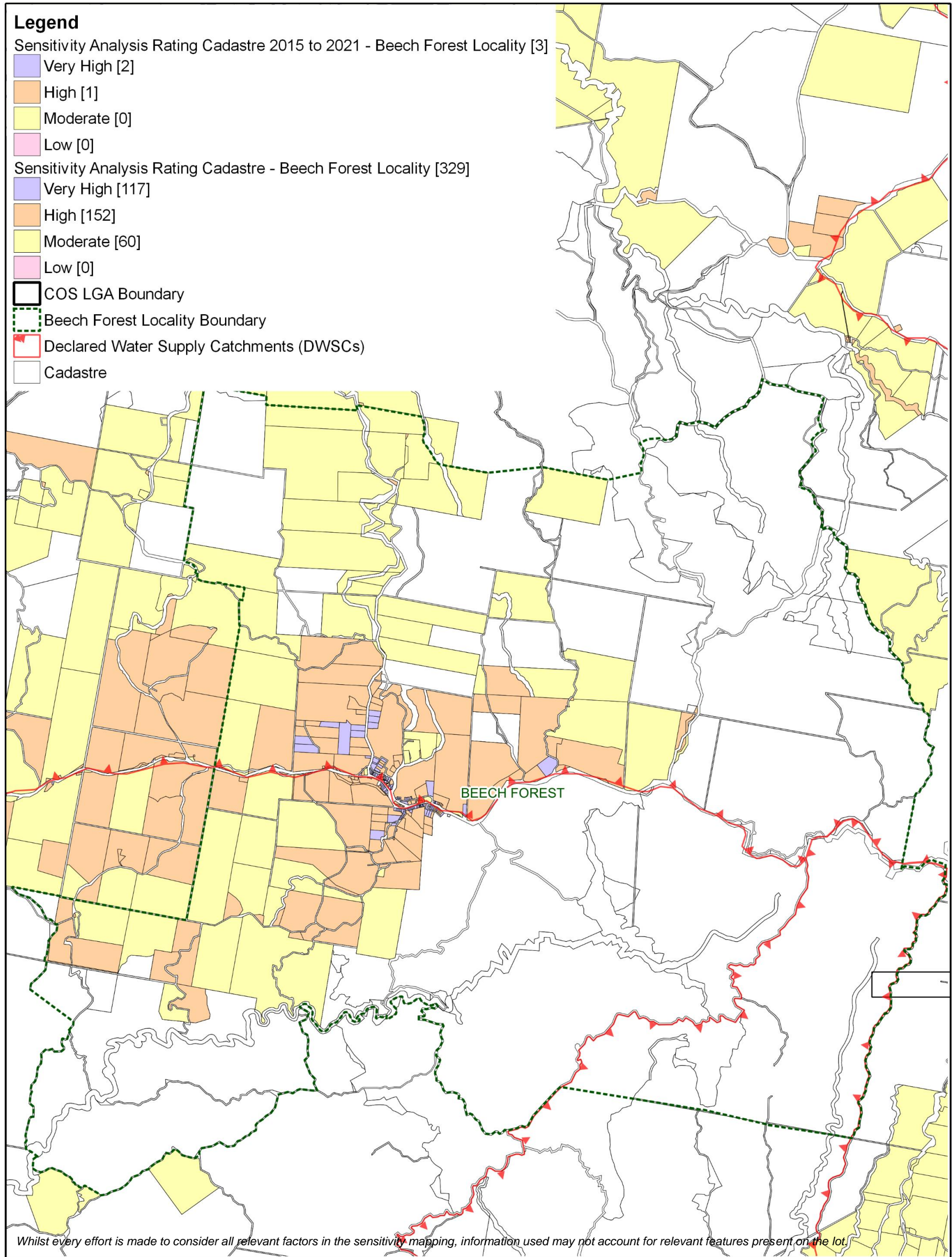
4f. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	The town is included within Zone 4 and part of the surrounding locality is located within Zone 3.
Surface waterways & catchments	<p>The northern half and the south-eastern corner of the locality are located within the Gellibrand River DWSC and Barham River DWSC, respectively. The DWSC boundary runs along the ridgeline, which forms the major road running through the middle of the town. The drainage network is extensive, with West Gellibrand Dam located in the northeast of the locality along the Gellibrand River.</p> <p>Waterways located within the DWSC are: Asplin Creek, Larder Creek East and West Branches, Little Larder Creek, McDonald Creek,</p>

Characteristic	Description
	Charleys Creek, Barham River East Branch, Falls Creek, and Seaview Creek. Waterways located outside of the DWSC are: Aire River, Little Aire Creek, Youngs Creek, Corgram Creek, Farrell Creek, Beech Creek, and Deppeler Creek.
Groundwater	Proximity to groundwater bores: minimal (only 3).
Land subject to inundation	Nil.
Useable Lot Area Town (Locality)	High: 91 (114) Moderate: 39 (62) Low: 12 (140) Compliant: 0 (16)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Farming Zone to the west and Public Conservation and Resource Zone to the east. The town is zoned as Township Zone. Compliance is variable throughout the locality, with the smaller town lots generally compliant and the larger rural lots non-compliant. Compliant: 138 (175) Non-compliant: 4 (157)
Slope Town (Locality)	High: 92 (216) Moderate: 25 (62) Low: 25 (54)
Geology	Underlain by Eumeralla Formation of Otway Group which consist of fluvial and braided stream sedimentary deposits.
Soil suitability Town (Locality)	High: 142 (288) Moderate: 0 (44) Low: 0 (0) The central region of the locality, including the town, consists of soil landscape unit '60' which form on rolling hills along the top of the Otway Ranges. The soil consists of brown friable gradational soils with weakly structured clay loam over light clay to 0.9m depth. Limitations include restricted drainage. The remainder of the locality consists of soil landscape unit '61' which forms on the deeply dissected hills of the Otway Ranges and consists of brown gradational soils to 1.2m depth. The soils consist of

Characteristic	Description
	moderately structured silty loam over clay loam. Limitations include acidity and restricted drainage.
Sensitivity Overlay	No depth to groundwater data. Landslip: extensive around locality Vegetation: both sides of ridgeline.
Sensitivity Analysis Rating Town (Locality)	Very High: 97 (119) High: 42 (153) Moderate: 3 (60) Low: 0 (0)

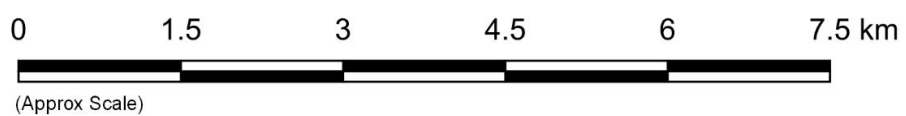
5f. Sensitivity Analysis (Maps)



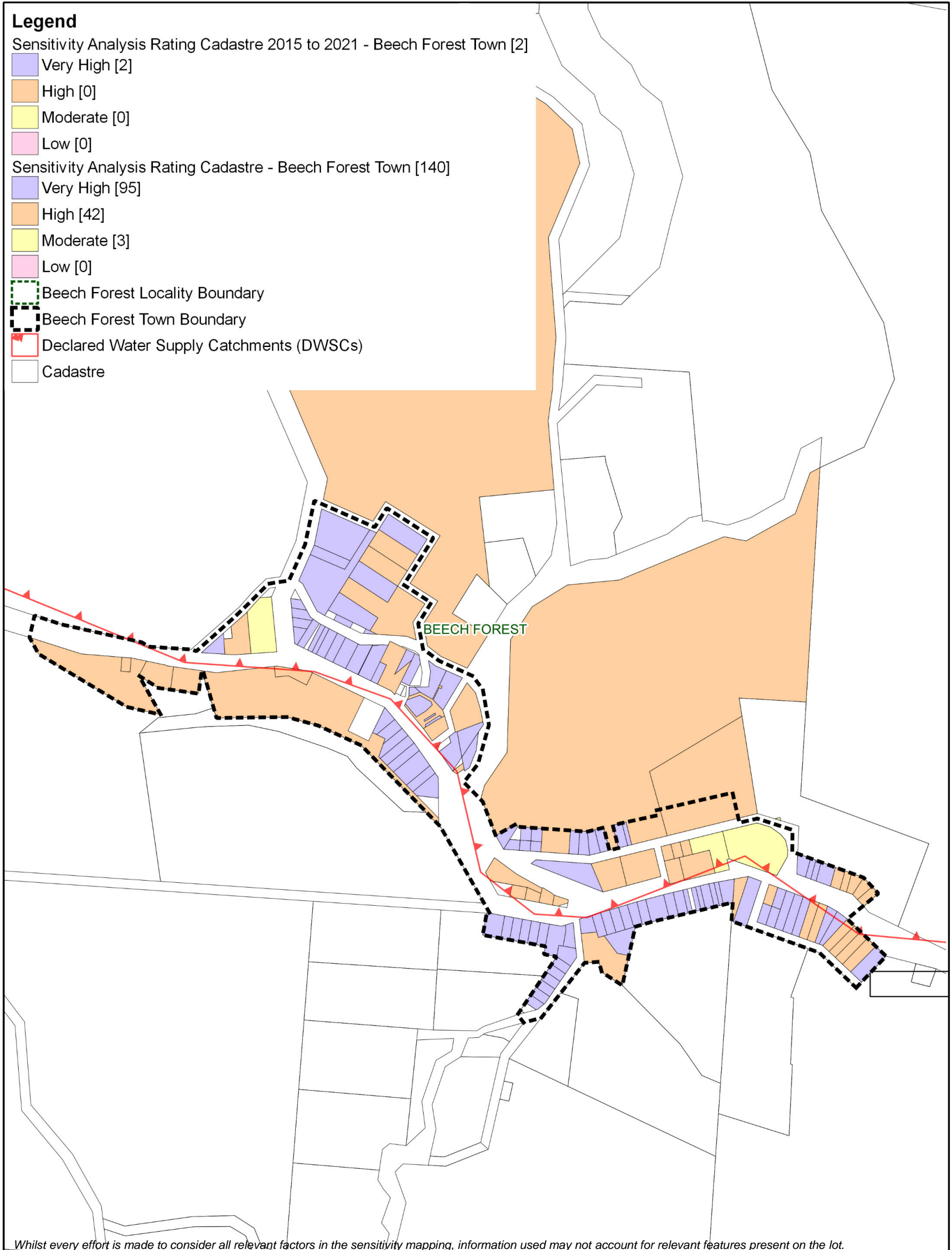
Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure f1: Sensitivity Analysis - Beech Forest Locality

Colac Otway Shire DWMP Review



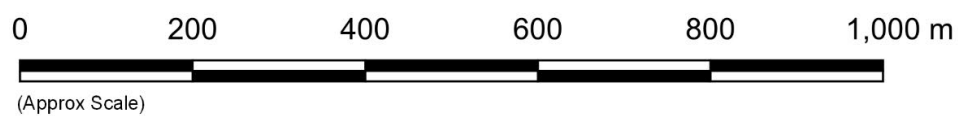
Revision	4
Drawn	JK
Approved	MS



Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure f2: Sensitivity Analysis - Beech Forest Town

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

6f. System Selection

Due to the shallow soils and localised steep slopes in the Beech Forest locality, conventional absorption trenches and beds are not likely to be feasible and are discouraged.

The wet climate of the Beech Forest area makes it a high risk for DWM and site-specific, detailed land capability assessment and design will be required for unsewered lots in this area. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

EPA Code of Practice (2013) (Section 2.2.2) identifies secondary treatment standard (or better) followed by subsurface pressure-compensating irrigation as current best-practice in Victoria for substantially reducing the risk associated with unsewered development. Further, the Code describes a “Wick trench/bed” land application option that may be incorporated with secondary treatment for consideration on sites constrained by climate or lot ‘useable area’, particularly within the DWSCs. Any variation from this best-practice approach must be provided with detailed supporting information to demonstrate suitability.

System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

7f. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall was sourced from the Beech Forest BoM station (090006) and average evapotranspiration data for Beech Forest was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the EPA Code of Practice. Where the Code has precluded use of a particular type of system on a certain soil type, it is shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as ‘Not Applicable’ (N/A) for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to justify the feasibility of these systems.

Sizing Tables for the Beech Forest locality are provided below.

8f. General Conclusion

The majority of lots within the locality have been assigned a Very High or High Sensitivity Rating to sustainable DWM. Predominantly, Detailed and Comprehensive LCAs will be required; however, all levels of LCA will require site-specific design due to the higher rainfall associated with this region (Climate Zone 4), as per Figure 3 of the DWMP Technical Document. Particular attention needs to be directed towards ensuring that DWM systems are sized based on the limiting soil horizon and that the systems selected are appropriate for steeper slopes with correct construction. The locality is also extensively considered to be prone to landslip; a geotechnical report by a suitably qualified person will need to be conducted to address this constraint.

Beech Forest (including Ferguson and Weeaprounah)

Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
Development Type	DIR (mm)	Not supported (Alternative Land Application System or Extensive/Modified Design Required)								
	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Notes: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
† not including spacing or setbacks										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
Development Type	DLR (mm)	Not supported (Alternative Land Application System Required)								
	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Evapotranspiration-Absorption Trenches and Beds† - Primary Treated Effluent (Category 3a to 5a) only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
Development Type	DLR (mm)	20*	20*	15	10	12	8	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)	
	Daily (L/day)	Total min. basal or 'wetted area' required for water balance (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	Not Supported (not considered best-practice)		131	332	206	862**			
4 bedroom residence	900			110	277	172	719**			
1-3 bedroom residence	720			88	222	138	575**			
Notes: * Gravels, Sands and Sandy loams are generally unsuitable for ETA trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012. ** Will require specialist advice regarding engineering and construction detail for installation.										
† will require detailed hydraulic design for effluent distribution system.										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
Development Type	DIR (mm)	Not supported (Alternative Land Application System Required)								
	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Wick Trench† - Secondary Treated Effluent Only - as per Section 7.4 design for High Rainfall Areas										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
Development Type	DLR (mm)	25	30	20	10	12	8	8	N/A (Alternative Land Application System Required)	
	Daily (L/day)	Total effluent application area footprint (m ²), including interbed spacing								
5 + bedroom residence	1,080	Not Supported (not considered best-practice)		295	815	620	1,400**			
4 bedroom residence	900			230	685	490	1,140**			
1-3 bedroom residence	720			165	555	425	880**			
Notes: ** Will require specialist advice regarding engineering and construction detail for installation.										
† will require detailed hydraulic design for effluent distribution system.										

G. Carlisle River Locality Report

1g. Introduction

Carlisle River is, spatially, the largest locality and is located approximately 30km southwest of Colac. The landform consists of dissected hills abutting rivers and streams and alluvial terraces with relatively flat topography in the dissected uplands of the Otway Ranges. Notably, the majority of the locality is located within a DWSC.

The locality has an estimated permanent population of approximately 135 residents (ABS Census, 2016). There are approximately 246 and 25 unsewered lots located within Carlisle River locality and town, respectively. There is one (1) new lot with DWM systems within the locality from June 2015-2021. There are 27 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Carlisle River locality are summarised as follows:

- 1 AWTS (1 unknown);
- 18 septic tanks (18 unknown); and
- 8 unknown (3 trenches, 5 unknown).

2g. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Carlisle River Township Master Plan Report (February, 2004);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3g. Site Assessment Results

The following table summarises the results from the representative audits conducted by Consultant staff in September 2014.

Characteristic	Description
Land use	Comprises a range of land uses, including dairy, forestry, rural living and tourism.
Occupancy rates	2.3 (Part of Beech Forest State Suburb, ABS Census, 2011).
Typical soils	Duplex soil. Black silt loam with excellent structure to 40cm, very wet below 25cm, abruptly overlies strongly mottled yellow brown and grey light to medium stiff clay to 70+cm. Can include lenses of dark yellow brown and strong brown mottled coffee rock between 40-50cm. Drainage and permeability are variable depending on slope and position.
AS/NZS 1547:2012 soil categories	4 (Clay Loams), 5 (Light Clays) and 6 (Medium to Heavy Clays).

Characteristic	Description
Existing Systems	<p>Separate Blackwater and Greywater</p> <p>Of the three systems inspected during field investigations, one (33%) comprised separate blackwater treatment in a septic tank, with direct greywater diversion to an adjacent paddock. The septic tank was not accessible, as it was covered by a concrete slab. It had been pumped out within the last two years.</p> <p>Septic effluent discharged to four conventional absorption trenches of 10m each, on slopes of less than 2%. Drainage was poor.</p> <p>Combined Blackwater and Greywater</p> <p>Two systems (67%) inspected have a combined wastewater treatment system, or were assumed to have based on layout of pipework and age of dwelling. The time since last pump-out was generally unknown (partly due to owner not being home to ascertain).</p> <p>Septic effluent discharged to one or more conventional absorption trenches (or was assumed to if trenches could not be identified). The trench dimensions were generally unclear, and it is likely that they were undersized for the number of bedrooms. The majority of trenches or/and available LAAs were located on land of less than 2% slope and appeared to be parallel with contours.</p>

4g. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Predominantly within Zone 3.
Surface waterways & catchments	Located entirely within DWSCs, i.e. Gellibrand River and Gellibrand River (South Otway). Two major rivers transverse the locality; Gellibrand River north to south in the western region of the locality and Carlisle River to the north of the town. Other waterways include: Rusty Creek, Sandy Creek, Crinoline Creek, Leahy Creek, Arkins Creek, Boggy Creek, and Charley Creek.
Groundwater	Proximity to groundwater bores: located within the town and along the Gellibrand River and Carlisle River.
Land subject to inundation	Along northern and western boundaries associated with Gellibrand River and lower reaches of the Carlisle River confluence point.
Useable lot area Town (Locality)	High: 9 (40) Moderate: 6 (16) Low: 10 (167) Compliant: 0 (23)

Characteristic	Description
Minimum lot size compliance with Planning Scheme Zoning	<p>The locality is predominantly zoned Farming Zone and Public Conservation and Resource Zone. The town is zoned Township Zone.</p> <p>Compliance is variable throughout the locality, with all of the lots within the town compliant.</p> <p>Compliant: 25 (98)</p> <p>Non-compliant: 0 (148)</p>
Slope Town (Locality)	<p>High: 0 (120)</p> <p>Moderate: 0 (32)</p> <p>Low: 25 (94)</p>
Geology	<p>Predominately underlain by the Wiridjil Gravel Member of the Pebble Point Formation, which is comprised of fluvial and braided stream deposits.</p> <p>Moomowroong Sand Member of the Pebble Point Formation (marginal marine and beach deposits) is located near the town straddling unnamed alluvial floodplain deposits.</p> <p>East to southeast - Eumeralla Formation of the Otway group which is comprised of fluvial and braided stream deposits.</p>
Soil suitability Town (Locality)	<p>High: 0 (43)</p> <p>Moderate: 25 (203)</p> <p>Low: 0 (0)</p> <p>Variable soil landscapes throughout the locality (7-8 in total).</p> <p>The town consists of soil landscape unit '94' which forms on elevated, and in parts, uplifted and dissected system of ancient cut and depositional terraces of Gellibrand River. The soils consist of grey sand soils with structured clay underneath; strongly structured sandy loam over moderately structured medium clay; to depths of more than 2m. Limitations include low fertility and restricted drainage.</p> <p>The area adjacent to the river consists of soil landscape unit '61' which forms on the deeply dissected hills of the Otway Ranges and consists of brown gradational soils to 1.2m depth. The soils consist of moderately structured silty loam over clay loam. Limitations include acidity and restricted drainage.</p>
Sensitivity Overlay	<p>Depth to Groundwater Compliance: variable compliancy, but generally compliant, except around the Gellibrand River and the confluence of Carlisle River.</p> <p>Landslip: minimal</p>

Characteristic	Description
	Vegetation: significant Great Otway National Park and Otway Forest Park.
Sensitivity Analysis Rating Town (Locality)	Very High: 0 (0) High: 0 (38) Moderate: 25 (205) Low: 0 (3)

5g. Sensitivity Analysis (Maps)

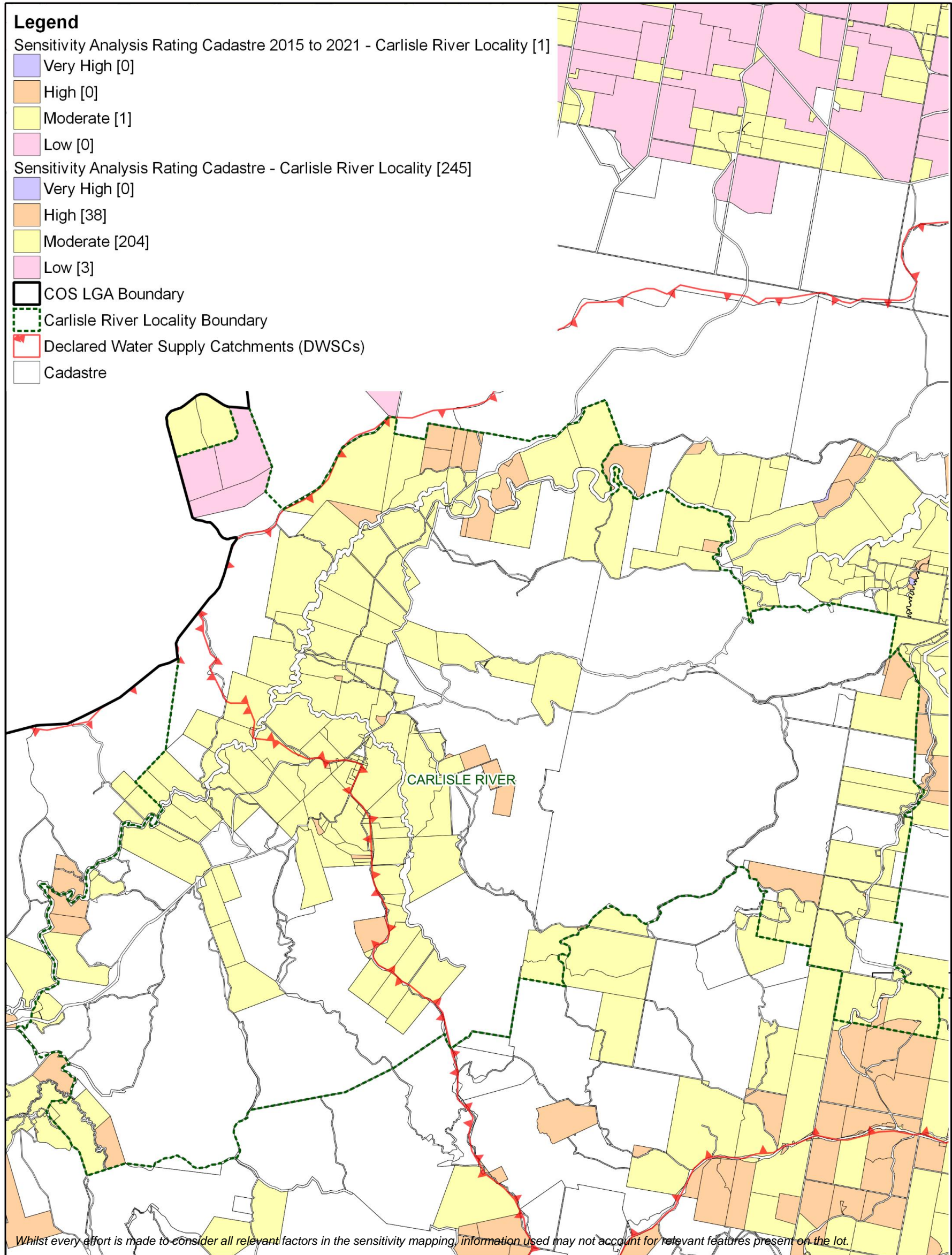
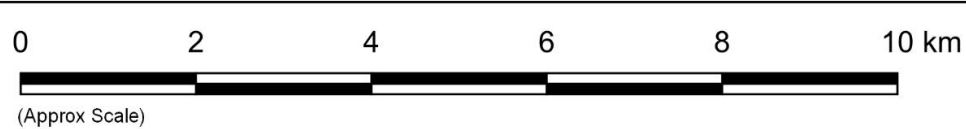


Figure g1: Sensitivity Analysis - Carlisle River Locality

Colac Otway Shire DWMP Review



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Revision	3
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Approved	MS

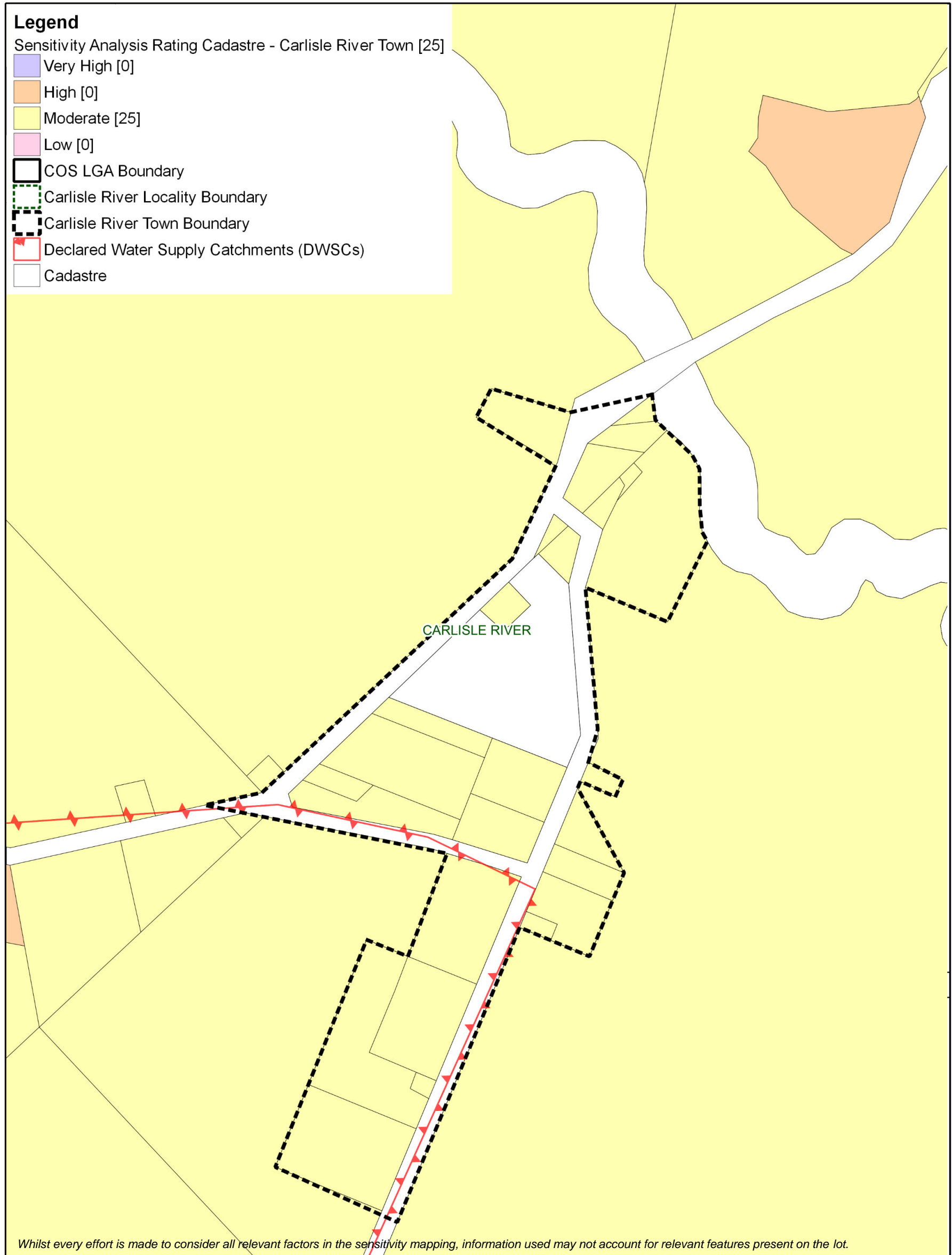


Figure g2: Sensitivity Analysis - Carlisle River Town

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

6g. System Selection

Due to the dominance of heavy-textured soils in the Carlisle River locality, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays).

EPA Code of Practice (2013) (Section 2.2.2) identifies secondary treatment standard (or better) followed by subsurface pressure-compensating irrigation as current best-practice in Victoria for substantially reducing the risk associated with unsewered development. Further, the Code describes a “Wick trench/bed” land application option that may be incorporated with secondary treatment for consideration on sites constrained by climate or lot ‘useable area’, particularly within the DWSCs. Any variation from this best-practice approach must be provided with detailed supporting information to demonstrate suitability.

System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

7g. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall and average evapotranspiration data for Carlisle River was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed ‘Not Applicable’ in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Carlisle River locality are provided below.

8g. General Conclusion

The lots within Carlisle River, including the town, have predominantly been assigned a Moderate Sensitivity Rating to sustainable DWM. Predominantly, Standard LCAs will be required, with the use of System Sizing Tables deemed appropriate. The Low Sensitivity Rating lots within a DWSC are required to complete a Standard LCA as per the current EPA Code of Practice’s requirements. Particular attention needs to be directed towards ensuring that appropriate setbacks to surface waterways and groundwater bores are maintained, that the DWM systems are sized based on the limiting soil horizon, and that the degree of slope is taken into consideration when designing the LAA.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Carlisle River										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	5	5	4	3.5					
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²)†				N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)			
5 + bedroom residence	1,080	509		960	1,726					
4 bedroom residence	900	424		800	1,439					
1-3 bedroom residence	720	339		640	1,151					
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
† not including spacing or setbacks										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
	DLR (mm)	Not supported (Alternative Land Application System Required)								
Development Type	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
	DLR (mm)	20*	20*	15	10	12	8			
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks							N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)
5 + bedroom residence	1,080	65	93	162	125	231				
4 bedroom residence	900	54	77	135	104	192				
1-3 bedroom residence	720	44	62	108	83	154				
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	Not supported (Alternative Land Application System Required)								
Development Type	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Wick Trenches and Beds - Secondary Treated Effluent Only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
	DLR (mm)	25	30	20	10	12	8	8		
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks							N/A (Alternative Land Application System Required)	
5 + bedroom residence	1,080	50	41	65	162	125	231			
4 bedroom residence	900	42	34	54	135	104	192			
1-3 bedroom residence	720	34	27	44	108	83	154			

H. Coragulac Locality Report

1h. Introduction

Coragulac is a rural locality located approximately 13km northwest of Colac, in close proximity to the Cororooke and Alvie localities within the Red Rock region. The landform features undulating agricultural land on the Western Volcanic Plains.

Coragulac has a population of approximately 161 residents (ABS Census, 2016). There are approximately 188 and 73 unsewered lots located within the Coragulac locality and town, respectively. There are 13 new lots with DWM systems within the locality from June 2015-2021. There are 43 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Coragulac locality are summarised as follows:

- 1 AWTS (3 subsurface irrigation, 3 drip irrigation, and 1 unknown);
- 1 worm farm (1 unknown);
- 2 sand filter (1 trench and 1 unknown);
- 22 septic tanks (4 trenches and 18 unknown); and
- 11 unknown (2 trenches and 9 unknown).

No field investigations were conducted within the Coragulac locality as part of the 2014 field assessments.

2h. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Red Rock Region Community Infrastructure Plan (September, 2013);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3h. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 2.
Surface waterways & catchments	Minimal surface waterways, with only Lake Coragulac and Lake Purdiguluc along the north-western locality border. Not located within a DWSC.
Groundwater	Proximity to groundwater bores: distributed throughout the locality, similar to Cororooke.
Land subject to inundation	Minimal; small amount to the west.
Useable lot area	High: 26 (37)

Characteristic	Description
Town (Locality)	Moderate: 16 (30) Low: 31 (119) Compliant: 0 (2)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Farming Zone, with the town zoned Township Zone and Low Density Residential Zone. Compliance is variable throughout the locality, with the rural lots surrounding the town generally non-compliant. Compliant: 57 (55) Non-compliant: 16 (133)
Slope Town (Locality)	High: 0 (1) Moderate: 0 (1) Low: 73 (186)
Geology	Underlain by the Newer Volcanic Group with unnamed phreatomagmatic (tuff ring) deposits in the west (including the town) and unnamed stony rises and hummocky lava flows in the east.
Soil suitability Town (Locality)	High: 0 (0) Moderate: 73 (188) Low: 0 (0) The locality consists of soil landscape units '123' and '114' which form on gently undulating plains and stony rises of the Volcanic Western Plains. Soil type changes significantly with landform, but generally consists of moderately to strongly structured, friable clay loam over strongly structured medium clay to less than 1.5m depth. Limitations include restricted drainage.
Sensitivity Overlay	Depth to Groundwater Compliance: all compliant. Landslip: Nil. Vegetation: locality borders Lake Coragulac to the northwest.
Sensitivity Analysis Rating Town (Locality)	Very High: 0 (0) High: 0 (0) Moderate: 43 (70) Low: 30 (118)

4h. Sensitivity Analysis (Maps)

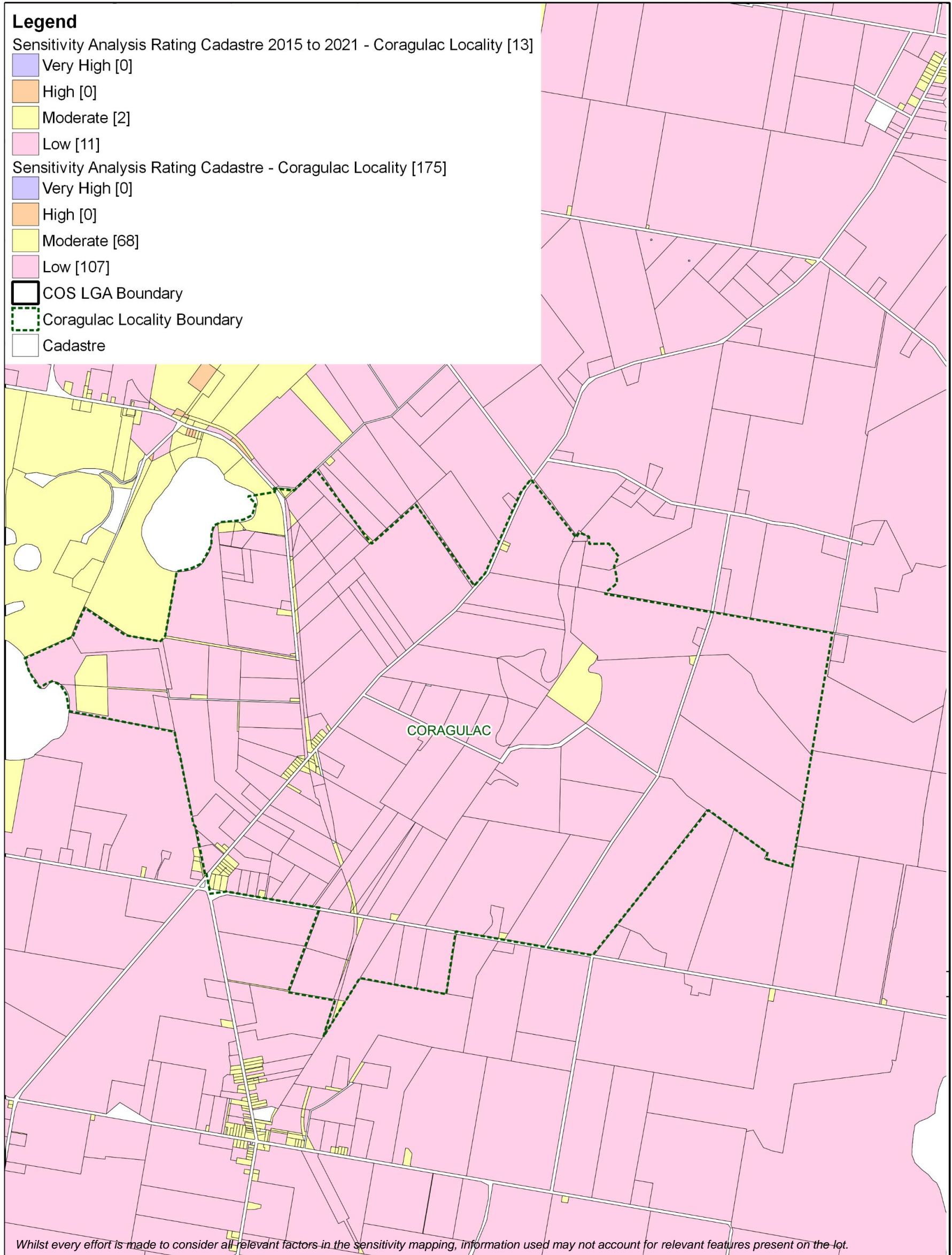
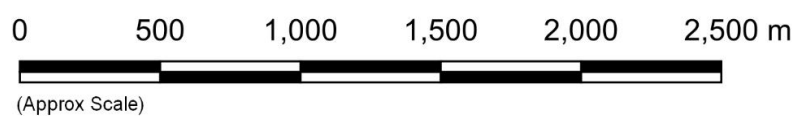


Figure h1: Sensitivity Analysis - Coragulac Locality

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

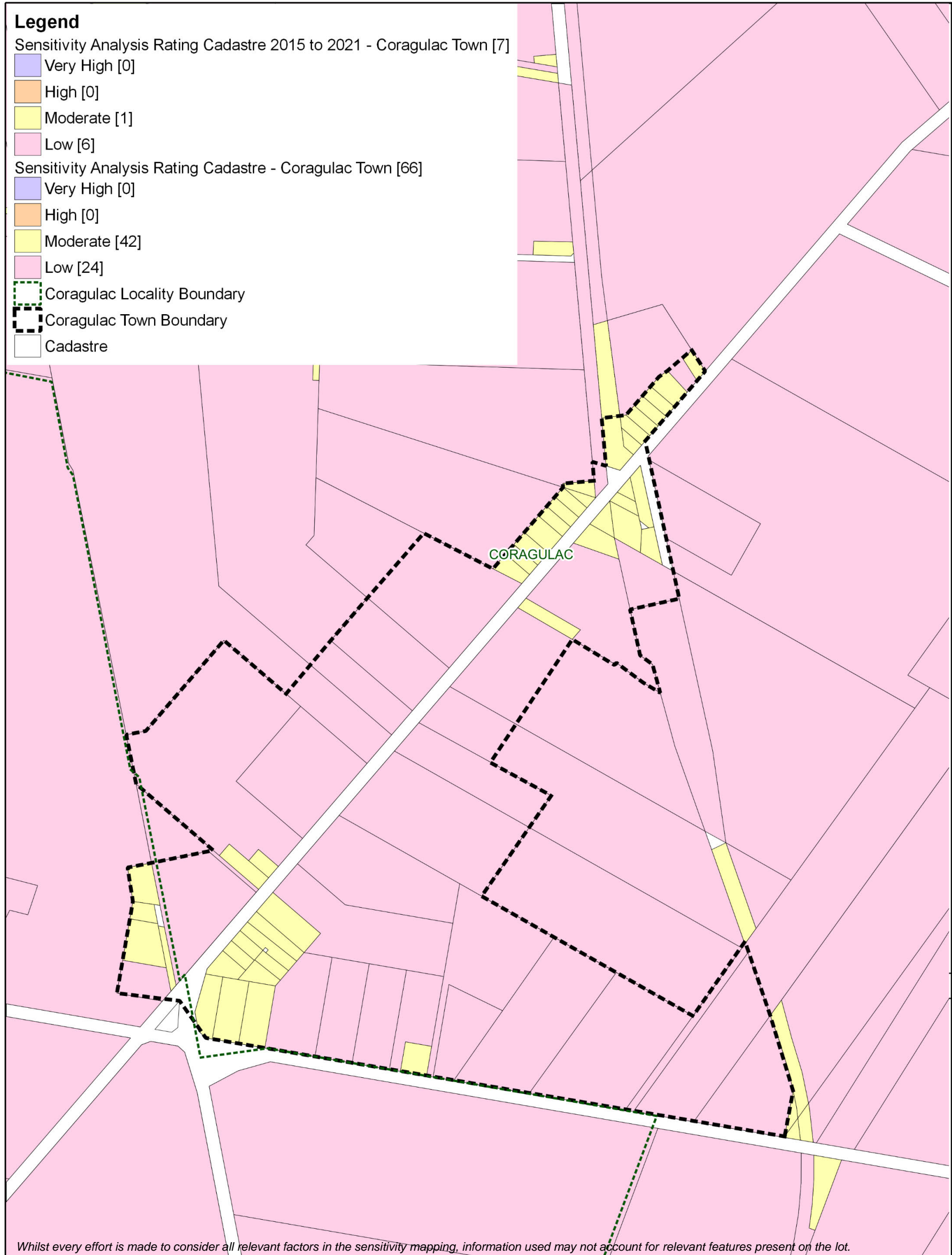
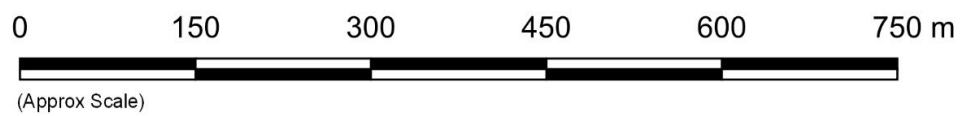


Figure h2: Sensitivity Analysis - Coragulac Town

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

5h. System Selection

Due to the dominance of heavy-textured soils in the Coragulac locality, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays). The System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

6h. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. The water balances used monthly 70th percentile rainfall and average evapotranspiration data for a single geographic point between Coragulac and Cororooke, due to their proximity. The climate data was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as 'Not Applicable' for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as 'Not Applicable' for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed 'Not Applicable' in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Coragulac locality are provided below.

7h. General Conclusion

The lots within Coragulac have been assigned a Moderate or Low Sensitivity Rating to sustainable DWM. Both Standard and Council LCAs will be required, with the use of System Sizing Tables deemed appropriate. The constraints within Coragulac are quite low in comparison to other localities, with particular attention directed towards ensuring that the quality of the groundwater resources is maintained and the correct decommissioning of groundwater bores occurs where necessary.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Coragulac									
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)		
	DIR (mm)	5	5	4	3.5	3	2		
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²) not including spacing & setbacks							
5 + bedroom residence	1,080	287	390	476	610	1,397			
4 bedroom residence	900	239	325	396	508	1,164			
1-3 bedroom residence	720	191	260	317	407	932			
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012									
Conventional Absorption Trenches and Beds - Primary or Secondary Treated Effluent									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Massive Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)
	DLR (mm)	Not supported (Alternative Land Application System Required)							
Development Type	Daily (L/day)								
5 + bedroom residence	1,080								
4 bedroom residence	900								
1-3 bedroom residence	720								
Evapotranspiration-Absorption Trenches and Beds - Primary or Secondary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only
	DLR (mm)	20*	20*	15	10	12	8	5	5
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing & setbacks							
5 + bedroom residence	1,080	59	80	127	103	165	305		
4 bedroom residence	900	49	67	106	86	138	254		
1-3 bedroom residence	720	39	54	85	69	110	203		
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012									
LPED Irrigation Systems - Primary or Secondary Treated Effluent									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)		
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	3	2.5	N/A (Alternative Land Application System Required)		
Development Type	Daily (L/day)		Total min. basal or 'wetted' area for zero wet weather storage (m ²)†						
5 + bedroom residence	1,080		424	527	697	1,029			
4 bedroom residence	900		353	440	581	858			
1-3 bedroom residence	720		283	352	465	686			
† not including spacing & setbacks									
Wick Trenches and Beds - Secondary Treated Effluent Only									
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)
	DLR (mm)	25	30	20	10	12	8	8	5
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing & setbacks							
5 + bedroom residence	1,080	46	38	59	127	103	165	305	
4 bedroom residence	900	39	32	49	106	86	138	254	
1-3 bedroom residence	720	31	26	39	85	69	110	203	

I. Cororooke Locality Report

1i. Introduction

Cororooke is a rural locality located approximately 7km northwest of Colac in close proximity to the Coragulac and Alvie localities within the Red Rock region. The landform features undulating agricultural land on the Western Volcanic Plains.

The locality has a population of approximately 310 residents (ABS Census, 2016). There are approximately 285 and 123 unsewered lots located within the Cororooke locality and town, respectively. There are 31 new lots with DWM systems within the locality from June 2015-2021. There are 78 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Cororooke locality are summarised as follows:

- 19 AWTs (5 drip irrigation, 1 irrigation, 1 trench and 12 unknown);
- 1 sand filter (1 drip irrigation);
- 44 septic tanks (3 trenches, 1 irrigation, 1 subsurface irrigation and 39 unknown); and
- 14 unknown (2 trenches and 12 unknown).

No field investigations were conducted in the Cororooke locality as part of the 2014 field assessments.

2i. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Red Rock Region Community Infrastructure Plan (September, 2013);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3i. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 2.
Surface waterways & catchments	Located outside of a DWSC. Minimal drainage features, with Lake Colac to the east.
Groundwater	Proximity to groundwater bores: distributed throughout the locality, similar to Coragulac.
Land subject to inundation	Nil but extensive to the east (associated with Lake Colac).
Useable lot area	High: 82 (102)
Town (Locality)	Moderate: 28 (44)

Characteristic	Description
	Low: 13 (134) Compliant: 0 (5)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Farming Zone. The town is zoned Township Zone and Rural Living Zone. Compliance is variable throughout the locality, with the majority of the rural lots non-compliant. Compliant: 79 (87) Non-compliant: 44 (198)
Slope Town (Locality)	High: 0 (0) Moderate: 0 (0) Low: 123 (285)
Geology	Variable. The town is predominately underlain by unnamed stony rises and hummocky lava flows of the Newer Volcanic Group Transversing east-west. North of the town – unnamed phreatomagmatic deposits (tuff rings) of Newer Volcanic Group South of the town – Quaternary unnamed swamp, lake and estuarine deposits. Southern region – Hanson Plain sand of the Brighton Group which is comprised of fluvial and minor shallow marine deposits Along southern boundary – unnamed sheet flow basalt of the Newer Volcanic Group.
Soil suitability Town (Locality)	High: 0 (1) Moderate: 123 (284) Low: 0 (0) Variable throughout locality (6 in total). The dominant soil landscape unit, which also includes the town, is '114' which forms on gently undulating plains and stony rises of the Volcanic Western Plains. Soil type changes significantly with landform, but generally consists of moderately to strongly structured, friable clay loam over strongly structured medium clay to less than 1.5m depth. Limitations include restricted drainage.
Sensitivity Overlay	Depth to Groundwater Compliance: all compliant, including town, except for the eastern lots around Lake Colac.

Characteristic	Description
	Landslip: Nil Vegetation: Lake Colac to southeast.
Final Sensitivity Rating Town (Locality)	Very High: 0 (0) High: 0 (0) Moderate: 110 (146) Low: 13 (139)

4i. Sensitivity Analysis (Maps)

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

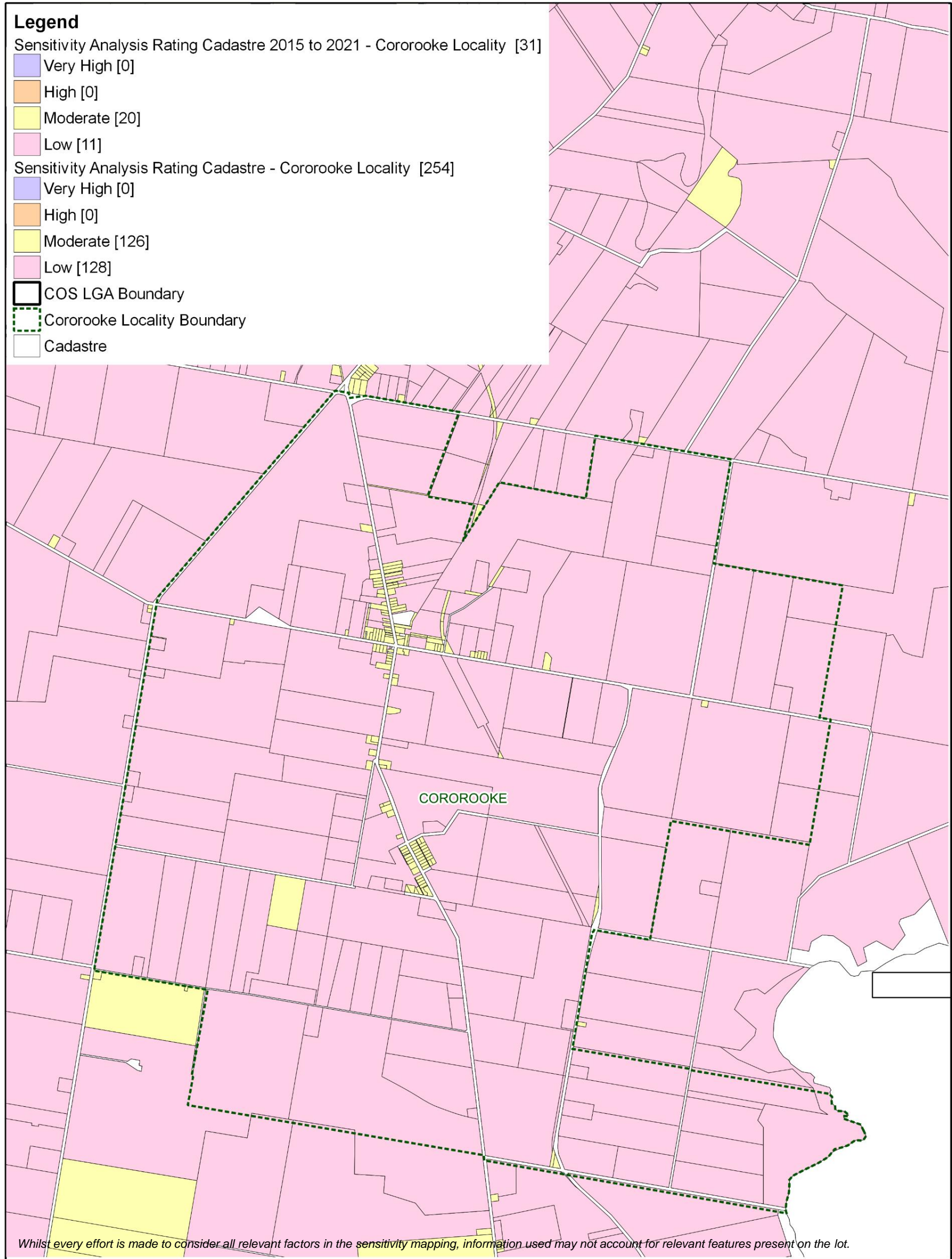


Figure i1: Sensitivity Analysis - Cororooke Locality

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

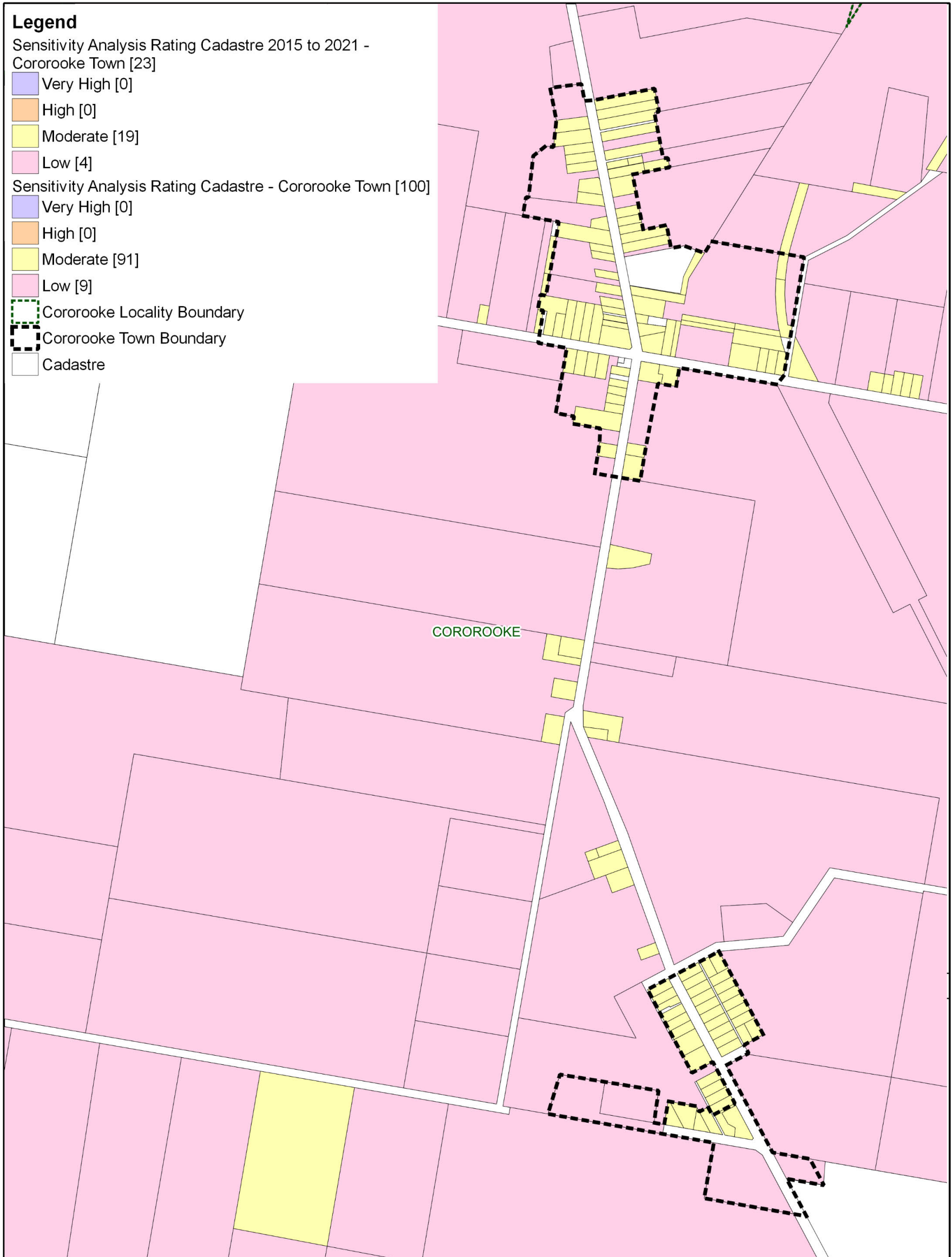


Figure i2: Sensitivity Analysis - Cororooke Town		N 	
Colac Otway Shire DWMP Review			
	0 200 400 600 800 1,000 m	Revision	4
	(Approx Scale)	Drawn	JK
		Approved	MS

5i. System Selection

Based on soil types and indicative depths, the Cororooke locality has the potential to sustainably accommodate a broad range of system types, depending on the influences of climate. The System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

6i. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. The water balances used monthly 70th percentile rainfall and average evapotranspiration data for a single geographic point between Cororooke and Coragulac, due to their proximity. The climate data was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as 'Not Applicable' for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as 'Not Applicable' for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed 'Not Applicable' in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Cororooke locality are provided below.

7i. General Conclusion

The lots within Cororooke have been assigned a Moderate or Low Sensitivity Rating to sustainable DWM. Both Standard and Council LCAs will be required, with the use of System Sizing Tables deemed appropriate. The constraints within Cororooke are quite low in comparison to other localities. Particular attention should be directed towards ensuring that the quality of the groundwater resources is maintained and the correct decommissioning of groundwater bores occurs where necessary.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Cororooke										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)				
	DIR (mm)	5	5	4	3.5	3	2			
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	287	390	476	610	1,397				
4 bedroom residence	900	239	325	396	508	1,164				
1-3 bedroom residence	720	191	260	317	407	932				
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
Conventional Absorption Trenches and Beds - Primary or Secondary Treated Effluent										
Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Massive Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)		
	DLR (mm)	20*	20*	15	10	6	4	5		
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	59	80	127	238	424	305	N/A (Alternative Land Application System Required)		
4 bedroom residence	900	49	67	106	198	353	254			
1-3 bedroom residence	720	39	54	85	159	283	203			
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
Evapotranspiration-Absorption Trenches and Beds - Primary or Secondary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)										
Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only		
	DLR (mm)	20*	20*	15	10	12	8	5	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	59	80	127	103	165	305			
4 bedroom residence	900	49	67	106	86	138	254			
1-3 bedroom residence	720	39	54	85	69	110	203			
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)				
	DIR (mm)		4	3.5	3	2.5				
Development Type	Daily (L/day)	N/A (Alternative Land Application System Required)	Total min. basal or 'wetted' area for zero wet weather storage (m ²)†				N/A (Alternative Land Application System Required)			
5 + bedroom residence	1,080		424	527	697	1,029				
4 bedroom residence	900		353	440	581	858				
1-3 bedroom residence	720		283	352	465	686				
† not including spacing & setbacks										
Wick Trenches and Beds - Secondary Treated Effluent Only										
Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)		
	DLR (mm)	25	30	20	10	12	8	8	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted' area required for zero wet weather effluent storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	46	38	59	127	103	165	305		
4 bedroom residence	900	39	32	49	106	86	138	254		
1-3 bedroom residence	720	31	26	39	85	69	110	203		

J. Forrest Locality Report

1j. Introduction

Forrest is located approximately 22km southeast of Colac in the northern hinterlands of the Otway Ranges. The town is located along a ridgeline that separates two well defined catchments. The majority of the locality is located outside DWSCs; however, small portions (10%) along the north-western and south-eastern boundaries fall within the Gellibrand River and Upper Barwon DWSCs, respectively.

The locality has a population of approximately 230 residents (ABS Census, 2016). There are approximately 349 and 167 unsewered lots within the Forrest locality and town, respectively. There are 5 new lots with DWM systems within the locality from June 2015-2021. There are 159 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DW permits and their associated treatment system and LAA method within Forrest are summarised as follows:

- 32 AWTS (9 drip irrigation, 2 trenches, 7 subsurface irrigation and 14 unknown);
- 39 sand filters (1 trench, 37 subsurface irrigation and 1 unknown);
- 45 septic tanks (10 trenches, 1 irrigation and 34 unknown);
- 4 worm farms (2 trenches, and 2 unknown); and
- 29 unknown (10 trenches, 1 subsurface irrigation and 18 unknown).

No field investigations were conducted within the Forrest locality as part of the 2014 field assessments.

There have been 21 notified wastewater complaints to Council within the township of Forrest regarding DWM systems and associated land applications that have been registered in Council's Health Manager database from 2015- 2021. The reticulation/sewering of Forrest would be beneficial as wastewater management complaints are received in this township. There are a number of site constraints that are present within these township properties. Protecting the environment and public health through the sewerage of Forrest would be supported.

2j. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Forrest Structure Plan (2011);
- Birregurra and Forrest Township Community Infrastructure Plans (2012);
- Colac Otway Domestic Wastewater Management Plan (2007);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3j. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zones 2 and 3.

Characteristic	Description
Surface waterways & catchments	A small region of the locality is located with DWSCs, being the Upper Barwon and Gellibrand River, but the town is located outside a DWSC. West Barwon Reservoir is located approximately 8km to the south of the town inside Barwon DWSC. Barwon River West Branch traverses north and east of the town. Other waterways within the locality include: Road Knight Creek, Porcupine Creek, and Barwon River East Branch. Limited surface water concerns are located along the ridgeline.
Groundwater	Proximity to groundwater bores: distributed throughout the northern region and along the river, but density is less than other localities.
Land subject to inundation	Transverses locality north-south along Barwon River West Branch which runs along the eastern perimeter of the town.
Useable lot area Town (Locality)	High: 8 (125) Moderate: 5 (62) Low: 24 (156) Compliant: 0 (6)
Minimum lot size compliance with Planning Scheme Zoning	The locality is zoned a variety of different uses, predominantly being zoned Farming Zone, Public Conservation and Resource Zone, and Public Use Zone around the reservoir. The town is zoned as Township Zone, Rural Living Zone and Rural Activity Zone. Compliance is variable throughout the locality, with the majority of the lots within the town compliant and surrounding lots non-compliant. Compliant: 148 (170) Non-compliant: 19 (179)
Slope Town (Locality)	High: 6 (84) Moderate: 22 (63) Low: 139 (202)
Geology	Town – Dilwyn Formation of Wangeripp Group (shallow marine, coastal barrier and back beach lagoonal deposit); North: Gellibrand Marl of Hytesbury Group (continental shelf deposit); South – Eumeralla Formation of the Otway Group (fluvial and braided stream deposits) with alluvial flood plain deposits along the creek.
Soil suitability Town (Locality)	High: 0 (28) Moderate: 167 (321) Low: 0 (0)

Characteristic	Description
	<p>The town consists of soil landscape unit '73' which form on the steep rolling hills on the northern periphery of the Otway Range and consists of texture contrast soils with ironstone to 2m depth. The soils consist of weakly structured sandy loam over strongly structured medium to heavy clay. Limitations include low fertility, low p-sorb, sodic, dispersive, restricted drainage and coarse fragments.</p> <p>The regions adjacent to the river to the north and west of the town consist of soil landscape unit '95' which forms on the alluvial floodplain of the Barwon River and its tributaries with numerous cut-off meanders. The soil consists of a moderately structured fine sandy clay loam over medium clay to more than 2m depth. Limitations include restricted drainage and dispersive.</p> <p>South and east facing slopes are linear and consist of in situ weathered rock with brown gradational soils covered by loam. North and west facing slopes consist of in situ weathered rock with brown duplex soils covered by loam.</p>
Sensitivity Overlay	<p>Depth to Groundwater Compliance: predominantly compliant, except in the northeast of the locality along Barwon River East Branch.</p> <p>Landslip: extensive around locality and surrounding locality</p> <p>Vegetation: Otway Forest Park surrounds the town, with a small region of Great Otway National Park.</p>
Sensitivity Analysis Rating Town (Locality)	<p>Very High: 0 (9)</p> <p>High: 14 (43)</p> <p>Moderate: 153 (284)</p> <p>Low: 0 (13)</p>

4j. Sensitivity Analysis (Maps)

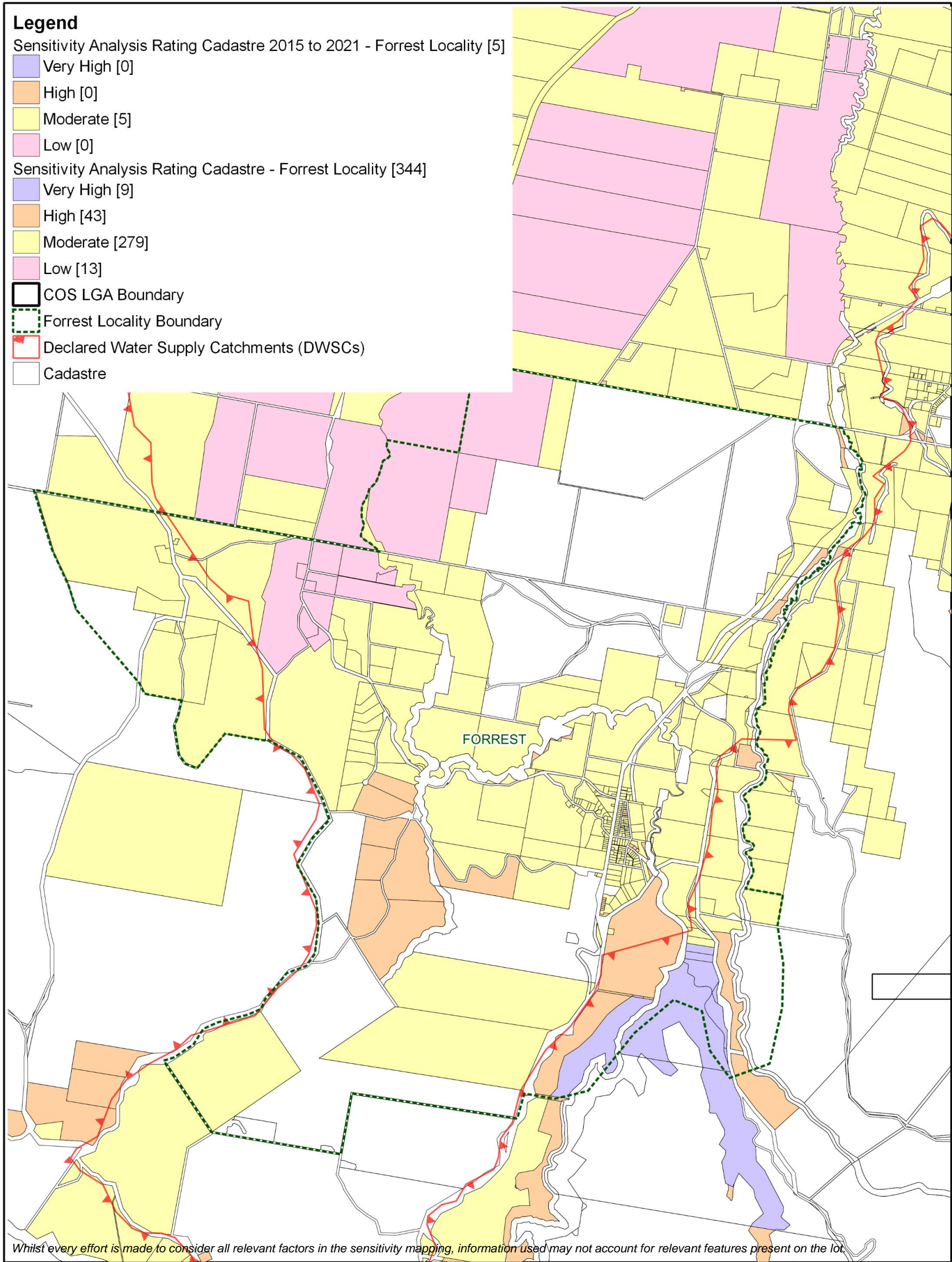


Figure j1: Sensitivity Analysis - Forreast Locality

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

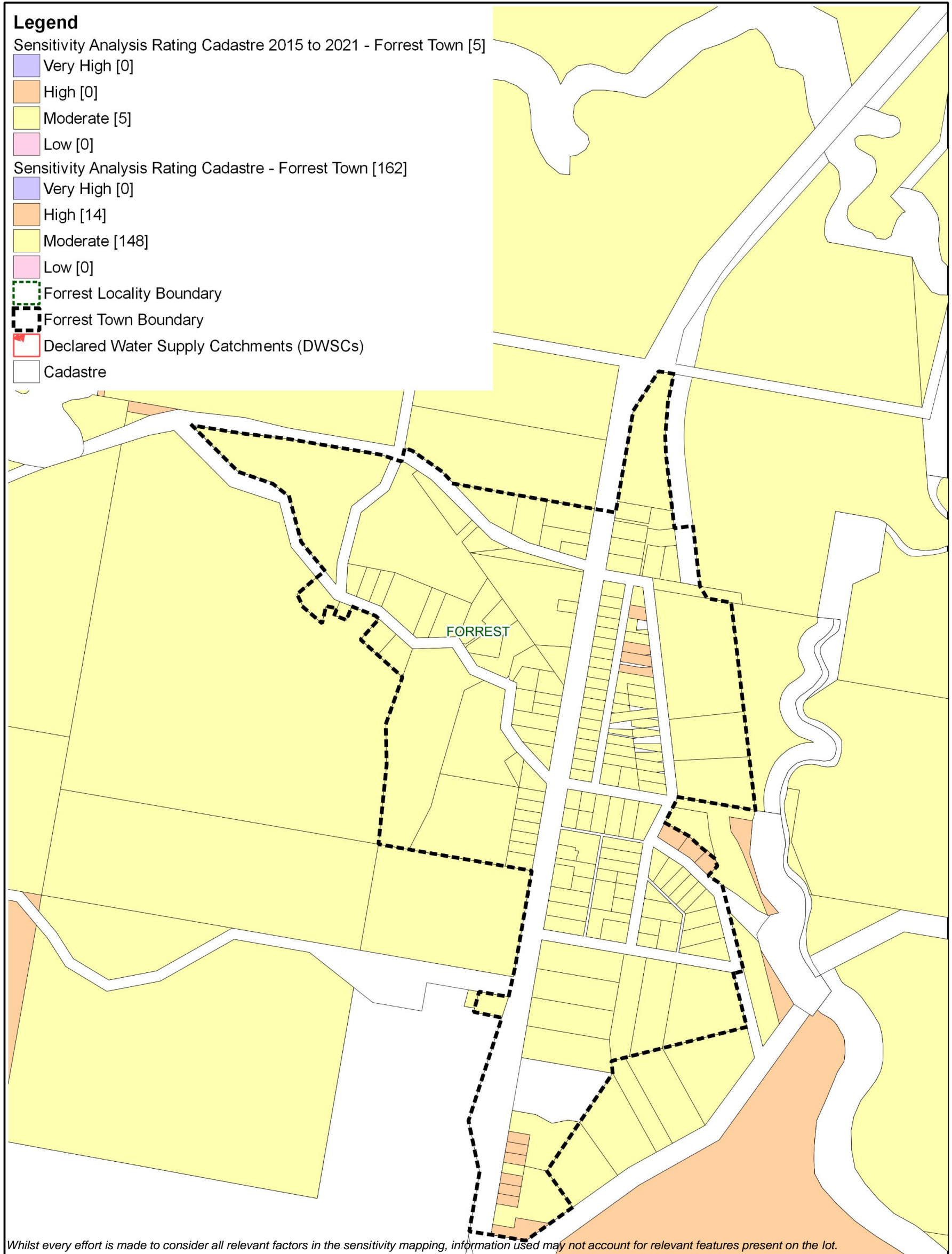
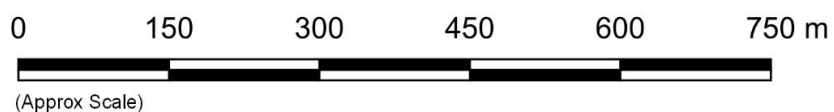


Figure j2: Sensitivity Analysis - Forrest Town

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

5j. System Selection

Due to the dominance of heavy-textured soils in the Forrest area, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays). The System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

6j. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. The water balances used monthly 70th percentile rainfall and average evapotranspiration data for Gellibrand, as it was compared with that of Forrest and found to be very similar, with very little size differences in water balance results. The climate data for Gellibrand was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as 'Not Applicable' for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as 'Not Applicable' for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed 'Not Applicable' in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Forrest locality are provided below.

7j. General Conclusion

The lots within Forrest have been assigned all classes of Sensitivity Rating to sustainable DWM, with the majority of the lots assigned a Moderate Sensitivity Rating. Predominantly, Standard LCAs will be required, with the use of System Sizing Tables deemed appropriate. The Low Sensitivity Rating lots that fall within a DWSC are required to complete a Standard LCA as per the current EPA Code of Practice's requirements. Particular attention needs to be directed towards ensuring that the degree of slope is taken into consideration when designing the LAA. The locality is also extensively considered to be prone to landslip; a geotechnical report by a suitably qualified person will need to be conducted to address this constraint.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Forrest										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	5	5	4	3.5	3	2			
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²) not including spacing or setbacks								
5 + bedroom residence	1,080	380		586	804	1,269	1,881			
4 bedroom residence	900	317		489	670	1,068	1,568			
1-3 bedroom residence	720	254		391	536	854	1,254			
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
	DLR (mm)	Not supported (Alternative Land Application System Required)								
Development Type	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
	DLR (mm)	20*	20*	15	10	12	8	5	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	62		87	144	114	197		431	
4 bedroom residence	900	52		72	120	95	164		360	
1-3 bedroom residence	720	42		58	96	76	131		288	
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)			
Development Type	Daily (L/day)		Total min. basal or 'wetted area' [†]							
5 + bedroom residence	1,080		717	1,073						
4 bedroom residence	900		598	895						
1-3 bedroom residence	720	478	716							
[†] required for zero wet weather storage (m ²) not including spacing & setbacks										
Wick Trenches and Beds - Secondary Treated Effluent Only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
	DLR (mm)	25	30	20	10	12	8	8	N/A (Alternative Land Application System Required)	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	48	40	62	145	114	197			
4 bedroom residence	900	40	33	52	121	95	164			
1-3 bedroom residence	720	32	27	42	97	76	132			

K. Gellibrand Locality Report

1k. Introduction

Gellibrand is located approximately 21km south of Colac. It is located on elevated and dissected terraces or deeply dissected hills, abutting the Gellibrand River. Gellibrand is located on relatively flat land gently slopes in a northerly direction to the convergence of Charleys Creek and Lardner Creek. Notably, the entire locality is located within the Gellibrand River DWSC.

The locality has an estimated permanent population of approximately 210 residents (ABS Census, 2016). There are approximately 265 and 69 unsewered lots located within the Gellibrand locality and town, respectively. There are 5 new lots with DWM systems within the locality from June 2015-2021. There are 110 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Gellibrand locality are summarised as follows:

- 12 AWTS (5 drip irrigation, 1 trenches, 1 irrigation and 4 unknown);
- 1 constructed reed beds wetland (1 trench);
- 35 sand filters (1 drip irrigation and 34 subsurface irrigation);
- 36 septic tanks (12 trenches, 1 subsurface irrigation and 23 unknown); and
- 26 unknown (10 trenches and 16 unknown).

2k. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Gellibrand River Township Master Plan Report (October, 2005); and
- Colac Otway Domestic Wastewater Management Plan (2007);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3k. Site Assessment Results

The following table summarises the results from the representative audits conducted by Consultant staff in September 2014.

Characteristic	Description
Land use	Comprises of a range of land uses, including dairy, forestry, rural living and tourism.
Occupancy rates	2.3 (Gellibrand State Suburb, ABS Census, 2011).
Typical soils	Duplex profile. Very dark grey brown sandy clay loam surface soil overlying abruptly at 35cm a strongly mottled yellow brown, grey, strong brown silty clay, overlying a stratum of white and yellow coarse gravelly sand with rounded quartz pebbles between 140-170cm, overlying strongly mottled clay to at least 200cm. Drainage and permeability are variable depending on slope and position.

Characteristic	Description
AS/NZS 1547:2012 soil categories	5 (Light Clays)
Existing Systems	<p>Separate Blackwater and Greywater</p> <p>Of the seven systems inspected during field investigations, three systems (43%) comprised separate blackwater treatment in a septic tank, with direct greywater diversion to either an adjacent paddock or street drain. Where discharged to paddocks or neighbouring vacant lots, greywater was typically ponded near the diversion outlet pipe, and often in areas trampled by livestock (cattle and sheep).</p> <p>The blackwater septic tanks were typically 40+ years old and less than half had been pumped out within the last ten years. Septic effluent discharged to one or more conventional absorption trenches, some of which could not be identified without the owner present. The majority of trenches were located on land of less than 8% slope and appeared to be parallel with contours (i.e. running across slope, not down it). There was evidence of blackwater effluent surcharging to the surface on one property (of three with separate blackwater and greywater systems). Soils were typically soft or boggy, mainly due to recent high rainfall.</p> <p>Combined Blackwater and Greywater</p> <p>Four of the seven systems (57%) inspected had combined wastewater treatment systems or were assumed to have combined systems, based on layout of pipework. It is likely that the proportion of combined systems in Gellibrand is likely to be less than this; however, this should be confirmed by ongoing inspections by Council.</p> <p>Septic effluent discharged to one or more conventional absorption trenches. At least one of the four properties had undersized trenches for the number of bedrooms; and on one property the LAA could not be identified and there was inadequate suitable space for an appropriately sized LAA.</p>

4k. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 3.
Surface waterways & catchments	The locality is located entirely within the Gellibrand River DWSC. There is an extensive drainage network surrounding the town; including Gellibrand River transversing southeast to northwest, Love Creek, Charleys Creek, Lardner Creek and Asplin Creek.
Groundwater	Proximity to groundwater bores: significantly dense distribution throughout the town and along the river, similar to Kawarren.

Characteristic	Description
	Groundwater depth: 1.5 – 2m below surface.
Land subject to inundation	Extensive along Gellibrand River, Charleys Creek, Lardner Creek and Love Creek; envelopes the town.
Useable lot area Town (Locality)	High: 19 (58) Moderate: 32 (46) Low: 18 (148) Compliant: 0 (13)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Farming Zone and Public Conservation and Resource Zone. The town is zoned Township Zone, Public Park and Recreation Zone and Public Use Zone. Compliance is variable throughout the locality, with the majority of the lots within the town compliant. Compliant: 62 (93) Non-compliant: 7 (172)
Slope Town (Locality)	High: 0 (84) Moderate: 0 (24) Low: 69 (157)
Geology	Various underlying geology. Majority of town is a river terrace with clay and sand which is moderately sorted and poorly consolidated. Northern tip is alluvial floodplain with silt, sand, and gravel deposits which are also moderately sorted and poorly consolidated. South – Eumeralla Formation of the Otway Group. Dilwyn Formation of Wangeripp Group is directly south of town. Older Volcanic Group (volcanic plugs, sills, dykes, pillow and pyroclastic deposits) to the east and north of town. Wiridjil Gravel Member of Pebble Point Formation to west of town towards Carlisle River. South eastern edge is a shallow marine deposit with sand, clay and silt.
Soil suitability Town (Locality)	High: 63 (124) Moderate: 6 (141) Low: 0 (0)

Characteristic	Description
	<p>The majority of the town is classified as having a high soil suitability constraint.</p> <p>The dominant soil landscape unit of the town consists of '67' which forms on deeply dissected hills abutting the Gellibrand River to the west of Love Creek. The soils consist of brown gradational soils, strongly structured sandy clay loam over weakly structured light clay, to 0.9m depth. Limitations include acidity.</p> <p>The western and southern regions of the town consist of soil landscape unit '94' which forms on elevated, and in parts, uplifted and dissected system of ancient cut and depositional terraces of Gellibrand River. The soils consist of grey sand soils with structured clay underneath; strongly structured sandy loam over moderately structured medium clay; to depths of more than 2m. Limitations include low fertility and restricted drainage.</p> <p>The northern region of the locality consists of soil landscape unit '90' which forms on the rolling hills in the northern upper reaches of the Gellibrand catchment and consists of mottled gradational soil to more than 2m depth. The soil consists of apedal fine sandy loam over weakly structured silty clay loam. Limitations include low p-sorb, low fertility and restricted drainage.</p> <p>The southern half of the locality consists of soil landscape unit '61' which forms on the deeply dissected hills of the Otway Ranges and consist of brown gradational soils to 1.2m depth. The soils consist of moderately structured silty loam over clay loam. Limitations include acidity and restricted drainage.</p> <p>Predominant soil is yellow sandy gravel fill over brown clayey sandy silt overlying dark brown silty fine sand.</p> <p>Soil capacity for good drainage but waterlogged during wetter months.</p>
Sensitivity Overlay	<p>Depth to Groundwater Compliance: variable throughout locality. Non-compliant particularly to the southeast of the locality around Gellibrand River and Lardner Creek.</p> <p>Landslip: excessive, particularly to northwest of town.</p> <p>Vegetation: Otway Forest Park in southeast corner.</p>
Sensitivity Analysis Rating Town (Locality)	<p>Very High: 0 (2)</p> <p>High: 19 (61)</p> <p>Moderate: 50 (202)</p> <p>Low: 0 (0)</p>

5k. Sensitivity Analysis (Maps)

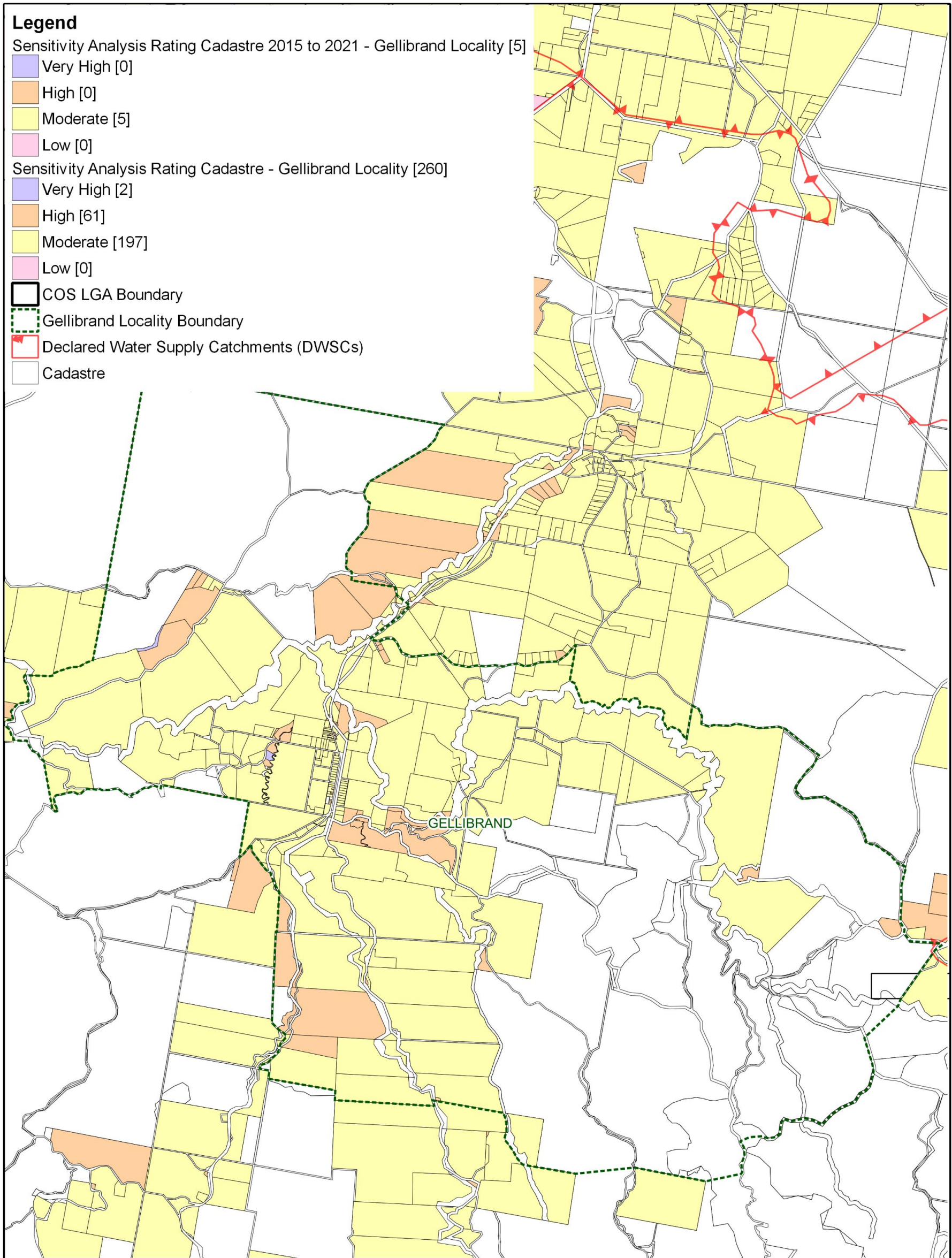
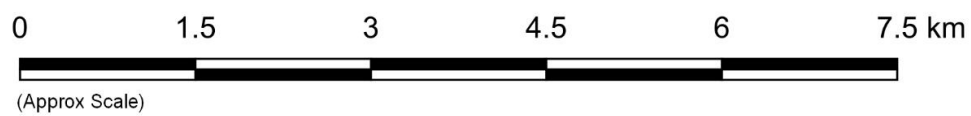


Figure k1: Sensitivity Analysis - Gellibrand Locality

Colac Otway Shire DWMP Review



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Drawn	JK
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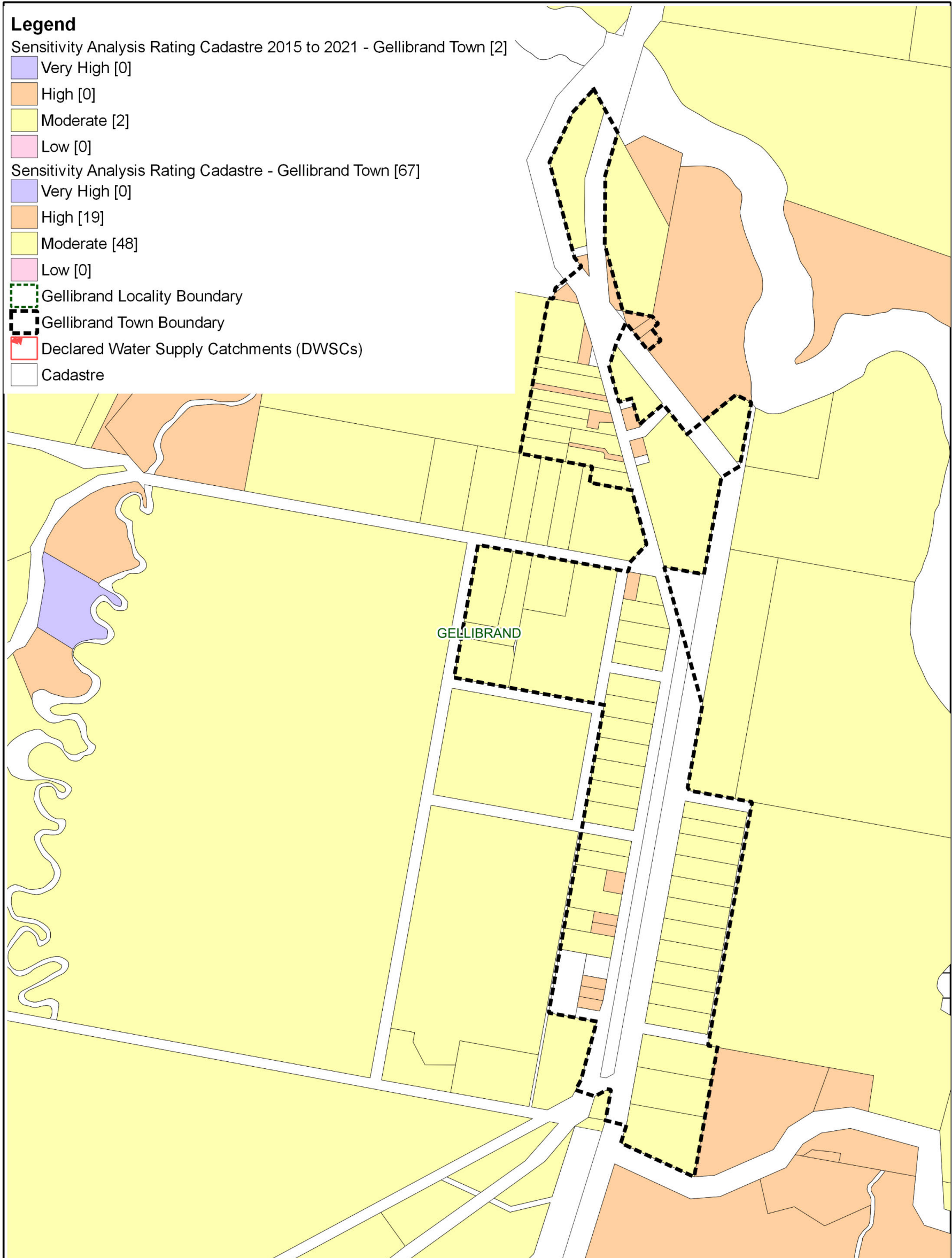
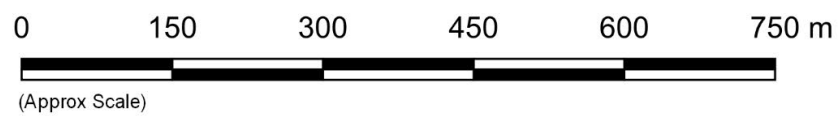


Figure k2: Sensitivity Analysis - Gellibrand Town

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Revision	4
Drawn	JK
Approved	MS

6k. System Selection

Due to the dominance of heavy-textured soils in the Gellibrand locality, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays).

EPA Code of Practice (2013) (Section 2.2.2) identifies secondary treatment standard (or better) followed by subsurface pressure-compensating irrigation as current best-practice in Victoria for substantially reducing the risk associated with unsewered development. Further, the Code describes a “Wick trench/bed” land application option that may be incorporated with secondary treatment for consideration on sites constrained by climate or lot ‘useable area’, particularly within the DWSCs. Any variation from this best-practice approach must be provided with detailed supporting information to demonstrate suitability. The System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

7k. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall and average evapotranspiration data for Gellibrand was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed ‘Not Applicable’ in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Gellibrand locality are provided below.

8k. General Conclusion

The Rural Living Strategy (2011) identified Gellibrand as having ‘deferred’ growth potential, dependent on water catchment constraints and bushfire hazard being satisfactorily addressed. The Sensitivity Analysis concludes that development is feasible given its predominantly Moderate Sensitivity to DWM, particular within the town. Particular attention needs to be directed towards ensuring that appropriate setbacks to surface waterways, groundwater bores and flood prone areas are maintained, that the DWM systems are sized based on the limiting soil horizon and that the depth to groundwater during site-specific LCAs is ascertained. It is imperative that there is sufficient useable area to sustainably manage wastewater on-site. Some areas within the locality are considered to be extensively prone to landslip; a geotechnical report by a suitably qualified person will need to be conducted to address this constraint. Predominantly, Standard and Detailed LCAs will be required, with the use of System Sizing Tables deemed appropriate for the lots assigned a Moderate Sensitivity Rating. The Low Sensitivity Rating lots within a DWSC are required to complete a Standard LCA as per the current EPA Code of Practice’s requirements.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Gellibrand & Kwarren										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	5	5	4	3.5	3	2			
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²)†								
5 + bedroom residence	1,080	379		584	800	1,269	2,329			
4 bedroom residence	900	316		487	667	1,058	1,941			
1-3 bedroom residence	720	253		389	533	846	1,553			
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
† not including spacing or setbacks										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
	DLR (mm)	Not supported (Alternative Land Application System Required)								
Development Type	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
	DLR (mm)	20*	20*	15	10	12	8	5	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	62		87	145	114	197		433	
4 bedroom residence	900	52		73	121	95	164		361	
1-3 bedroom residence	720	42		58	97	76	132		289	
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)			
Development Type	Daily (L/day)		Total min. basal or 'wetted area'†							
5 + bedroom residence	1,080		723	1,086						
4 bedroom residence	900		603	905						
1-3 bedroom residence	720		482	724						
† required for zero wet weather storage (m ²) not including spacing & setbacks										
Wick Trenches and Beds - Secondary Treated Effluent Only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
	DLR (mm)	25	30	20	10	12	8	8	N/A (Alternative Land Application System Required)	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	49	40	62	145	114	197			
4 bedroom residence	900	41	33	52	121	95	164			
1-3 bedroom residence	720	33	27	42	97	76	132			

L. Kwarren Locality Report

1I. Introduction

Kwarren is located approximately 16km south of Colac. It is located on rolling hills or dissected hills abutting rivers and streams or large flood plains with undulating agricultural land. Notably, approximately 90% of the locality is located within a DWSC; predominantly Gellibrand River DWSC and a small portion in the northeast corner located within Barwon Downs Wellfield Intake DWSC.

The locality has an estimated permanent population of approximately 166 residents (ABS Census, 2016). There are approximately 215 and 72 unsewered lots located within the Kwarren locality and settlement, respectively. There are 3 new lots with DWM systems within the locality from June 2015-2021. There are 71 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Kwarren locality are summarised as follows:

- 11 AWTS (1 drip irrigation, 1 trench, 1 irrigation and 7 unknown);
- 1 composting toilet (1 trench);
- 3 sand filter (1 irrigation and 2 subsurface irrigation);
- 40 septic tank (12 trenches and 28 unknown); and
- 16 unknown (10 trenches and 6 unknown).

2I. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- COS Planning Scheme; and
- Rural Living Strategy (2011).

3I. Site Assessment Results

The following table summarises the results from the representative audits conducted by Consultant staff in September 2014.

Characteristic	Description
Land use	Comprises of a range of land uses, including dairy, forestry, rural living and tourism.
Occupancy rates	2.3 persons (Part of the Gellibrand State Suburb ABS Census, 2011) ⁵ .
Typical soils	Grey brown fine sandy loam to fine sandy clay loam becoming mottled at 15cm, abrupt change at 30cm to mottled light yellow brown and grey brown silty clay loam, grading to increasing mottling with depth to bright dark yellow brown, strong brown silty clay loam with some black

⁵ No separate data for individual small townships and localities.

Characteristic	Description
	small concretions below 80cm depth. Drainage and permeability are variable depending on slope and position.
AS/NZS 1547:2012 soil categories	4 (Clay Loams) to 5 (Light Clays)
Existing Systems	<p>Separate Blackwater and Greywater</p> <p>Of the 8 systems inspected during field investigations, 75% of systems comprised separate blackwater treatment in a septic tank, with direct greywater diversion to an adjacent paddock (not to street drains, due to blocks generally sloping away from the street frontage). Greywater was typically ponded near the diversion outlet pipe, and often in areas trampled by livestock (cattle and sheep).</p> <p>The blackwater septic tanks were typically 40+ years old and approximately half had been pumped out within the last ten years. Septic effluent discharged to one or more conventional absorption trenches, some of which could not be identified without the owner present. The majority of trenches were located on land of less than 8% slope and appeared to be parallel with contours (i.e. running across slope, not down it). There was no evidence of blackwater effluent surcharging to the surface; however, soils were typically soft or boggy, mainly due to recent high rainfall.</p> <p>Combined Blackwater and Greywater</p> <p>25% of systems inspected had combined wastewater treatment systems or were assumed to have combined systems, based on layout of pipework. It is likely that the proportion of combined systems in Kawarren is less than this; however, this should be confirmed by ongoing inspections by Council.</p> <p>Septic effluent discharged to one or more conventional absorption trenches, which were all undersized for the number of bedrooms, and/or located in inadequately sized available land application areas (LAAs).</p>

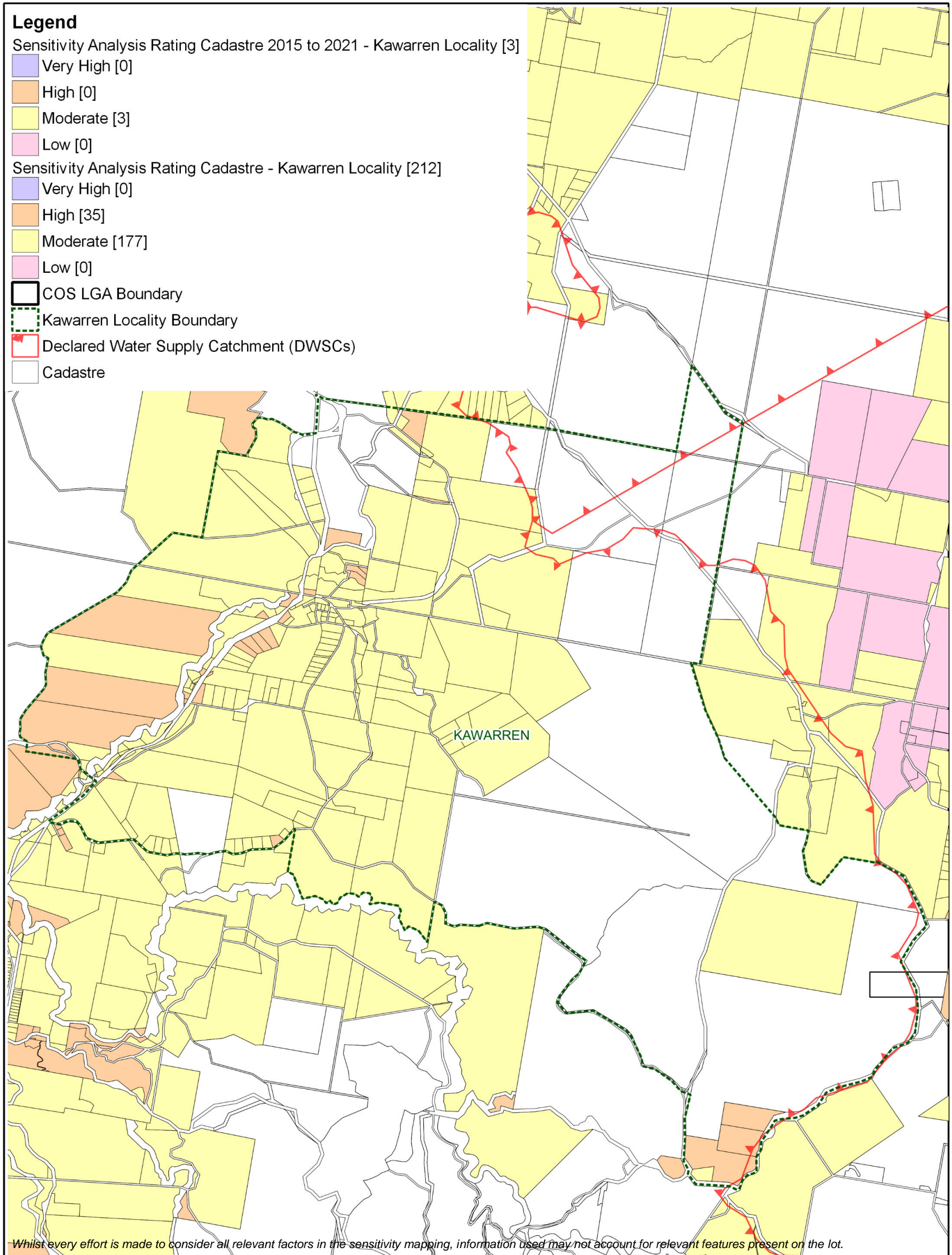
4I. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zones 2 and 3.
Surface waterways & catchments	The locality is located within the Gellibrand River and Barwon Downs Wellfield Intake DWSCs. The waterways include: Love Creek to the north of the settlement, Yahoo Creek, Ten Mile Creek, and Porcupine Creek which contains an extensive waterbody.

Characteristic	Description
Groundwater	Proximity to groundwater bores: significantly dense distribution throughout the settlement and along the river, similar to Gellibrand.
Land subject to inundation	Nil.
Useable lot area Settlement (Locality)	High: 37 (72) Moderate: 6 (16) Low: 29 (121) Compliant: 0 (6)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Farming Zone and Public Conservation and Resource Zone. The settlement is zoned Rural Living Zone. The majority of lots are non-compliant, particularly within the settlement. Compliant: 1 (24) Non-compliant: 71 (191)
Slope Settlement (Locality)	High: 6 (58) Moderate: 29 (74) Low: 37 (83)
Geology	Gellibrand Marl of Heytesbury Group (continental shelf deposits) is dominant with Older Volcanic Group to the west and north of settlement. The Clifton Formation of Heytesbury Group straddles the Older Volcanic Group and alluvial flood plain deposits. Demons Bluff Formation of the Nirranda Group is to the north of locality.
Soil suitability Settlement (Locality)	High: 0 (13) Moderate: 72 (202) Low: 0 (0) Variable soil landscapes throughout locality (5 in total). The settlement and the majority of the locality consists of soil landscape unit '90' which forms on the rolling hills in the northern upper reaches of the Gellibrand catchment and consists of mottled gradational soil to more than 2m depth. The soil consists of apedal fine sandy loam over weakly structured silty clay loam. Limitations include low p-sorb, low fertility and restricted drainage. The settlement and to the east of the locality consists of soil landscape unit '76' which forms on undulating plains. The soil consists of grey

Characteristic	Description
	sand soils to more than 2m depth with weak loamy sand overlying apedal sand. Limitations include low fertility.
Sensitivity Overlay	<p>Depth to Groundwater Compliance: predominantly compliant, except for along Love Creek which transverses northeast to southwest around the settlement.</p> <p>Landslip: minimal, with a few large regions to the east of the settlement.</p> <p>Vegetation: eastern half of locality consists of Otway Forest Park and Great Otway National Park.</p>
Sensitivity Analysis Rating Settlement (Locality)	<p>Very High: 0 (0)</p> <p>High: 12 (35)</p> <p>Moderate: 60 (180)</p> <p>Low: 0 (0)</p>

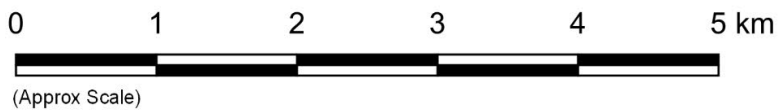
5I. Sensitivity Analysis (Maps)



Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure I1: Sensitivity Analysis - Kawarren Locality

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

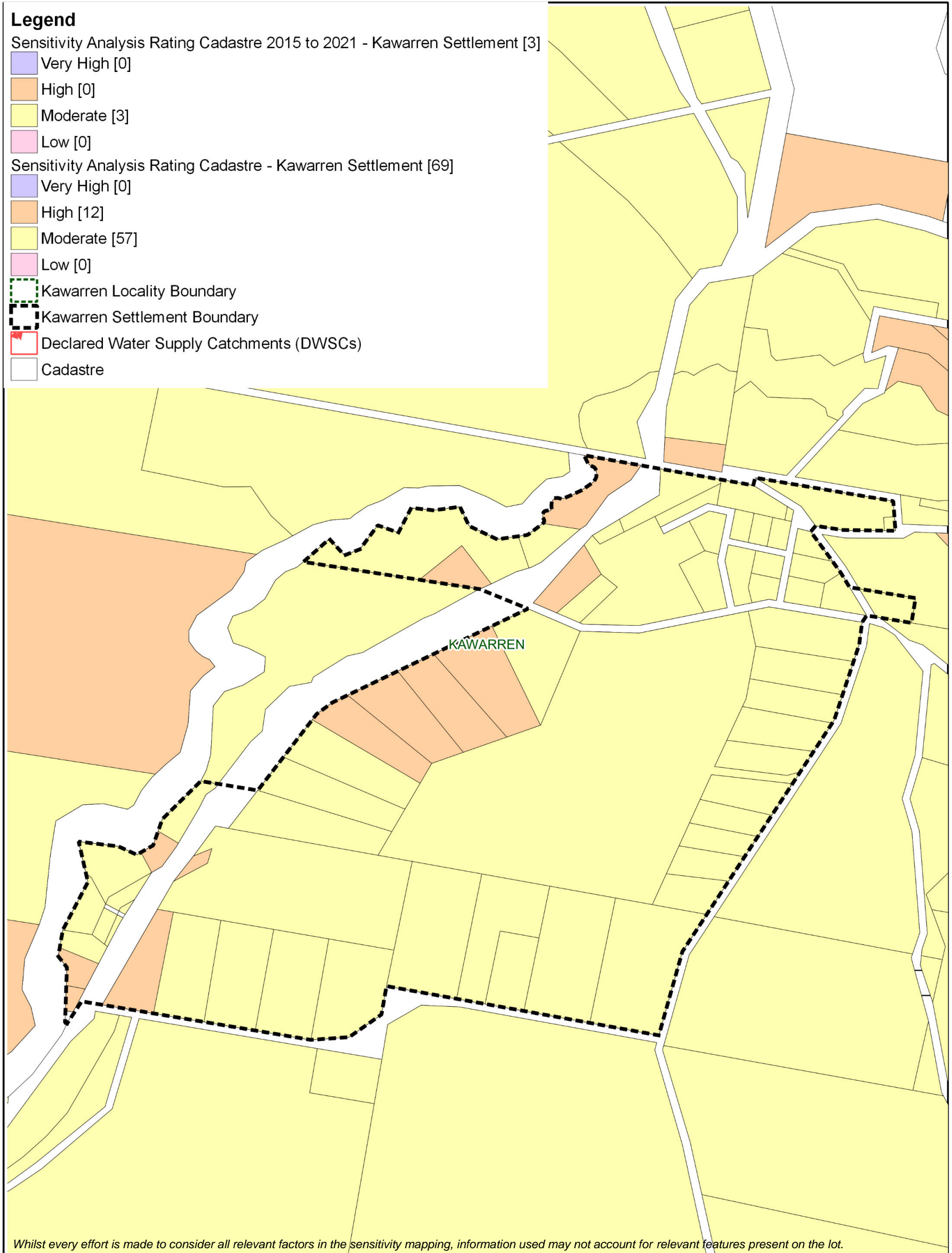
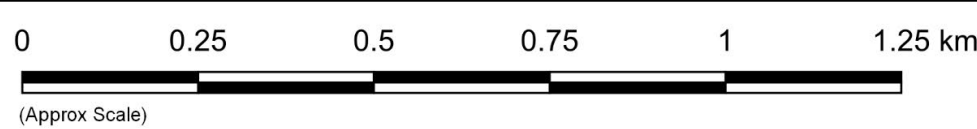


Figure I2: Sensitivity Analysis - Kawarren Settlement

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

6I. System Selection

Based on soil types and indicative depths, the Kwararren locality has the potential to sustainably accommodate a broad range of system types, depending on the influences of climate.

EPA Code of Practice (2013) (Section 2.2.2) identifies secondary treatment standard (or better) followed by subsurface pressure-compensating irrigation as current best-practice in Victoria for substantially reducing the risk associated with unsewered development. Further, the Code describes a “Wick trench/bed” land application option that may be incorporated with secondary treatment for consideration on sites constrained by climate or lot ‘useable area’, particularly within the DWSCs. Any variation from this best-practice approach must be provided with detailed supporting information to demonstrate suitability.

System Sizing Tables (below) indicate which systems are likely to be the most appropriate for the locality.

7I. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall and average evapotranspiration data for Kwararren was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as ‘Not Applicable’ for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed ‘Not Applicable’ in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Kwararren locality are provided below.

8I. General Conclusion

The lots within the locality have predominantly been assigned a Moderate Sensitivity Rating to sustainable DWM; however, some lots, particularly in the settlement, have been assigned a High and Low Sensitivity Rating. Predominantly, Standard LCAs will be required, with the use of System Sizing Tables deemed appropriate. The Low Sensitivity Rating lots within a DWSC are required to complete a Standard LCA as per the current EPA Code of Practice’s requirements. Particular attention needs to be directed towards ensuring that appropriate setbacks to surface waterways, groundwater bores and flood prone areas are maintained. It is imperative that there is sufficient useable area to sustainably manage wastewater on-site.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Gellibrand & Kwarren										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	5	5	4	3.5	3	2			
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²)†								
5 + bedroom residence	1,080	379		584	800	1,269	2,329			
4 bedroom residence	900	316		487	667	1,058	1,941			
1-3 bedroom residence	720	253		389	533	846	1,553			
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
† not including spacing or setbacks										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
	DLR (mm)	Not supported (Alternative Land Application System Required)								
Development Type	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
	DLR (mm)	20*	20*	15	10	12	8	5	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	62		87	145	114	197		433	
4 bedroom residence	900	52		73	121	95	164		361	
1-3 bedroom residence	720	42		58	97	76	132		289	
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)			
Development Type	Daily (L/day)		Total min. basal or 'wetted area'†							
5 + bedroom residence	1,080		723	1,086						
4 bedroom residence	900		603	905						
1-3 bedroom residence	720		482	724						
† required for zero wet weather storage (m ²) not including spacing & setbacks										
Wick Trenches and Beds - Secondary Treated Effluent Only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
	DLR (mm)	25	30	20	10	12	8	8	N/A (Alternative Land Application System Required)	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	49	40	62	145	114	197			
4 bedroom residence	900	41	33	52	121	95	164			
1-3 bedroom residence	720	33	27	42	97	76	132			

M. Kennett River Locality Report

1m. Introduction

Kennett River is a coastal locality along the south-eastern coastline of COS, approximately 20km northeast of Apollo Bay, in the heavily vegetated foothills of the south-eastern section of the Otway Ranges. The locality is not located within a DWSC.

The locality has an estimated permanent population of approximately 41 residents (ABS Census, 2016). There are 183 and 180 unsewered lots within the Kennett River locality and town, respectively. There are no new lots with DWM systems within the locality from June 2015-2021. There are 120 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Kennett River locality is summarised as follows:

- 39 AWTS (13 drip irrigation, 3 irrigation, 4 subsurface irrigation, 2 trenches and 17 unknown);
- 52 sand filters (50 subsurface irrigation, 1 trench and 1 unknown)
- 10 septic tanks (2 trenches and 8 unknown)
- 19 unknown (5 trenches, 1 subsurface irrigation and 13 unknown).

No field investigations were conducted in Kennett River as part of the 2014 field assessments.

2m. Background Documentation

Refer to the following documents for additional detail regarding the locality.

- Colac Otway Shire Coastal Community Revitalisation Project (April 2003);
- Colac Otway Shire, Three Towns Stormwater Management Strategy, Concept Study (October 2004);
- Concept Design for Wye River Separation Creek and Kennett River, (June 2006);
- Kennett River, Wye River and Separation Creek Structure Plans (February 2008);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3m. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 2.
Surface waterways & catchments	The locality is not located within a DWSC. Kennett River and its tributaries form the major waterway within this region and confluences with the Southern Ocean. Kennett River east and west branches are located in the top of the catchment before merging. Additional waterways within the Kennett River locality include, Grey River and Carisbrook Creek which flows along the western locality boundary.

Characteristic	Description
Groundwater	Proximity to groundwater bores: none.
Land subject to inundation	Along the confluences of Kennett River around the town.
Useable lot area Town (Locality)	High: 172 (172) Moderate: 7 (8) Low: 1 (2) Compliant: 0 (1)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Public Conservation and Resource Zone, with small sections of Rural Conservation Zone. The town is zoned Township Zone, with Public Use Zone along the foreshore. The majority of the lots are compliant. There are prescribed minimum lot sizes for subdivisions, as per Design and Development Overlay Schedule 4 (DDO4 – Coastal Towns: Skenes Creek, Kennett River, Wye River and Separation Creek). Compliant: 178 (179) Non-compliant: 2 (4)
Slope Town (Locality)	High: 160 (163) Moderate: 15 (15) Low: 5 (5)
Geology	Eumeralla Formation of the Otway Group with alluvial floodplain deposits around the Kennett River confluence.
Soil suitability Town (Locality)	High: 0 (0) Moderate: 180 (183) Low: 0 (0) Along the coastline and town consists of soil landscape '64' (moderate rating) which forms in the similar landscape as detailed in '61'. It consists of brown texture contrast soils to 0.9m depth. The soils consist of weakly structured clay sand over strongly structured clay loam. The northern half of the locality consists of soil landscapes '61 and 59', which are located within the forested regions of the Great Otway National Park.
Sensitivity Overlay	No depth to groundwater data. Landslip: minimal, found along the foreshore and a small section along the eastern boundary to the north of the town.

Characteristic	Description
	Vegetation: all land surrounding the town is defined as Great Otway National Park and Kennett River Coastal Reserve.
Sensitivity Analysis Rating Town (Locality)	Very High: 0 (0) High: 174 (175) Moderate: 6 (8) Low: 0 (0)

4m. Sensitivity Analysis (Maps)

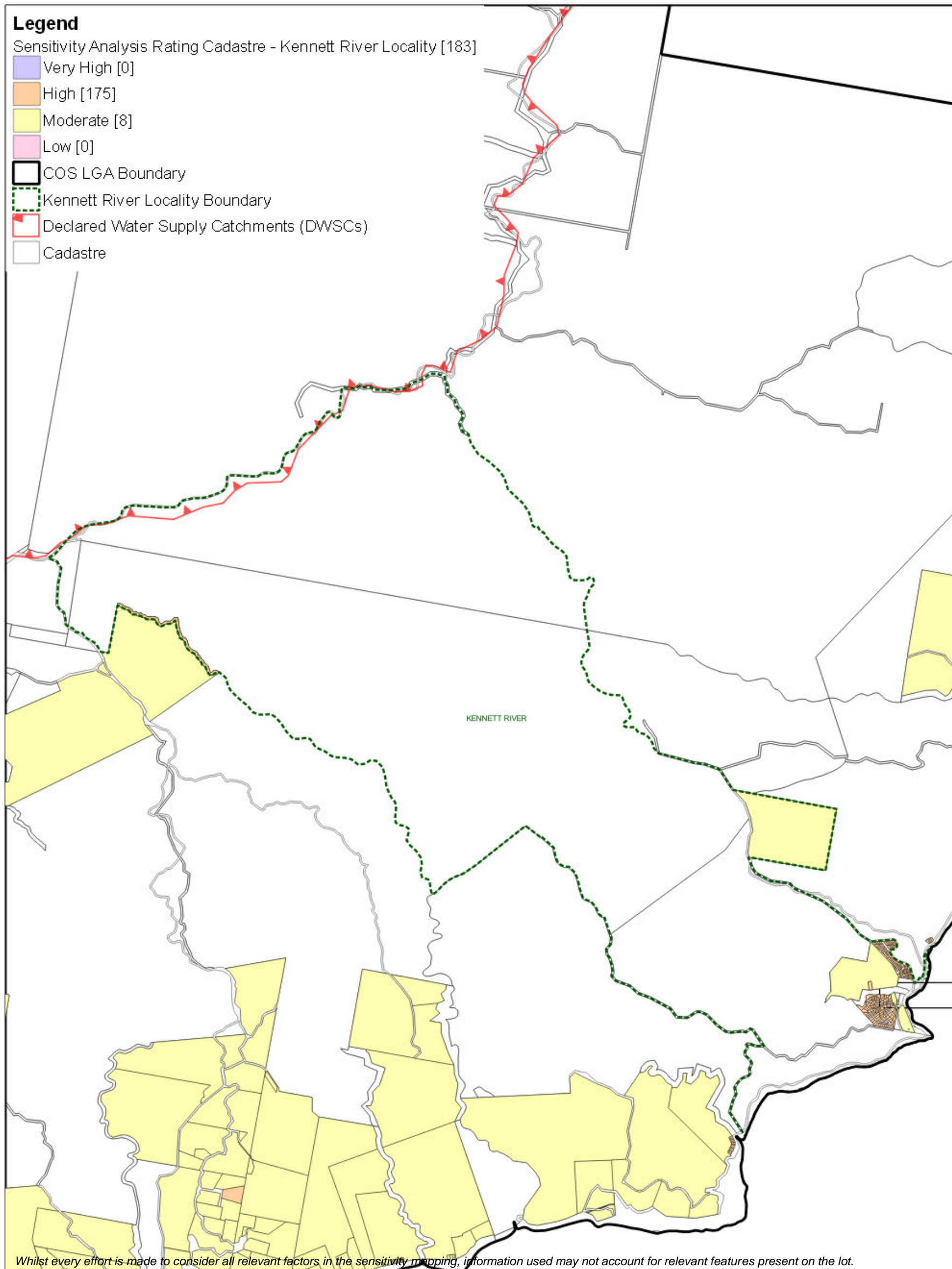
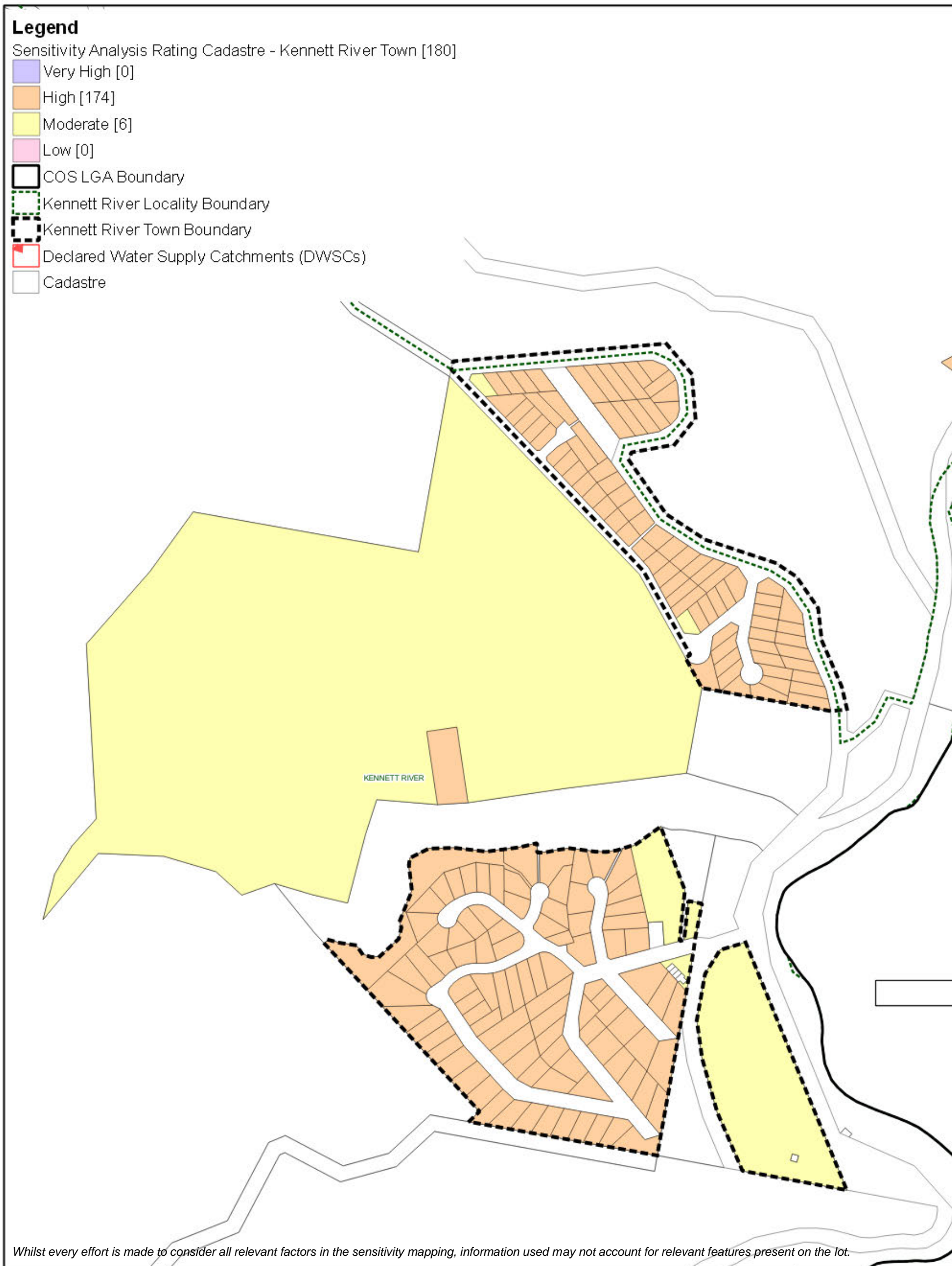


Figure m1: Sensitivity Analysis - Kennett River Locality




Colac Otway Shire DWMP Review



Revision	3
Drawn	JK
Approved	MS



Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure m2: Sensitivity Analysis - Kennett River Town			
Colac Otway Shire DWMP Review			
 Whitehead & Associates Environmental Consultants	0 100 200 300 400 500 m  (Approx Scale)		Revision 2
			Drawn JK
			Approved MS

5m. System Selection

Soil types vary significantly in the Kennett River area depending on position in the landscape (i.e. sand deltas or hill slopes). Appendix A of the EPA Code of Practice (2013) prohibits conventional and modified trenches and beds as well as LPED systems on Category 1 soils (sands), which preclude these systems on the delta areas. Landslip risks and land gradients are major constraints for DWM on lots located on the hillslopes in the locality. As such, site-specific LCA investigations and system designs are recommended; however, the sizing tables (below) provide some guidance on which systems may be appropriate. Note that the DIR for subsurface irrigation systems has not been reduced to account for slopes above 10% (as is recommended in AS/NZS 1547:2012). Surface irrigation is not recommended on slopes greater than 10%.

6m. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall and average evapotranspiration data for the Kennett River and Sugarloaf area was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as 'Not Applicable' for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as 'Not Applicable' for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed 'Not Applicable' in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Kennett River locality are provided below.

7m. General Conclusion

The lots within the locality have been assigned a Moderate or High Sensitivity Rating to sustainable DWM, with the majority of the town assigned as High. Both Standard and Detailed LCAs will be required, with the use of System Sizing Tables deemed appropriate for the Standard LCAs. Particular attention needs to be directed towards ensuring that the DWM systems are sized based on the limiting soil horizon, which may be relatively shallow, and that the systems selected are appropriate for steeper slopes with correct construction. The majority of lots within the region also have less than 1,500m² of useable area for DWM, which also does not exclude heavily vegetated areas. This will limit design options and it is imperative that the LCA DWM system design ensure that DWM is contained on-site.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Kennett River (& Sugarloaf)										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	5	5	4	3.5	3	N/A (Alternative Land Application System Required)			
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²)†								
5 + bedroom residence	1,080	338		491	626	900				
4 bedroom residence	900	282		410	530	750				
1-3 bedroom residence	720	225		328	424	600				
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
† not including spacing or setbacks										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
	DLR (mm)	20*	20*	15	10	6	5	4	N/A (Alternative Land Application System Required)	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing or setbacks								
5 + bedroom residence	1,080	61		85	138	281	379	584		
4 bedroom residence	900	51		71	115	234	316	487		
1-3 bedroom residence	720	41		57	92	187	253	389		
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
	DLR (mm)	20*	20*	15	10	12	8	5	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	61		85	138	110	185		379	
4 bedroom residence	900	51		71	115	92	154		316	
1-3 bedroom residence	720	41		57	92	74	124		253	
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent - Slopes only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	3	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)			
Development Type	Daily (L/day)		Total min. basal or 'wetted area'†							
5 + bedroom residence	1,080		584	800	1,269					
4 bedroom residence	900		487	666	1,057					
1-3 bedroom residence	720	389	533	846						
† required for zero wet weather storage (m ²) not including spacing & setbacks										
Wick Trenches and Beds - Secondary Treated Effluent Only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
	DLR (mm)	25	30	20	10	12	8	8	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	48	39	61	138	110	185		379	
4 bedroom residence	900	40	33	51	115	92	154		316	
1-3 bedroom residence	720	32	26	41	92	74	124		253	

N. Lavers Hill Locality Report

1n. Introduction

Lavers Hill is located approximately 41km southwest of Colac within the southern section of COS. The locality centres on a narrow ridgeline on the Great Ocean Road. The landform consists of undulating, dissected crests and rolling hills of the Otway Ranges. Notably, the locality on the northern side of the ridgeline is located within the Gellibrand River (South Otway) DWSC as indicated by the surface water informative map A1, Appendix A.

The locality has an estimated permanent population of approximately 78 residents (ABS Census, 2016). There are approximately 194 and 84 unsewered lots located within the Lavers Hill locality and town, respectively. There are 5 new lots with DWM systems within the locality from June 2015-2021. There are 50 DWM system permits that have been inspected to date by COS (including PTI and CTU). The current DWM permits and their associated treatment system and LAA method within the Lavers Hill locality are summarised as follows:

- 16 AWTS (4 drip irrigation, 3 trenches, 1 subsurface irrigation and 8 unknown);
- 12 septic tanks (5 trenches, 1 subsurface irrigation and 6 unknown);
- 1 worm farm (1 unknown); and
- 21 unknown (11 trenches, 1 irrigation, 1 subsurface irrigation and 8 unknown).

2n. Background Documentation

Refer to the following documents for additional detail regarding the locality:

- Amended Urban Design Framework Plan for Lavers Hill (June, 2006);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3n. Site Assessment Results

The following table summarises the results from the representative audits conducted by Consultant staff in September 2014.

Characteristic	Description
Land use	Comprises a range of land uses, including dairy, forestry, rural living and tourism.
Occupancy rates	2.3 (Part of the Beech Forest State Suburb, ABS Census, 2011).
Typical soils	Gradational profile with very dark grey brown silty clay loam topsoil becoming mottled with dark grey brown and dark yellow brown between 40-60 cm, then more strongly mottled dark yellow brown, yellow brown and grey brown silty clay to 80+ cm. Drainage and permeability are variable depending on slope and position.
AS/NZS 1547:2012 soil categories	4 (Clay Loams) and 5 (Light Clays).

Characteristic	Description
Existing Systems	<p>Separate Blackwater and Greywater</p> <p>Of the six systems inspected during field investigations, two or three systems (33-50%) comprised separate blackwater treatment in a septic tank, with direct greywater diversion to an adjacent paddock or within the property boundary.</p> <p>The blackwater septic tanks were typically 30+ years old (or not found) and the time since last pump-out was generally unknown (partly due to owner not being home to ascertain). Septic effluent discharged to one or more conventional absorption trenches (or was assumed to if trenches could not be identified). The trench dimensions were generally unclear, and it is likely that most trenches were undersized for the number of bedrooms. One property had poorly-treated blackwater effluent being discharged to the ground surface from a broken pipe. LAA slopes ranged from 2-10%.</p> <p>Combined Blackwater and Greywater</p> <p>Three or four systems (50-67%) inspected have a combined wastewater treatment system, or were assumed to have based on layout of pipework and age of dwelling. This included one combined AWTS (less than 2 years old) for a commercial property, and a retrofitted AWTS using one of three existing septic tanks on another commercial property.</p> <p>Septic tank effluent discharged to a series of conventional absorption trenches in LAAs generally of less than 4% slope. Most trenches could be identified and all were undersized for the number of bedrooms and/or the type of property.</p> <p>The standalone AWTS discharged effluent to subsurface irrigation which appeared to be undersized based on the likely patronage over the peak tourism season, and had boggy sections.</p> <p>The retrofitted AWTS discharged effluent to an undersized trench LAA.</p>

4n. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	The town is included within Zone 4 and part of the surrounding locality is located within Zone 3.
Surface waterways & catchments	Lavers Hill is similar to Beech Forest, whereby the northern half of the locality is within a DWSC, Gellibrand River. The DWSC boundary runs along the ridgeline which forms the main road which divides the town. The waterways include: Chapple Creek South and North Branch, Skinner Creek, Sandy Creek, Melba Gully and Ford River West Branch.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Characteristic	Description
Groundwater	Proximity to groundwater bores: Nil.
Land subject to inundation	Nil
Useable lot area Town (Locality)	High: 50 (62) Moderate: 20 (27) Low: 12 (93) Compliant: 0 (12)
Minimum lot size compliance with Planning Scheme Zoning	The locality is predominantly zoned Farming Zone and Public Conservation and Resource Zone. The town is zoned Township Zone. Compliance is variable throughout the locality, with the majority of the lots on the southern side of the main road outside of the DWSC non-compliant. Compliant: 80 (104) Non-compliant: 2 (90)
Slope Town (Locality)	High: 26 (96) Moderate: 22 (54) Low: 34 (44)
Geology	Predominately Eumeralla Formation of the Otway Group, with Wiridjil Gravel Member of the Pebble Point Formation to the northwest.
Soil suitability Town (Locality)	High: 82 (182) Moderate: 0 (12) Low: 0 (0) The ridgeline and town consist of soil landscape unit '60' which form on rolling hills along the top of the Otway Ranges. The soil consists of brown friable gradational soils with weakly structured clay loam over light clay to 0.9m depth. Limitations include restricted drainage. Flanking either side of '60' is soil landscape unit '61' which forms on the deeply dissected hills of the Otway Ranges and consists of brown gradational soils to 1.2m depth. The soils consist of moderately structured silty loam over clay loam. Limitations include acidity and restricted drainage.
Sensitivity Overlay	No depth to groundwater data. Landslip: minimal.

Characteristic	Description
	Vegetation: extensive regions of Great Otway National Park and Otway Forest Park primarily to the north of the town.
Sensitivity Analysis Rating Town (Locality)	Very High: 29 (40) High: 53 (131) Moderate: 0 (23) Low: 0 (0)

5n. Sensitivity Analysis (Maps)

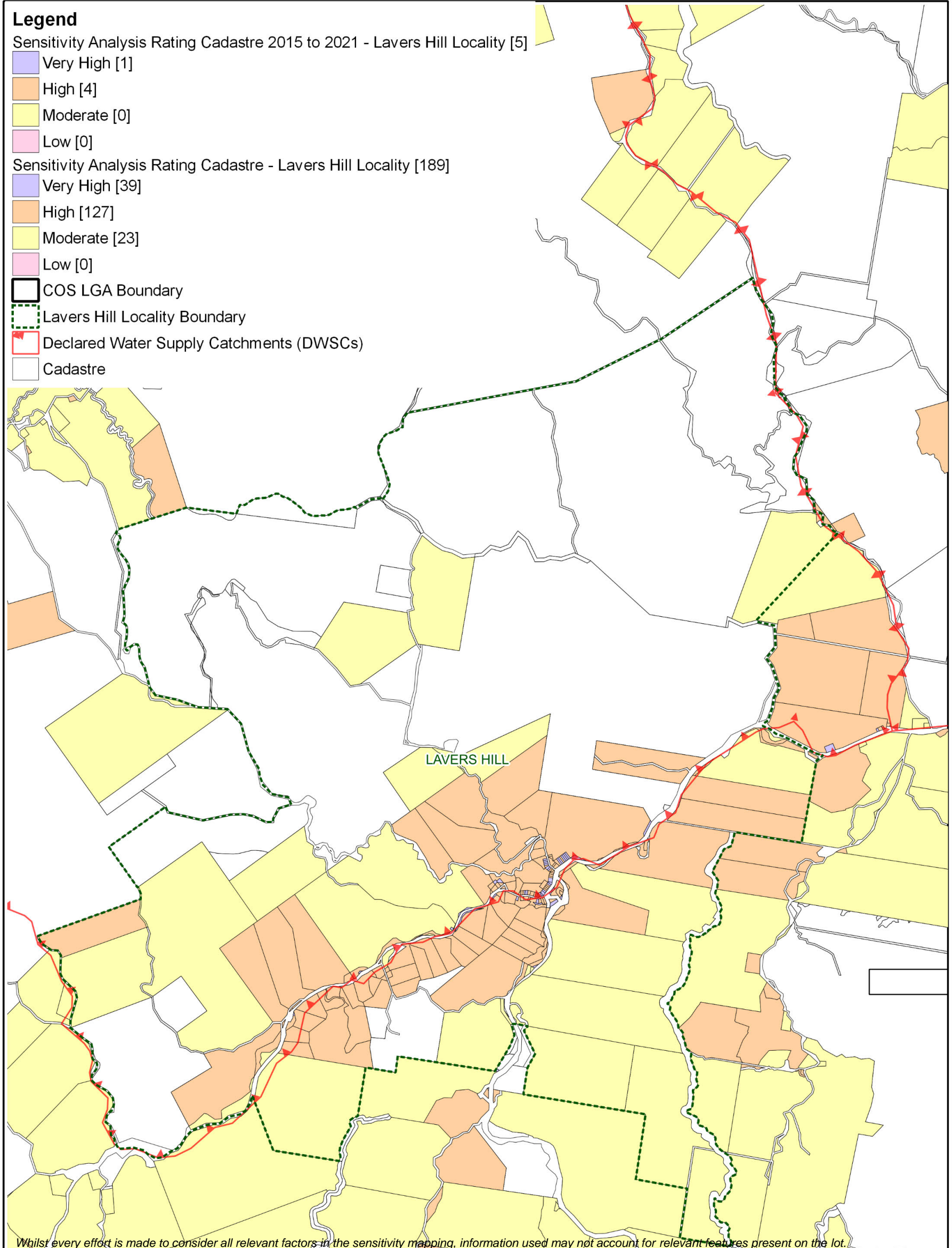
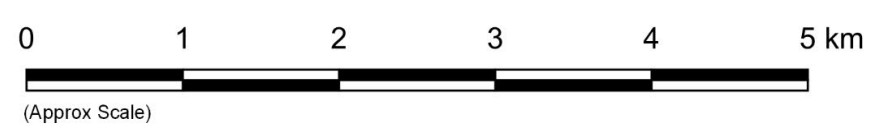
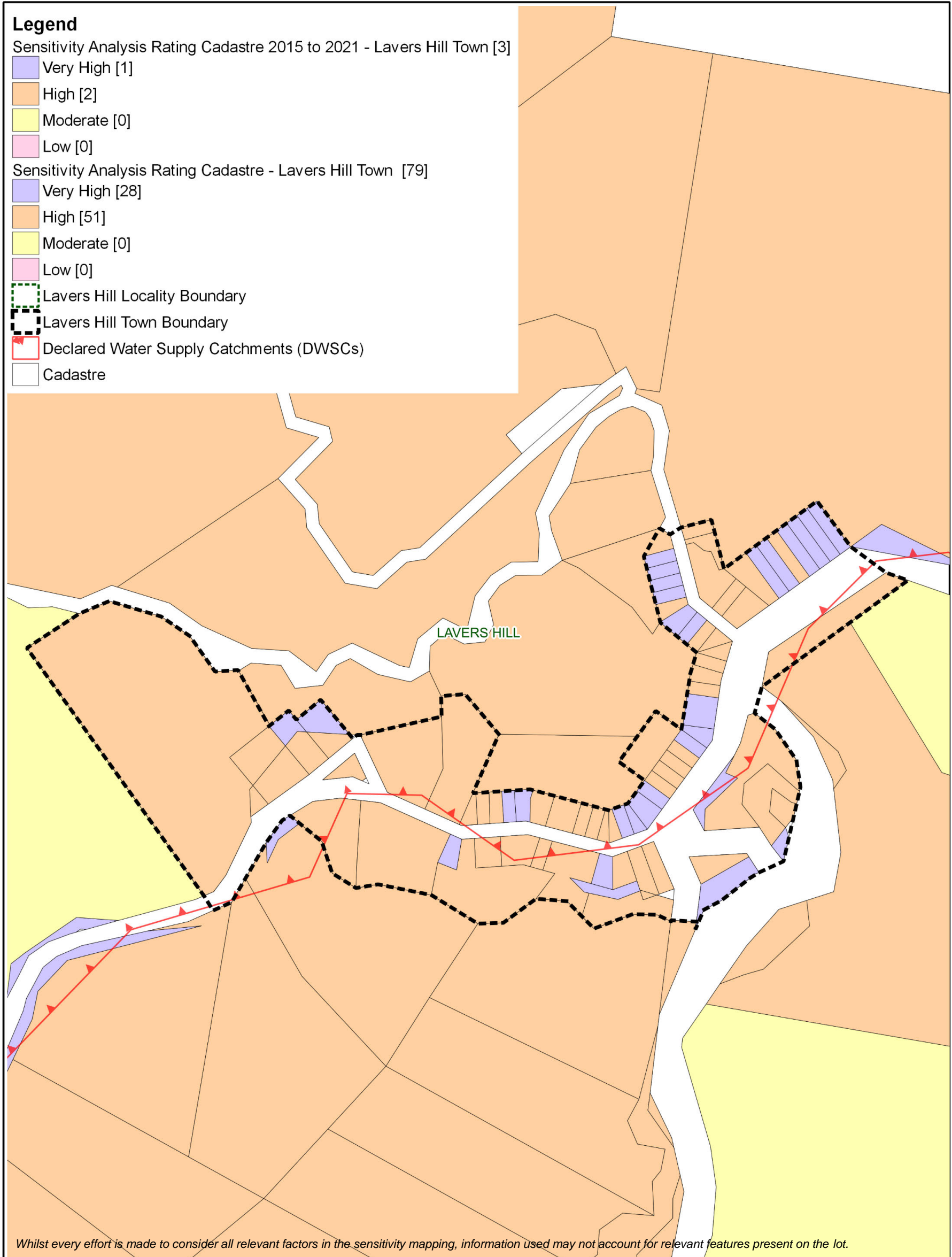


Figure n1: Sensitivity Analysis - Lavers Hill Locality

Colac Otway Shire DWMP Review



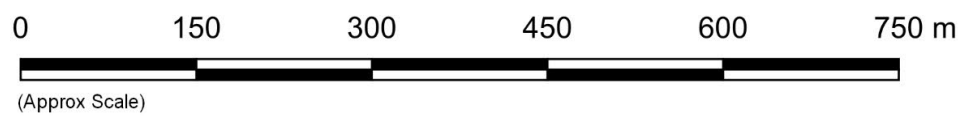
N	
Revision	3
Drawn	JK
Approved	MS



Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure n2: Sensitivity Analysis - Lavers Hill Town

Colac Otway Shire DWMP Review



Revision	4
Drawn	JK
Approved	MS

6n. System Selection

Due to the dominance of heavy-textured soils in the Lavers Hill locality, conventional absorption trenches and beds are not likely to be feasible and are discouraged. Appendix A of the EPA Code of Practice (2013) prohibits LPED systems on Category 5 and 6 soils (medium to heavy clays).

The wet climate of the Lavers Hill area makes it a high risk for DWM and site-specific, detailed land capability assessment and design will be required for unsewered lots in this area. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area) may be required to sustainably achieve land application of effluent on constrained lots.

EPA Code of Practice (2013) (Section 2.2.2) identifies secondary treatment standard (or better) followed by subsurface pressure-compensating irrigation as current best-practice in Victoria for substantially reducing the risk associated with unsewered development. Further, the Code describes a “Wick trench/bed” land application option that may be incorporated with secondary treatment for consideration on sites constrained by climate or lot ‘useable area’, particularly within the DWSCs. Any variation from this best-practice approach must be provided with detailed supporting information to demonstrate suitability.

Sizing Tables (discussed below) are not applicable for the Lavers Hill locality.

7n. System Sizing Tables

Sizing Tables for each system type were tested using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall was sourced from the Wyelangta BoM station (090087) and average evapotranspiration data for Lavers Hill was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

70th percentile monthly rainfall exceeds average monthly evapotranspiration for the entire ‘design’ climate year in and around Lavers Hill. As a result, there is a month-to-month surplus of hydraulic inputs and subsequently the monthly water balance does not resolve itself and cannot produce meaningful results for land application area sizing.

8n. General Conclusion

The majority of the lots within the locality have been assigned a High Sensitivity Rating to sustainable DWM. Predominantly, Detailed LCAs will be required, with all levels of LCA required to complete a site-specific design due to the higher rainfall associated with this region. System Sizing Tables were not generated for Lavers Hill and site-specific design is required for all lots that are located within Climate Zone 4, as per Figure 3 of the DWMP Technical Document, and System Sizing Tables cannot be used. Particular attention needs to be directed towards ensuring that the DWM systems are sized based on the limiting soil horizon and that the systems selected are appropriate for steeper slopes with correct construction.

Lavers Hill (and Wyelangta)

Drip and Spray Irrigation Systems* - Secondary Treated Effluent only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
Development Type	DIR (mm)	Not supported (Alternative Land Application System or Extensive/Modified Design Required)								
	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
† not including spacing or setbacks										
Conventional Absorption Trenches and Beds - Primary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
Development Type	DLR (mm)	Not supported (Alternative Land Application System Required)								
	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 3a to 5a) only										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
Development Type	DLR (mm)	20*	20*	15	10	12	8	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)	
	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	Not Supported (not considered best-practice)		131	332	206	862**			
4 bedroom residence	900			110	277	172	719**			
1-3 bedroom residence	720			88	222	138	575**			
Note: * Gravels, Sands and Sandy loams are generally unsuitable for ETA trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012. ** Will require specialist advice regarding engineering and construction detail for installation.										
LPED Irrigation Systems - Primary or Secondary Treated Effluent										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
Development Type	DIR (mm)	Not supported (Alternative Land Application System Required)								
	Daily (L/day)									
5 + bedroom residence	1,080									
4 bedroom residence	900									
1-3 bedroom residence	720									
Wick Trench - Secondary Treated Effluent Only - as per Section 7.4 design for High Rainfall Areas										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
Development Type	DLR (mm)	25	30	20	10	12	8	8	N/A (Alternative Land Application System Required)	
	Daily (L/day)	Total effluent application area footprint (m ²), including interbed spacing								
5 + bedroom residence	1,080	Not Supported (not considered best-practice)		295	945	620	1,600**			
4 bedroom residence	900			230	720	555	1,400**			
1-3 bedroom residence	720			165	620	425	1,140**			
Note: ** Will require specialist advice regarding engineering and construction detail for installation.										

O. Wye River and Separation Creek Locality Report

1o. Introduction

Wye River and Separation Creek are two separate adjacent localities, with respective towns, that are located along the south-eastern coastline of COS approximately 23km northeast of Apollo Bay. They are located in the heavily vegetated foothills of the south-eastern section of the Otway Ranges. The localities are not located within a DWSC.

Previous studies have found that it is not technically feasible to sewer the towns, particularly due to the heavily vegetated steep slopes and landslip potential of the region. Extensive assessment, outlined in the background documentation listed below, has been conducted within this region about the perceived environmental and public health risks in both the Wye River and Separation Creek estuaries associated with DWM systems.

The locality has an estimated permanent population of approximately 63 and 19 residents for Wye River and Separation Creek, respectively (ABS Census, 2016). Note that there is a high seasonal population fluctuation within these localities.

There are approximately 389 and 373 unsewered lots located within the Wye River locality and town, respectively, and 129 and 117 in the Separation Creek locality and town, respectively. There are 13 and zero new lots with DWM systems within the Wye River and Separation Creek localities from June 2015-2021, respectively. There are 217 and 103 DWM system permits that have been inspected to date by COS for Wye River and Separation Creek respectively (including PTI and CTU). The 2015 bushfires that swept through this region is the major contributor to the higher number of inspections that have occurred in association with the rebuild of this region. The current DWM permits and their associated treatment system and LAA method within the Wye River and Separation Creek localities are summarised as follows:

Wye River:

- 149 AWTS (24 drip irrigation, 2 trenches, 11 irrigation, 16 subsurface irrigation and 96 unknown);
- 2 composting toilet (2 unknown);
- 32 septic tanks (5 trenches and 27 unknown);
- 5 worm farms (3 trenches and 3 irrigation); and
- 25 unknown (5 drip irrigation, 1 trench, 1 irrigation and 18 unknown).

Separation Creek:

- 50 AWTS (8 drip irrigation, 5 trenches, 4 irrigation, 7 subsurface irrigation, 26 unknown);
- 22 sand filters (21 subsurface irrigation and 1 unknown);
- 15 septic tanks (1 subsurface irrigation, 1 trench and 13 unknown); and
- 16 unknown (2 trenches, 2 subsurface irrigation and 12 unknown).

There were two official complaints relating to DWM systems directed to COS in 2015; failed land application area with improvement directed by COS, and a system failing (odour) and unsuitably sized for intermittent holiday loading.

No field investigations were conducted in the Wye River and Separation Creek localities.

2o. Background Documentation

Refer to the following documents for additional detail regarding the localities.

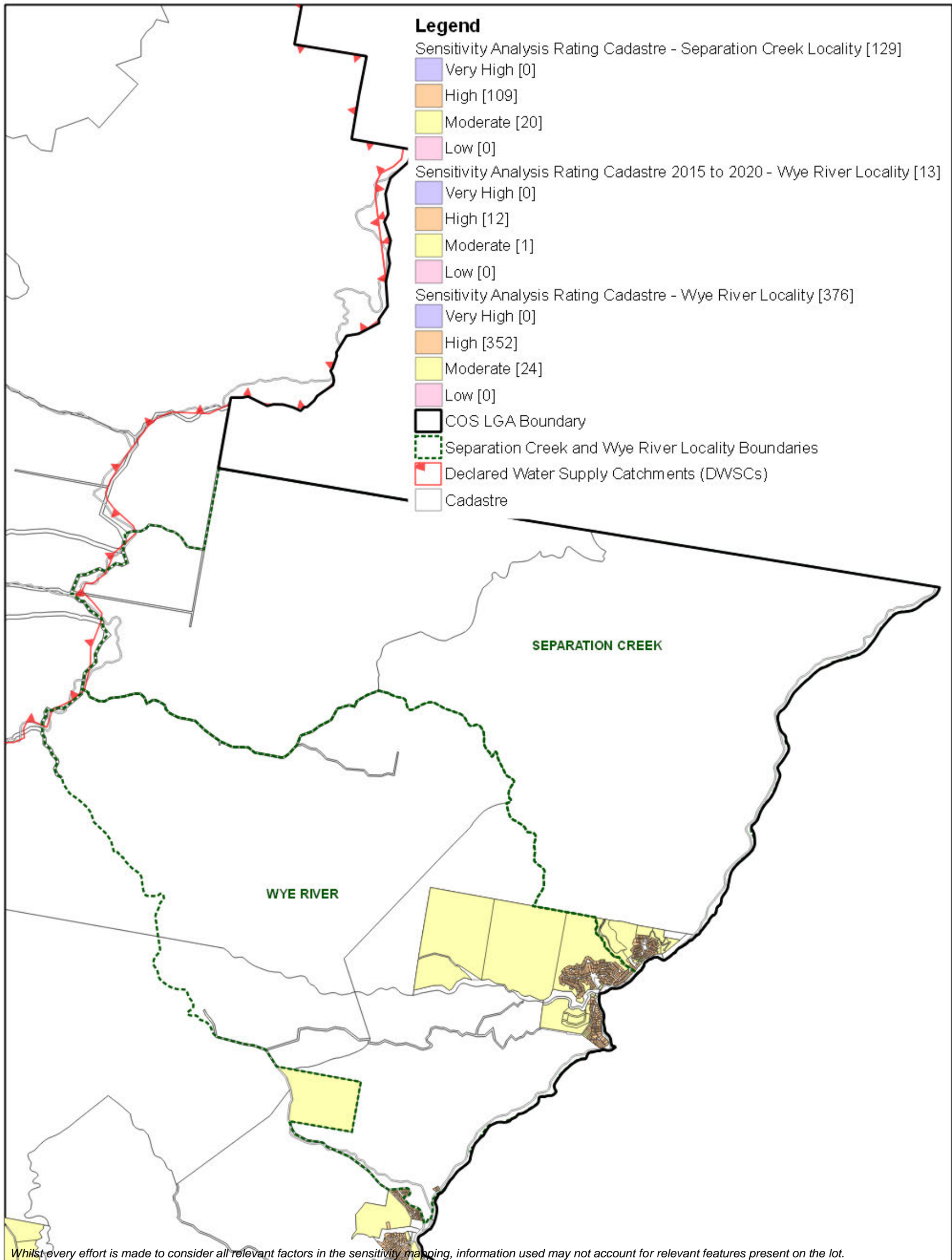
- Wye River and Separation Creek Site Survey Property Reports (November 2013);
- Wye River and Separation Creek Quantitative Microbial Risk Assessment and Ecological Risk Assessment (September 2014);
- Issues Paper Wastewater Management Wye River and Separation Creek (May 2002);
- Wye River Drainage Reserve Land Management Plan: Assessment and Recommendations (February 2012);
- Colac Otway Shire Coastal Community Revitalisation Project (April 2003);
- Colac Otway Shire, Three Towns Stormwater Management Strategy, Concept Study (October 2004);
- Concept Design for Wye River Separation Creek and Kennett River, (June 2006);
- Kennett River, Wye River and Separation Creek Structure Plans (February 2008);
- GIS Atlas - Climate Paper (June, 2000);
- COS Planning Scheme; and
- Rural Living Strategy (2011).

3o. Summary of Constraints to DWM

Characteristic	Description
Climate Zone	Zone 2.
Surface waterways & catchments	The localities are not located within a DWSC. Both Separation Creek and Wye River form the major waterways within this region and confluence with the Southern Ocean. Additional waterways within Separation Creek include Jamieson Creek and Cumberland River. Additional waterways within Wye River include Monash Gully and Hitchcock Gully.
Groundwater	Proximity to groundwater bores: insignificant (only one).
Land subject to inundation	Along the confluences of Wye River and Separation Creek within the towns.
Useable lot area Town (Locality)	High: WR 327 (330) SC 118 (121) Moderate: WR 45 (45) SC 0 (1) Low: WR 2 (11) SC 0 (7) Compliant: WR 0 (3) SC 0 (0)

Characteristic	Description
Minimum lot size compliance with Planning Scheme Zoning	<p>The localities are predominantly zoned Rural Conservation Zone and Public Conservation and Resource Zone. The towns are predominantly zoned Township Zone.</p> <p>The majority of lots are compliant, with only the larger lots adjacent to the towns non-compliant. These are prescribed minimum lot sizes for subdivisions within the Township Zone, under the provisions of Design and Development Overlay Schedule 4 (DDO4 – Coastal Towns: Skenes Creek, Kennett River, Wye River and Separation Creek).</p> <p>Compliant: WR 363 (366) SC 116 (117) Non-compliant: WR 10 (23) SC 2 (12)</p>
Slope Town (Locality)	<p>High: WR 359 (375) SC 100 (111) Moderate: WR 7 (7) SC 5 (5) Low: WR 7 (7) SC 13 (13)</p>
Geology	Eumeralla Formation of the Otway Group with alluvial flood plain deposits.
Soil suitability Town (Locality)	<p>High: WR 0 (0) SC 0 (0) Moderate: WR 373 (389) SC 118 (129) Low: WR 0 (0) SC 0 (0)</p> <p>Along the coastline and the towns consists of soil landscape unit '64' (moderate rating) which forms in the similar landscape as detailed in '61'. It consists of brown texture contrast soils to 0.9m depth. The soils consist of weakly structured clay sand over strongly structured clay loam.</p>
Sensitivity Overlay	<p>No depth to groundwater data.</p> <p>Landslip: extensive, particularly around coastal extents around the town.</p> <p>Vegetation: all land surrounding the town is defined as Great Otway National Park and Wye River Coastal Reserve.</p>
Sensitivity Analysis Rating Town (Locality)	<p>Very High: WR 0 (0) SC 0 (0) High: WR 360 (364) SC 105 (109) Moderate: WR 13 (25) SC 13 (20) Low: WR 0 (0) SC 0 (0)</p>

4o. Sensitivity Analysis (Maps)



Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

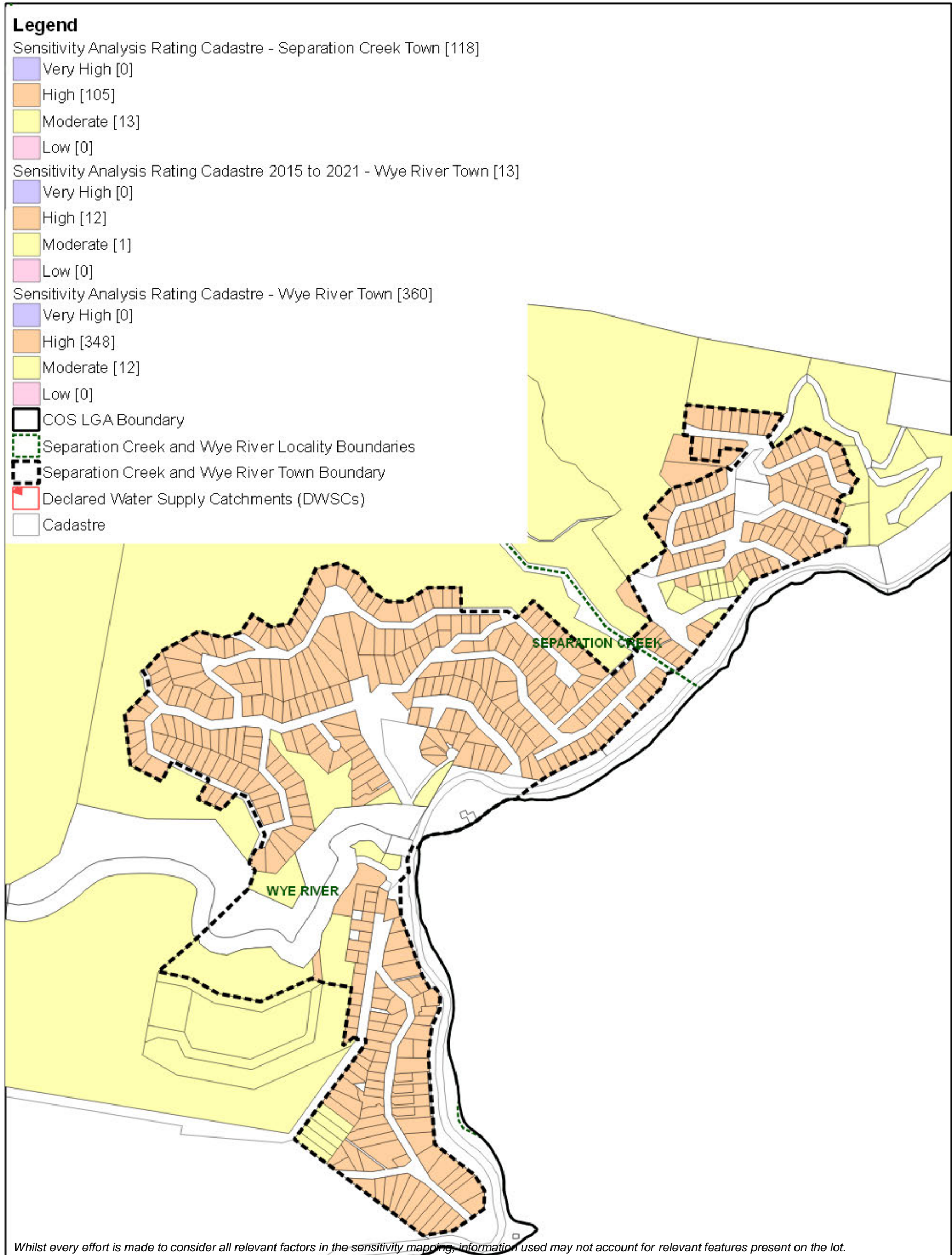
Figure 01: Sensitivity Analysis - Separation Creek and Wye River Localities

Colac Otway Shire DWMP Review

W Whitehead & Associates
Environmental Consultants



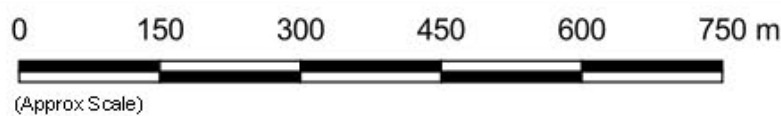
Revision	3
Drawn	JK
Approved	MS



Whilst every effort is made to consider all relevant factors in the sensitivity mapping, information used may not account for relevant features present on the lot.

Figure o2: Sensitivity Analysis - Separation Creek and Wye River Towns

Colac Otway Shire DWMP Review



Revision	2
Drawn	JK
Approved	MS

5o. System Selection

Soil types vary significantly in the Wye River and Separation Creek localities, depending on position in the landscape (i.e. sand deltas or hill slopes). Appendix A of the EPA Code of Practice (2013) prohibits conventional and modified trenches and beds as well as LPED systems on Category 1 soils (sands), which preclude these systems on the delta areas. Landslip risks and land gradients are major constraints for DWM on lots located on the hillslopes in these localities. As such, site-specific LCA investigations and system designs are recommended; however, the sizing tables (below) provide some guidance on which systems may be appropriate. Note that the DIR for subsurface irrigation systems has not been reduced to account for slopes above 10% (as is recommended in AS/NZS 1547:2012). Surface irrigation is not recommended on slopes greater than 10%.

6o. System Sizing Tables

Sizing Tables for each system type were created using conservative monthly water balances, following methods described in the MAV Model LCA, 2014. Monthly 70th percentile rainfall and average evapotranspiration data for the Wye River and Separation Creek localities was sourced from SILO (Scientific Information for Land Owners) climate databases, which are managed by the Queensland Government. The SILO databases use accurate meteorological data collected throughout Australia over long time periods.

The Design Loading Rates (DLRs) and Design Irrigation Rates (DIRs) were taken from the current EPA Code of Practice. Where the Code of Practice has precluded use of a particular type of system on a certain soil type, it is shown as 'Not Applicable' for that soil type in the Sizing Tables. Where the evapotranspiration deficit requires unrealistically large land application areas for a particular system on a certain soil type, it is also shown as 'Not Applicable' for that soil type in the Sizing Tables. Detailed, site-specific LCAs and system designs would be required to further investigate the feasibility of systems deemed 'Not Applicable' in the sizing tables. Mitigation measures (such as importation of topsoil to appropriate depths in the land application area), may be required to sustainably achieve land application of effluent on constrained lots.

Sizing Tables for the Wye River and Separation Creek localities are provided below.

7o. General Conclusion

The lots within the localities have been assigned a Moderate or High Sensitivity Rating to sustainable DWM, with the majority of the towns assigned as High. Both Standard and Detailed LCAs will be required, with the use of System Sizing Tables deemed appropriate for the Standard LCAs. Particular attention needs to be directed towards ensuring that the DWM systems are sized based on the limiting soil horizon and that the systems selected are appropriate for steeper slopes with correct construction. The majority of lots within the region also have less than 1,500m² of useable area for DWM, which also does not exclude heavily vegetated areas. This will limit design options and it is imperative that the LCA DWM system design ensures that DWM is contained on-site. The area is also extensively considered to be prone to landslip; a geotechnical report by a suitably qualified person will need to be conducted to address this constraint.

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Wye River and Separation Creek										
Drip and Spray Irrigation Systems* - Secondary Treated Effluent only - Slopes or Sand Delta										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	5	5	4	3.5	3	N/A (Alternative Land Application System Required)			
Development Type	Daily (L/day)	Total min. irrigation area required for zero wet weather effluent storage (m ²)†								
5 + bedroom residence	1,080	332		480	616	862				
4 bedroom residence	900	277		400	514	718				
1-3 bedroom residence	720	222		320	411	575				
Note: * irrigation system sizes are based on the assumption that the land application area is less than 10% slope. Reductions in DIR apply for slopes above 10% according to Table M2 of AS1547:2012										
† not including spacing or setbacks										
Conventional Absorption Trenches and Beds - Primary Treated Effluent - Slopes only (not Sand Delta)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Weak Loams & High/Mod Clay Loams (3 & 4)	Weak Clay Loams (4)	Light Clays (5)	Massive Clay Loams (4)	Medium to Heavy Clays (6)	
	DLR (mm)	20*	20*	15	10	6	5	4	N/A (Alternative Land Application System Required)	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing or setbacks								
5 + bedroom residence	1,080	61		84	136	274	366	553		
4 bedroom residence	900	51		70	114	228	305	461		
1-3 bedroom residence	720	41		56	91	183	244	369		
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
Evapotranspiration-Absorption Trenches and Beds - Primary Treated Effluent (Category 1 to 5) and Secondary Treated Effluent only (Category 6) - Slopes only (not sand delta)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3a)	Weak/Massive Loams (3b)	High/Mod Clay Loams (4a)	Weak Clay Loams (4b) & Strong Light Clays (5a)	Massive Clay Loams (4c) and Mod & Weak Light Clays (5b, 5c)	Medium to Heavy Clays (6) - Secondary Effluent Only	
	DLR (mm)	20*	20*	15	10	12	8	5	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	61		84	136	109	182		366	
4 bedroom residence	900	51		70	114	91	152		305	
1-3 bedroom residence	720	41		56	91	73	121		244	
Note: * Gravels, Sands and sandy loams are unsuitable for conventional absorption trenches and beds if there is a high watertable, including seasonal and perched watertables. Value based on average of conservative rate and maximum rate for Category 2b and 3a soils in AS1547:2012										
LPED Irrigation Systems - Primary or Secondary Treated Effluent - Slopes only (not Sand Delta)										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2)	Loams (3)	Clay Loams (4)	Light Clays (5)	Medium to Heavy Clays (6)			
	DIR (mm)	N/A (Alternative Land Application System Required)	4	3.5	3	N/A (Alternative Land Application System Required)	N/A (Alternative Land Application System Required)			
Development Type	Daily (L/day)		Total min. basal or 'wetted area'†							
5 + bedroom residence	1,080		553	743	1,133					
4 bedroom residence	900		461	620	944					
1-3 bedroom residence	720	369	496	755						
† required for zero wet weather storage (m ²) not including spacing & setbacks										
Wick Trenches and Beds - Secondary Treated Effluent Only - Slopes or Sand Delta										
	Soil Category	Gravels & Sands (1)	Sandy Loams (2) Loams (3) & High/Mod Clay Loams (4a,b)	Weak Clay Loams (4)	Massive Clay Loams (4)	Strong Light Clays (5a)	Moderate Light Clays (5b)	Weak Light Clays (5c)	Medium to Heavy Clays (6)	
	DLR (mm)	25	30	20	10	12	8	8	5	
Development Type	Daily (L/day)	Total min. basal or 'wetted area' required for zero wet weather storage (m ²) not including spacing & setbacks								
5 + bedroom residence	1,080	48	39	61	136	109	182		366	
4 bedroom residence	900	40	33	51	114	91	152		305	
1-3 bedroom residence	720	32	26	41	91	73	121		244	

Appendix C

Acceptable Monthly Climate Data

Colac Otway Shire Council Domestic Wastewater Management Plan - Technical Document

Locality	Longitude	Latitude	70th Percentile Rainfall	Median Annual Wet Months	Average Rainfall	Average ET ₀	Rainfall January	ET ₀ January	Rainfall February	ET ₀ February	Rainfall March	ET ₀ March	Rainfall April	ET ₀ April	Rainfall May	ET ₀ May	Rainfall June	ET ₀ June	Rainfall July	ET ₀ July	Rainfall August	ET ₀ August	Rainfall September	ET ₀ September	Rainfall October	ET ₀ October	Rainfall November	ET ₀ November	Rainfall December	ET ₀ December
Alvie (& Warrion)	143.5E	38.2S	641	5	588	928	32	143	31	118	35	97	48	59	53	36	57	24	58	28	66	40	61	59	61	87	47	106	40	130
Barongarook	143.6E	38.4S	1,007	7	929	863	44	133	41	110	52	91	73	54	86	34	98	22	108	26	106	37	99	55	97	81	69	98	57	121
Barramunga	143.7E	38.6S	1,561	8	1,432	790	65	122	63	100	82	82	119	50	133	30	167	20	168	23	170	34	149	50	133	75	99	91	84	112
Barwon Downs	143.8E	38.5S	1,048	7	969	846	44	129	44	106	55	88	77	54	90	33	110	22	109	25	117	37	101	55	92	81	69	97	59	119
Beeac	143.6E	38.2S	644	4.5	576	932	32	144	31	118	36	98	46	59	51	36	55	25	56	28	63	41	59	60	59	88	47	106	40	131
Beech Forest¹	143.56E	38.62S	2,046	11	1,748	804	88	121	91	100	114	83	179	51	208	32	242	21	233	25	244	36	213	53	187	77	134	93	114	112
Birregurra (& outskirts)	143.8E	38.3S	681	5	614	915	32	138	31	114	38	95	47	59	57	37	61	25	63	27	69	41	64	59	63	86	49	104	41	129
Carlisle River	143.4E	38.6S	1,257	7	1,161	860	53	129	50	106	67	88	94	55	120	35	123	24	135	27	143	40	118	57	107	83	81	98	69	118
Chapple Vale	143.3E	38.6S	1,105	7	1,038	890	49	131	46	108	61	91	85	58	105	38	109	26	121	29	128	43	105	60	94	85	74	101	62	121
Colac/ Elliminyt/ Irrewarra	143.6E	38.3S	730	5	658	909	34	140	33	115	39	95	53	58	61	35	66	24	68	27	76	40	67	58	67	86	52	103	43	128
Cororooke and Coragulac	143.5E	38.3S	740	5	665	911	34	140	33	115	39	95	54	58	61	36	67	24	69	27	78	40	69	58	68	86	51	104	43	128
Cressy	143.7E	38.1S	602	4	543	951	32	146	32	120	34	99	44	61	48	37	49	25	50	29	57	42	55	61	56	89	46	108	42	134
Forrest	143.7E	38.5S	980	6	910	865	42	131	41	108	51	89	72	55	85	34	101	23	102	26	115	39	95	56	86	83	66	99	54	121
Gellibrand	143.6E	38.5S	1,005	6	928	875	44	133	40	109	53	90	73	56	90	35	101	23	105	26	117	39	97	57	88	83	66	100	55	122
Hordern Vale	143.6E	38.8S	1,160	7	1,088	852	52	123	50	101	68	85	88	56	105	37	117	26	124	29	135	42	109	59	98	83	78	97	64	115
Johanna (& Glenaire)	143.3E	38.8S	1,016	6	951	881	45	126	43	103	58	88	79	58	96	39	108	28	109	31	118	45	94	61	83	85	64	100	54	118
Kawarren	143.5E	38.5S	1,052	7	955	886	44	133	41	110	54	91	76	57	93	36	102	24	109	27	120	40	99	58	90	84	68	101	58	123
Kennett River	143.9E	38.7S	981	6	897	897	43	129	45	106	57	90	71	58	85	39	91	28	98	32	110	44	93	61	84	87	65	102	54	121
Marengo	143.7E	38.8S	1,050	7	989	882	49	126	48	103	64	88	80	57	93	38	101	28	109	32	123	45	100	61	90	85	71	100	59	119
Pirron Yallock (& Larpent)	143.4E	38.3S	746	5	673	913	34	140	33	115	39	96	55	58	63	36	67	24	71	28	79	40	70	59	67	86	52	104	44	127
Skenes Creek North (& Tanybryn)	143.7E	38.7S	1,059	6	965	892	49	129	49	106	64	89	77	58	92	38	101	27	104	31	117	44	97	61	88	86	70	101	57	121
Wattle Hill	143.2E	38.8S	965	6	905	881	41	126	40	103	53	88	74	58	92	39	107	28	107	31	111	45	89	61	79	85	60	100	51	117
Wongarra & Sugarloaf	143.8E	38.7S	974	6	893	901	44	130	46	106	59	90	72	58	86	39	92	28	96	32	109	45	91	62	82	87	64	102	53	122
Wyangtata²	143.45E	38.66S	2,279	11	1,947	804	108	121	108	100	125	83	192	51	232	32	231	22	266	25	274	36	221	52	207	77	172	93	142	112

70th Percentile rainfall System Sizing Tables completed for townships shown in bold font - Appendix B of Technical Document.
 70th Percentile rainfall Water Balances NOT completed for localities shown in normal font - information included for LCA assessors and Council staff - for water balance as part of a LCA, the closest climate locality should be used.
 The localities of Lavers Hill, Weeaprounah, Beech Forest, Wyangtata and Barham River Catchment do not have any suitable water balances as detailed in their respective Locality reports (Appendix B Technical Document) and Section 7 of the Technical Document. As part of a detailed or comprehensive LCA, site specific designs warrant the use of appropriate Otway Ridge rainfall data from the Bureau of Meteorology. 70th percentile rainfall data from BOM stations 90006¹ Beech Forest and 90087² Wyangtata stations was obtained and the closest BOM station must be used for any locality within the Otway Ridge (i.e. Weeaprounah uses Beech Forest and Lavers Hill uses Wyangtata). The closest SILO ET₀ data was used for both of these BOM stations Beech Forest and Wyangtata.

Item: 10.9

Memorial Square Public Toilets – Summary of submissions and finalisation of Concept Plan

OFFICER	Paula Gardiner
GENERAL MANAGER	Tony McGann
DIVISION	Environment and Infrastructure
ATTACHMENTS	<ol style="list-style-type: none">1. Public Toilets - Memorial Square Toilet Layout Plan [10.9.1 - 1 page]2. Memorial Square Public Toilets Redevelopment - Proposed Parking and Pedestrian Connections Plan [10.9.2 - 1 page]3. Heritage Report in support of Current Proposal Redacted [10.9.3 - 2 pages]4. Memorial Square Public Toilets - Summary of Submissions [10.9.4 - 8 pages]

1. PURPOSE

To present the feedback from the public consultation period regarding the draft Memorial Square Public Toilet concept design, and to seek endorsement from Council to proceed to detailed design.

2. EXECUTIVE SUMMARY

A draft concept plan for a new Memorial Square toilet facility, and improved parking and pedestrian movements was placed on public exhibition for six weeks to seek community feedback on 25 August 2021. Feedback received during the exhibition period was considered, and where appropriate, incorporated into the concept design.

The revised concept design is now ready for Councillors consideration to determine the final concept to allow the project to move to detailed design phase.

The current concept design includes:

- Unisex and gender specific cubicles,
- Male urinals

- A family change room
- An additional baby change table in a unisex cubicle
- An accessible cubicle
- Changing places facility
- Cleaners' storeroom
- Privacy screening
- Handwashing troughs
- Pathway connections
- Raised pedestrian crossing point
- Improved accessible parking.

3. RECOMMENDATION

That Council:

- 1. Acknowledges the submissions received and thanks the submitters for their contribution to the Memorial Square Public Toilet Redevelopment project.***
- 2. Endorses the Memorial Square Public Toilet Redevelopment Concept Plan as attached to this report, which has considered and incorporated feedback received during the community consultation period.***
- 3. Resolves to proceed to detailed design for the Memorial Square Public Toilet Redevelopment.***

4. KEY INFORMATION

Following options testing and preliminary stakeholder consultation regarding new public toilet and changing places facilities in Colac, a preferred draft concept plan was presented at the 25 August 2021 Council Meeting and endorsed for use to seek community feedback.

At the 25 August 2021 meeting Council resolved to:

- 1. Note the Memorial Square Public Toilet Redevelopment Draft Concept Plans***
- 2. Place the Draft Concept Plans on exhibition for a period of 6 weeks***
- 3. Receive a report and revised concept designs addressing any feedback received, for endorsement as 'final', following the public consultation period.***

A summary of feedback and submissions made during the public exhibition process is provided at Attachment 4.

The feedback received has informed minor changes to the provided concept plans including:

- Additional baby change table to be incorporated into an ambulant unisex cubicle.
- Changing some cubicles to be gender specific, while retaining some unisex cubicles. This recommendation has been made to incorporate community feedback to inform the concept plan, while also aiming to meet the Council Plan target of "3.2.6 Promote and demonstrate

gender equity with new and upgraded facilities to accommodate gender neutral design principles”.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

While all governance principles are important in relevant, the principle identified below is of particular relevance;

Priority is to be given to achieving the best outcomes for the municipal community, including future generations.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

In line with the *Gender Equality Act 2020*, the Council Plan sets the priority of ‘3.2.6 Promote and demonstrate gender equity with new and upgraded community facilities to accommodate gender neutral design principles’. Removal of unisex cubicles from the design would be contrary to the objectives and indicators stated in the Council Plan, however a mix of cubicle types would still support the intent of the Council Plan.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

The project will not adversely affect the environment, and sustainability considerations will be incorporated in to the specifications should the concept proceed to detailed design and construction.

Community Engagement (s56 LGA 2020 and Council’s Community Engagement Policy)

Public Exhibition Period

Draft Memorial Square Public Toilet Redevelopment Plans were placed on public exhibition from 30 August to 11 October 2021. Plans were made available for viewing and download on Council’s website and emailed to key stakeholders involved in the preliminary consultation. These groups included: local disability group - Colac and Surrounds Special Needs Support Group, the local bus company, taxi company and eight businesses in the Gellibrand Street precinct.

Supporting information regarding the proposed location, design, Changing Places Facility and parking improvements was provided on the website.

Feedback was received via an online survey, emails and letters. Council received 98 submissions consisting of:

- Survey responses (84)
- Letters (1)
- Emails (12)
- Phone Call (1)

A detailed summary of comments and officer responses for consideration is provided in Attachment 4.

The main points arising from the feedback are:

- The majority of respondents (over 80%) say they would use the new toilets, support the proposed pedestrian and parking improvements, and support the accessible features of the design with a number of positive statements made about these features.
- 73% support the architectural design.
- 63% agree that the proposed number and type of cubicles are sufficient.
- 6-13% of respondents for each question stated they were 'not sure' or neutral.
- A minority of respondents raised concerns (6-15%), with the exception of the question regarding the number and type of cubicles (33%).

Where opinions differed from the majority, most concerns related to:

- the safety of unisex toilets for children and women and opposition to all cubicles being unisex toilets: a preference for separate male and female toilets; and
- the raised pedestrian crossing being either too expensive or creating frustration for drivers.

The RSL Colac Branch submitted a strong objection to the location of the proposed toilet development within the reserve boundary. They would like to see the toilets developed outside the boundary in their current location.

Wait times

The survey asked respondents about their preferred wait times. 45% of respondents stated that one to two minutes wait time is acceptable to them and 28% stated they would prefer to wait less than one minute. The proposed design allows for no wait times when there are no tour buses. When there is one 56 seat tour bus the wait time is under seven minutes and when two arrive the wait time is under 14 minutes. Due to the substantial number of additional cubicles required to reduce the wait times during these discrete peak times (approximately eight additional cubicles) the additional expense and footprint size was not considered feasible.

Feedback

Although the majority of responses support the proposal, some respondents raised concerns, including:

- opposition to having all cubicles as unisex cubicles;
- concern in relation to the raised pedestrian crossing;
- requests for additional features such as a second baby change table; and
- objection from a key stakeholder to the proposed toilet location within the reserve boundary.

1. Opposition to having all cubicles as unisex cubicles

Some respondents (33% or 28 respondents) have raised perceived safety concerns regarding unisex cubicles and some opposition to having all the cubicles as unisex cubicles. Some respondents indicated a preference for two to three dedicated female and male cubicles with one to two unisex cubicles.

Considerations

The proposed public toilets at Memorial Square are in an outdoor setting with a high level of surveillance to the cubicle doors in line with modern facility design and Crime Prevention (CPTED) principles. It is possible that those who have raised concern about safety are not aware of this intention in the design and are imagining a traditional public toilet arrangement, with an enclosed area prior to entering the cubicles (as is currently the case with the existing toilets).

Further advice has been provided from the designer which indicates that there are not anticipated to be a change to wait time impacts from an alternative mix of cubicle types for example: one male, two female and seven unisex.

In line with the *Gender Equality Act 2020*, the Council Plan sets the priority of '3.2.6 Promote and demonstrate gender equity with new and upgraded community facilities to accommodate gender neutral design principles'. Removal of unisex cubicles from the design would be contrary to the objectives and indicators stated in the Council Plan, however a mix of cubicle types would still support the intent of the Council Plan.

2. Concern in relation to the raised pedestrian crossing

7% of respondents (6 in total) indicated that they did not support the proposed pedestrian connections and traffic calming improvements due to being expensive and adding to the frustration of drivers in an already congested street.

A significant majority of the respondents (80%) said that they are supportive of the parking arrangements in the plan because they would be an improvement to existing conditions, make it more accessible and safer to get to the new toilets, increase accessibility to businesses, slow through traffic and create a more pedestrian friendly environment. Indeed, the intention of the raised crossing is to provide pedestrian priority in accordance with Movement and Place principles. Vehicle access would be retained as per the current situation. Overall, it is considered that the benefits of the proposal outweigh the concerns raised.

3. Concern with proposed toilet location within the reserve boundary.

An objection has raised various concerns including '*the plan to build new, large, permanent and multi-purpose toilet facilities on the Memorial Square goes against the open space plan*'.

In response to the concerns raised, an investigation was undertaken into whether there is any agreement or plan, which supports the claim made that no buildings are permitted to be installed within the reserve boundary. No record of such an agreement was found.

Structures within the reserve must comply with the requirements of the Heritage Overlay and this matter was referred to Council's heritage advisor. The heritage advisor concluded:

'The new toilet facilities proposed for location at the west end of Colac Memorial Square are sympathetic to the significance of the Memorial Square Precinct and will not impact on its significance. The new toilet building is sympathetic in placement, scale, design and colours and will not alter any significant features of the Square. The proposed new building will also not impact on significant views to the central War Memorial and its setting or the historic character of the Square. The proposed new building will also help maintain the Square as a place for community use and public recreation. As a result, the demolition of the existing toilet building and construction of the new building as proposed in the Concept Plans is supported on heritage grounds.' (Refer Attachment 6 - Heritage Report).

Land Owner Consent has also been obtained for the development from DELWP. DELWP raised no concerns.

Location spatial analysis

One of the suggestions was to replace the toilets '*on the current site outside the Memorial Square boundary*'.

Brand Architects investigated the suggestion above and have provided the following information:

- The envelope for the existing toilets is 4.4m x 18.6m and including the canopy is 5.8m x 18.6m. The envelope for the new toilets is 6.7m x 10.6m, and the canopy is 11.0m x 13.3m.
- The new toilets can fit into the width of the existing toilet block, although they would extend another 5.6 metres into the square, including their overhead canopy. The newly constructed public toilets would then straddle the boundary of the reserve and the road reserve.
- Whilst this is possible, constructing the new public toilets this way would mean that there would be a period of time (approximately 6 months) that Memorial Square would be without toilets and some portable toilets may need to be provided onsite during the construction period at an additional cost. Constructing the new public toilets within the reserve boundary would allow for the existing toilets to remain operational until the new public toilets are constructed. The old toilets would then be demolished and parking and pavement improvements made following the new public toilets construction.

In examining various options for the siting of the new toilets, one of the main reasons for choosing the location as currently shown in the plans was proximity to the playspace, shops, parking and bus parking, allowing for additional, reconfigured parking on Gellibrand Street and clear footpath access with a dedicated connection to shops, and that the existing toilets would be available for use during the construction of the new public toilets (refer Attachment 1 and 2).

Visual impacts

A further analysis was undertaken using photomontages and other images, showing different angles to ascertain the visual impact of the development in its proposed location. Please refer to the following images.



Image 1 – View to proposed toilets from within the reserve looking towards Gellibrand Street.



Image 2 - View to proposed toilets from within the reserve looking towards Gellibrand Street, with proposed toilets sited within the location of the existing toilets.



Image 3 – View of the proposed toilets from the corner of Gellibrand Street and Dennis Street



Image 4 – View of proposed toilets from the corner of Gellibrand Street and Dennis Street within the current location of the existing toilets.

The photomontages indicate that there is a minimal difference between the two proposed locations in terms of visual impact. Practically speaking, placing the new toilets in the location of the current toilets (as shown in image 4) would create a situation where footpath users are directed through the undercover area of the toilets and past the toilet doors and wash basin area, which is not considered to be an acceptable urban design outcome. The building canopy cannot be sited any closer to the kerb-line than shown in image 4, to allow room for a footpath between the building and the kerb. As such, and due to its size and configuration, the toilets cannot be entirely located outside of the reserve and would straddle the road reserve and park. The preferred location within the reserve (as shown in Images 1 and 3) allows for a consistent reserve frontage and footpath connection and does not allow the toilets to visually dominate the streetscape or the reserve.

The images below show views towards the existing toilets from the vicinity of the cenotaph and Murray Street and indicate that the current toilets are generally not visible from these locations and have little to no impact on the presentation of the cenotaph or the reserve. Locating the new toilets within the reserve boundary arguably would have equally limited visibility from these locations, considering also that the proposed materials will be more muted (greys and black) than the current toilet colour palette (pale blue and burgundy).



Image 5 - View from Murray Street looking towards the cenotaph, fountain, playspace and toilets.



Image 6 - View towards the toilets from the cenotaph.

4. Additional baby change table

A second baby change table was requested by some submitters. One table is currently proposed within the parent's room, however consideration has been given to provision of a second table to service demand from the adjacent playspace. Disability groups specifically requested a second change table not be placed within the ambulant cubicle. Accommodating a second table has required enlargement of an ambulant unisex cubicle by approximately 700mm.

Public Transparency (s58 LGA 2020)

Council has actively engaged with the community to seek and consider feedback in the finalisation of the concept plan for the future construction of the public toilets

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 1 - Strong and Resilient Community

Objective 3: Key infrastructure investment supports our economy and liveability

Objective 4: Colac Otway Shire is a destination to visit

Theme 2 - Valuing the Natural and Built Environment

Objective 5: Provide and maintain an attractive and safe built environment

Financial Management (s101 *Local Government Act 2020*)

Construction Budget

The development is estimated to cost in the order of \$1,370,000, and includes the additional baby change table (approximately \$46,000) and the proposed parking and pedestrian connection improvements (\$200,000).

These costs are based on an architect's estimate and include all construction costs, demolition of the existing toilet, pavements, signage and landscaping, parking alterations, pedestrian treatments, contingencies, cost escalation, project management, detailed design and tender documentation.

The completion and endorsement of the concept plan will enable funding opportunities to be sought, with confidence in the scope, level of stakeholder support and amount to be requested.

Service Performance (s106 *Local Government Act 2020*)

Public toilets provide an essential piece of community infrastructure which contribute to the enjoyment and amenity of a place. If designed correctly, they cater to all people: residents, workers, visitors, and those experiencing homelessness. They can support increased use of open space, and increased participation in local social, economic and physical activity.

Public toilets also play an important role in tourism. Research has shown that toilets are one of the most important aspects of a holiday experience, particularly for road trips. The location of Colac in relation to its distance from the Great Ocean Road, Melbourne and Warrnambool, and the prominence of Memorial Square in the Colac CBD, lends itself to being an important stop for visitors to our region. People may remember Colac from their public toilet experience which influences future decisions to stop and spend money in Colac.

Regardless of the destination, the need for public toilets is present for all travellers, and the provision of safe, clean and accessible toilets can greatly contribute to positive perceptions of an area among visitors, and even attract new ones. The Memorial Square public toilets receive high volume of visitors which poses its own challenges. Facilities need to be well designed, well maintained, and well located to have a 'flow on effect' for the local economy.

Local disability groups consulted during the Masterplan process expressed that the lack of provision of an adult changing facility within the Colac Otway Shire is a form of discrimination, preventing certain members of the community from enjoying public places and conducting regular daily activities. People's ability to access public places and spaces throughout the Colac Otway Shire is influenced by the built environment and whilst it is not a legal requirement to provide these facilities, Council should strive to meet universal access standards for all public places and facilities as a matter of social equity.

Risk Assessment

There is little risk to Council associated with this project. There is a reputational risk to Council if Memorial Square public toilet facility is not upgraded, as the need was first identified in 2017 during the Memorial Square Masterplan process. An endorsed concept plan places Council in a strong position to attract funding for the construction of the toilets should a funding opportunity arise with short lead times that do not allow sufficient time for consultation and community engagement.

The primary risk relates to concerns which have been raised by through the submission period relates to the placement of the toilet block. This has the potential to delay the project if difficult to resolve.

Communication/Implementation

An update will be placed on Council's website to advise of the outcome of the consideration of submissions.

Human Rights Charter

The design as proposed, provides for a gender-neutral setting, as well providing a family room, and accessible facility and an adult changing places facility. This proposed design provides greater equity and limits discrimination which may be felt by gender diverse community members.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Option 1 – Endorse the concept plan as provided

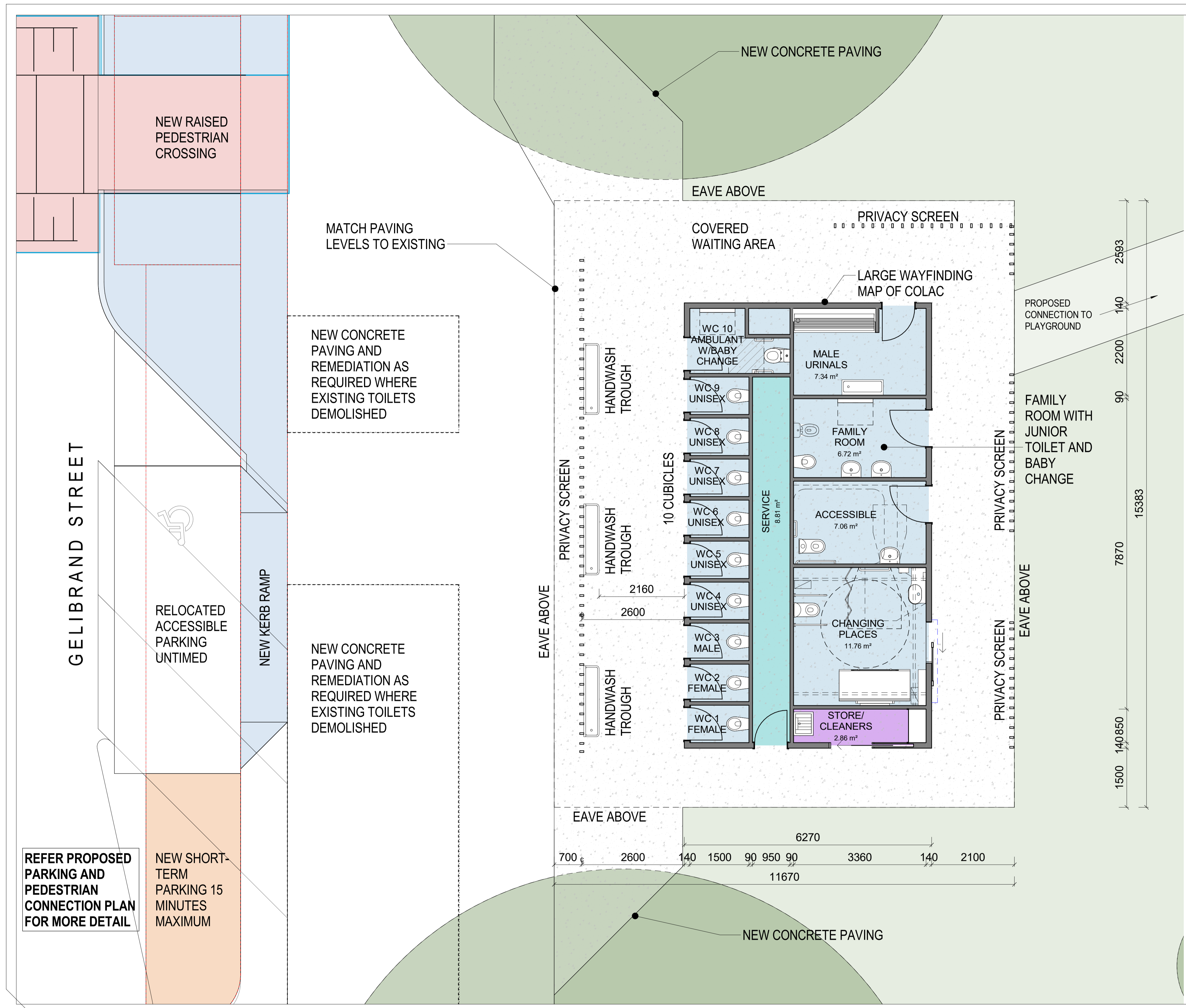
This option is recommended by officers as the concept plan has been through a vigorous community consultation process and incorporated feedback from a number of different parts of the community and is felt to be an excellent representation of the community needs, whilst also assisting Council to meet our Council Plan goals and obligations under the Human Rights Charter and Gender Equality Act. An endorsed concept plan positions Council strongly to attract funding for the construction of the facility should any become available.

Option 2 – Endorse the concept plan with amendments

This option is not recommended by officers as careful consideration has been taken by officers recommending a concept plan which reflect best practices, legislative requirements and feedback from the community and it is considered that the concept plan is effective and complete in the proposed form.

Option 3 – Do not endorse the concept plan as provided

This option is not recommended by officers as the concept plan has been formulated after considering extensive feedback and the process is nearing its natural conclusion.



VIEW FROM THE GELIBRAND STREET FOOTPATH LOOKING TOWARDS THE ROTUNDA



VIEW FROM ACROSS GELIBRAND STREET WITH NEW RAISED PEDESTRIAN CROSSING



VIEW UNDER VERANDAH SHOWING UNISEX TOILET CUBICLES AND WAYFINDING MAP



0 500 2500 5000 mm

SCALE: 1 : 50@A1
 REV: A
 DATE: 14/04/2022

PROPOSED PUBLIC TOILET LAYOUT PLAN
 MEMORIAL SQUARE PUBLIC TOILET REDEVELOPMENT

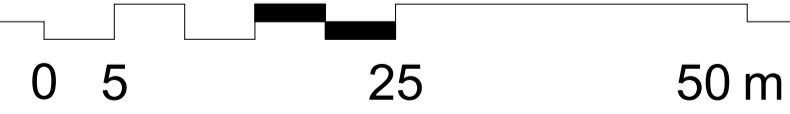
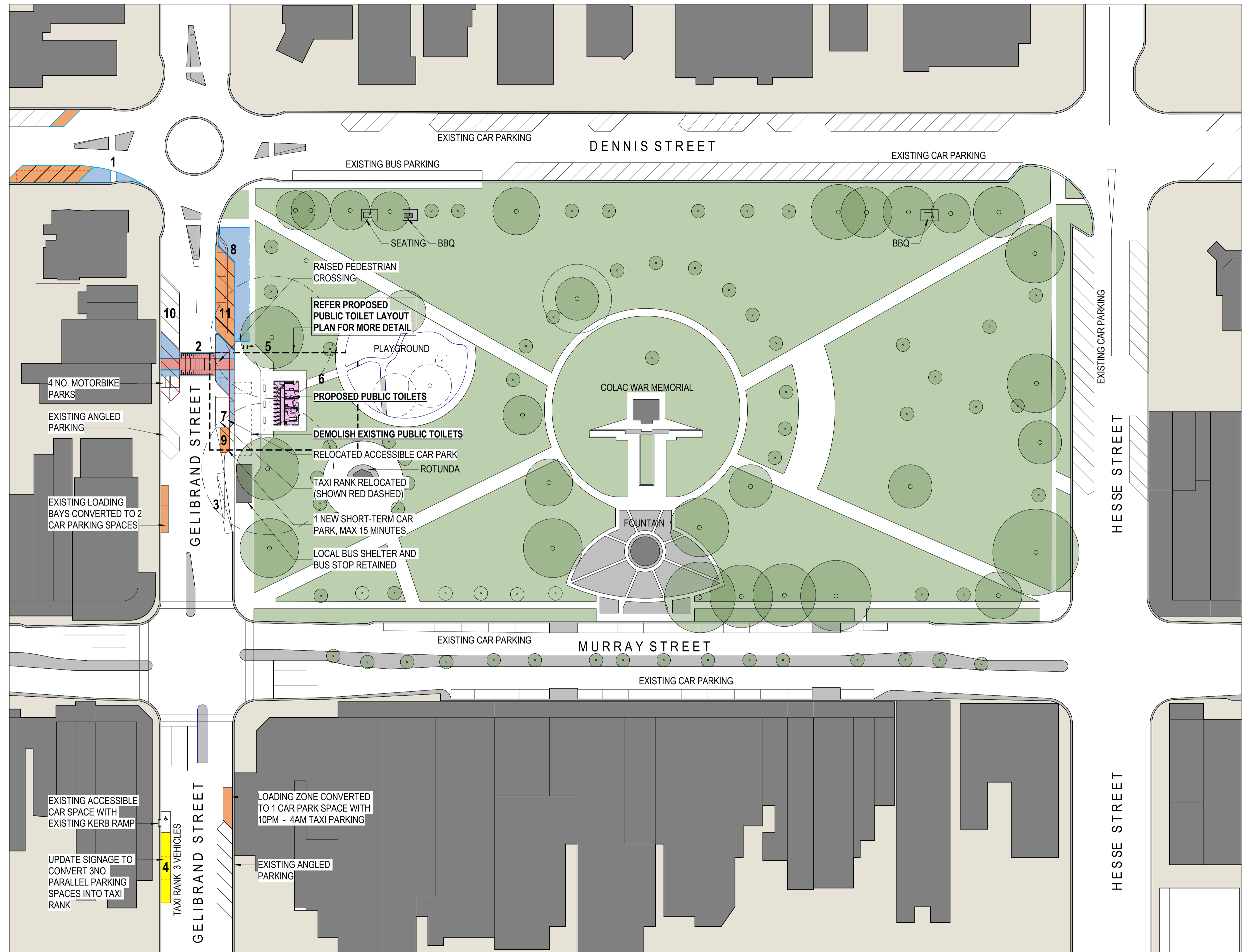
CONCEPT PLAN FOR ADOPTION BY COUNCIL



CAR PARK NUMBERS
NET INCREASE:
2 REGULAR CAR PARKS

- 1 EXTEND KERB TO IMPROVE PEDESTRIAN CONNECTIVITY
- 2 NEW RAISED PEDESTRIAN CROSSING BETWEEN SHOPS AND SQUARE
- 3 EXISTING LOCAL BUS STOP & SHELTER TO BE RETAINED
- 4 TAXI RANK RELOCATED
- 5 2 No. BICYCLE HOOPS TO REMAIN
- 6 NEW PATH CONNECTION TO PLAYGROUND
- 7 RELOCATED ACCESSIBLE CAR PARKING SPACE
- 8 REALIGN EXISTING KERB TO CREATE 45 DEGREE ANGLED CAR PARKING
- 9 15 MINUTE SHORT-TERM PARKING BAY
- 10 MAINTAIN 1/2 HOUR PARKING RESTRICTION TO WEST SIDE OF STREET
- 11 MAINTAIN 1 HOUR PARKING RESTRICTION TO PARK SIDE OF STREET

- LEGEND**
- EXISTING KERB
 - EXISTING BUILDING
 - ALTERED CAR OR TAXI PARKING
 - NEW CAR PARKING SPACES
 - NEW KERB AND FOOTPATH
 - NEW RAISED PEDESTRIAN CROSSING
 - RELOCATED TAXI RANK
 - NEW PUBLIC TOILETS



SCALE: 1 : 500@A1
REV: A
DATE: 14/04/2022

PROPOSED PARKING AND PEDESTRIAN CONNECTIONS PLAN

MEMORIAL SQUARE PUBLIC TOILET REDEVELOPMENT

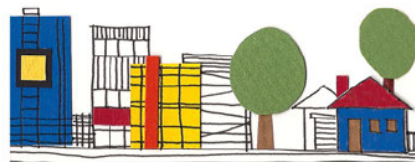
CONCEPT PLAN FOR ADOPTION BY COUNCIL



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HERITAGE ADVISOR ASSESSMENT

Date:	19 September 2021
Property:	Memorial Square, Colac
Heritage Status:	Memorial Square Precinct H0308
Proposal:	Construction of a new Toilet Block
Heritage Advisor:	Samantha Westbrooke, Heritage Architect

Introduction:

The Colac Memorial Square, bounded by Murray, Gellibrand, Dennis and Hesse Streets, is a World War 1 Memorial Reserve that evolved from the market Reserve set aside when Colac was surveyed in 1864. Now known as Memorial Square, the areas incorporate a large walk-in memorial (c1924) at its centre designed by Frederick Sales, and a generally symmetrical path system with extensive plantings of mature *Ulmus procera* (English Elm) framing the centrepiece. The Memorial Square also includes a number of memorials that commemorate members of the community, playground and public toilet facilities. The square is the focal point for community activities in the district and is a popular recreational site providing respite for travellers passing through the Shire. The Memorial Square is of historical, architectural, aesthetic and social importance to the Shire of Colac Otway. The Memorial Square is historically important for its commemoration of the service and sacrifices of the Colac and district communities. The Memorial Square is architecturally important for the War Memorial, which is one of the most impressive walk-in memorials in regional Victoria. The Memorial Square is aesthetically and socially important as a public open space in continuous use since the first settlement of Colac.

The proposal involves the demolition of the existing Public Toilet facilities and construction of a new, larger toilet building.

In preparing this assessment I have reviewed the Concept Plans prepared by Colac Otway Shire and on public exhibition and I am familiar with the site and the significance of the Heritage Overlay Precinct.

Assessment:

Aspects of the proposal under consideration

The new Public Toilet facility is proposed for location at the west end of the site, between the two central Elms at this end and running parallel to Gellibrand Street. The new building will be located within the boundaries of the Memorial Square rather than on the adjacent pavement where the current toilet building is located. While the existing toilet building will eventually be demolished, it will remain to provide essential public facilities until the new facility is completed.

While the overall footprint of the new building is larger than the existing facilities, the proposed new building will be shorter in length. The footprint is larger mainly due to the canopy/verandah on four sides of the central toilet and changing facilities.

The central core of the building will be constructed of blockwork in a light stone colour and the building will have a single skillion roof form incorporating the surrounding verandah with slatted screening at the edges. The colours will be muted stone/brown/grey tones.

Demolition of the existing public toilet facility

There are no heritage issues with the proposed demolition of the existing toilet facilities. The toilet facilities area a much later change and do not contribute to the significance of the Memorial Square.

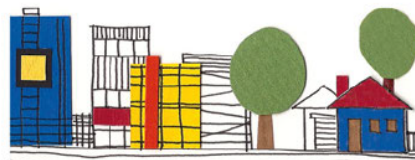
The proposed location of the new toilet facility

Although located in the Memorial Square, rather than outside the Square like the existing, the new building will have little more impact on views of the Square, than the existing, particularly from Murray Street. The new building will be less obtrusive on views than the existing, from Gellibrand Street due to their location

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HERITAGE ADVISOR ASSESSMENT

symmetrically between the Elm trees. It is also screened in views from the north and south due to the location between the two Elm trees. The toilets are located at the end of the Square that has already undergone change for the playground, will not involve removal of any Elm trees (or any other trees) and will not impact on the symmetrical path system. Although located within the Square and therefore closer to the central War Memorial, the new toilet building will still be a substantial distance away from the Memorial and will not impact on significant views to the Memorial (from outside or within the Square) or its setting.

The design of the new toilet facility

The simplicity and muted colour palette of the proposed new building ensure that it will be recessive in views across the Memorial Square. Although larger than the existing toilet building to be demolished, it is more sympathetic in design with its surrounding canopy, slatted screening and simple skillion roof form. Although larger than the existing building it is still not of an overwhelming scale that will not dominate this west end of the Square. While the overall footprint is larger than the existing building, the surrounding verandah/canopy allow views/vistas still to be gained directly around the central core and the screening is permeable so light can be seen through the gaps. Therefore the solid central core is not much greater than the existing building.

Other heritage assessment considerations

The upgrading of the public toilet facilities located in the Memorial Square will ensure the ongoing use of the Square for its original purpose as a Public Reserve for use by the community, public recreation and visitors to the town. With a more sympathetic building providing better facilities - use and visitation to the Square will be promoted so more people can appreciate the significance of this important Memorial Reserve.

Conclusions:

The new toilet facilities proposed for location at the west end of Colac Memorial Square are sympathetic to the significance of the Memorial Square Precinct and will not impact on its significance. The new toilet building is sympathetic in placement, scale, design and colours and will not alter any significant features of the Square. The proposed new building will also not impact on significant views to the central War Memorial and its setting or the historic character of the Square. The proposed new building will also help maintain the Square as a place for community use and public recreation. As a result the demolition of the existing toilet building and construction of the new building as proposed in the Concept Plans is supported on heritage grounds.

MEMORIAL SQUARE PUBLIC TOILET REDVELOPMENT PUBLIC EXHIBITION – SUBMISSIONS

SUMMARY

Council received 98 submissions (via online Survey Monkey form, emails and letters) when the Draft Memorial Square Public Toilet Redevelopment Plans were on public exhibition from 30th August to 11th October 2021. A summary of the key themes and recommendations is provided below.

Question	Comments received	
Q4. Do you use the current toilets in Memorial Square?	<ul style="list-style-type: none"> - Majority of the respondents said that existing toilets are in poor condition, lack hygiene, are unclean, uninviting, dark and poorly serviced 	<ul style="list-style-type: none"> - Council are aware that the current toilets are in poor condition. Issues like lighting and ventilation are being addressed through the new design
	<ul style="list-style-type: none"> - Some respondents (2) commented that they are unable to use the toilets as their children have disabilities and not appropriate for changing and mobility issues to access the toilet 	<ul style="list-style-type: none"> - The new toilets will have a Changing Places Facility and an accessible toilet for people with disabilities
	<ul style="list-style-type: none"> - Some respondents (2) commented on the lack of changing facilities for young children. One respondent commented that they did not have changing facilities for 2 year-old and hence do not use the playground either; - Second respondent, also parent to a 2 year-old similarly stated that facilities to change young children were lacking 	<ul style="list-style-type: none"> - Design for the new toilets incorporates a Family Room with junior toilet and Baby Change
Q5. Would you use the new toilets in Memorial Square as per the current design?	<ul style="list-style-type: none"> - Majority of the respondents (85%) said that they would use the new toilets as per the current design; - However, 15% indicated that they would not use the new toilets as per the current design 	<ul style="list-style-type: none"> - Please refer 'Differing Opinions' Section
Q6. Are you supportive of the parking arrangements in the plan? *Parking	<ul style="list-style-type: none"> - Majority of the respondents (82%) said that they are supportive of the parking arrangements in the plan, due to the following reasons: 	

<p>arrangements include: new angled parking, additional parking spaces, compliant accessible car space, and relocated taxi rank.</p>	<ul style="list-style-type: none"> ○ Many respondents felt angled parking is essential and better than parallel parking which holds up traffic for a longer time; ○ Respondents noted that proposed parking would be an improvement to the parking in this area; ○ Reinstating angled parking in a busy area is welcomed. <ul style="list-style-type: none"> - 12% indicated that they were not sure; - 6% indicated that they did not support. 	<ul style="list-style-type: none"> - Please refer 'Differing Opinions' Section
<p>Q7. Do you support the proposed pedestrian connections and traffic calming treatments? * Includes: raised pedestrian crossing, traffic islands, planting and new path connecting the toilets to the playspace</p>	<ul style="list-style-type: none"> - Majority of the respondents (80%) said that they are supportive of the parking arrangements in the plan, due to the following reasons: <ul style="list-style-type: none"> ○ Respondents felt that these would be an improvement to existing conditions, make it more accessible and safer to get to the new toilets; ○ Would increase accessibility to businesses and beautify the area; ○ Would slow the through traffic and also allow people to cross the road safely when going to the local shops. <ul style="list-style-type: none"> - 13% indicated that they were not sure; - 7% indicated that they did not support. 	<ul style="list-style-type: none"> - Please refer 'Differing Opinions' Section
<p>Q8. Do you support the architectural design for the toilets? *Design elements include: style of building, materials, colour scheme, features such as lighting and privacy screens</p>	<ul style="list-style-type: none"> - Majority of the respondents (73%) said that they are supportive; - 13% indicated that they were not sure; - 14% indicated that they did not support. 	<ul style="list-style-type: none"> - Nearly 2/3 of the respondents are supportive of the design elements of the new toilets
<p>Q9.</p>	<ul style="list-style-type: none"> - Majority of the respondents (63%) said that they are supportive and that the increased number of 	

Do you agree that the number of cubicles and type of cubicles are sufficient?	cubicles would be beneficial to bus-loads of tourists as well as users of the new play area; - 33% indicated that they did not support.	- Please refer 'Differing Opinions' Section
Q10. Do you support the accessible aspects of the toilet design? *Includes a dedicated accessible cubicle, separate Changing Places facility and accessible parking provision	- Majority of the respondents (88%) said that they are supportive because of the following reasons: o Finally there is a plan that is inclusive; o Adult Changing Place though used by a small number of people would have an enormous positive impact on them; o Good to see a Changing Place in Colac; - 6% indicated that they were not sure; - 6% indicated that they did not support.	Please refer 'Differing Opinions' Section
Q11. What do you consider an acceptable wait time for a public toilet?	- 45% responded saying 1-2 minutes wait time; - 28% responded saying less than 1 minute wait time.	A 56 seat tour bus can clear the toilets in under 7 minutes, assuming everyone uses the toilets. In off-peak times there would be no wait time.
Q12. Do you have any other comments on the Memorial Square Public Toilet Redevelopment?	Some of the respondents have commented positively indicating that: - The redevelopment is long overdue for Colac; - A good design with accessibility features for people of all mobilities; - Very important addition with the new playground; - The toilet design is an important amenity and usually under-appreciated. However, other feedback provided included comments not-supportive of certain aspects of the redevelopment	Please refer 'Differing Opinions' Section

SECONDARY FEEDBACK

The following were raised by 1-5 submitters.

Question	Comments received	
<p>Q5. Would you use the new toilets in Memorial Square as per the current design?</p>	<ul style="list-style-type: none"> - Not enough space for parents to change nappies. Several families will be lined up to use one room with 1 junior toilet and by the looks a nappy change station. Will this include spaces for breastfeeding mothers, who do not wish to feed in public? 	<ul style="list-style-type: none"> - There is expected to be an increased usage of the new toilets due to the new playspace - Breastfeeding spaces are not usually provided in public toilet blocks. Mothers should not have to breastfeed in the same room as a toilet, so a separate room would be needed. Breastfeeding rooms usually contain a comfortable chair / couch which would require a higher level of maintenance and cleanliness and may be prone to vandalism. - There can be two baby change tables, one in the family room and one in the Accessible Toilet, however disability group representatives made a specific request for baby change to not be included in the accessible cubicle. Accommodating another baby change table would involve enlarging one of the unisex cubicles at an additional cost.
<p>Q6. Are you supportive of the parking arrangements in the plan? *Parking arrangements include: new angled parking, additional parking spaces, compliant accessible car space, and relocated taxi rank.</p>	<ul style="list-style-type: none"> - Needs more disabled parking as well; - Please give us at least two disabled parks; - It would be great to see the 'new short term car park' converted to a second accessible car park. With the addition of the new changing places toilet, I feel it will be important to have adequate parking for the increased foot traffic the changing places toilet will bring to the area. 	<ul style="list-style-type: none"> - A standard carpark can be swapped for an accessible one.
<p>Q7. Do you support the proposed pedestrian connections and traffic calming treatments? * Includes: raised pedestrian crossing, traffic islands, planting and new path connecting the toilets to the playspace</p>	<ul style="list-style-type: none"> - One respondent indicated that there is a need to have disabled friendly traffic lights and crossing lights. Plus disabled sensory section of trees and flora and plants as well 	

<p>Q10. Do you support the accessible aspects of the toilet design? *Includes a dedicated accessible cubicle, separate Changing Places facility and accessible parking provision</p>	<ul style="list-style-type: none"> - Two (2) respondents requested an additional family room due to many users in the new playspace which would result in need to queue up to use the family room; - One respondent queried whether the door to the Family Room was wide enough for a double pram 	<ul style="list-style-type: none"> - The family room door is wide enough for double pram - This requirement will be addressed as part of detailed design
<p>Q12. Do you have any other comments on the Memorial Square Public Toilet Redevelopment?</p>	<p>Some of the feedback provided included:</p> <ul style="list-style-type: none"> - Use of sensors/ electronic buttons to operate the heavy doors to the accessible toilets for disabled/ wheelchair-bound patrons; - No stainless steel seats in toilets; - Are any of the cubicles ambulant?; - Have attractive planter boxes with the bench seat in front of new toilets. The local takeaway businesses would certainly appreciate more seating and a more attractive frontage since it is a major spot for tourists to stop; - Fish & Chips Shop Owner would like to have outdoor seating in front of his shop. He was concerned that the raised pedestrian crossing will impact/ limit his outdoor seating; - Rotary Club Colac alerted that the controls to the mechanism that operates the Rotary Clock along Murray St is located inside the existing Toilet Block and this should be reinstated in the new design 	<ul style="list-style-type: none"> - These requests can be considered and addressed as part of detailed design - Two of the toilet cubicles will have to be ambulant and they are sized so that this can be accommodated.

DIFFERING OPINIONS

Question	Comments received	
Q5. Would you use the new toilets in Memorial Square as per the current design?	15% indicated that they would not use the new toilets as per the current design. 7 respondents were vocal due to the following reasons: <ul style="list-style-type: none"> - Did not want gender neutral toilets, should be male and female with 1 cubicle designed for gender neutral use; - Do not believe we should be having toilets as gender neutral, I would not feel safe having a stranger of the opposite sex in a cubicle beside or near me, although I'm all for people uniting, some things just shouldn't be shared; - Would prefer them traditionally set up as men's and women's generally cleaner this way; - Men get their own private urinal toilet, which they still will go into the unisex toilets BUT women do not get their own private toilet. Why not have only a couple of single toilets for men, then the rest for the woman? - Issue of safety for women by going to public toilets where men can enter. It is NOT SAFE. 	<ul style="list-style-type: none"> - Some respondents have raised safety concerns re: Unisex cubicles and its impact on the proposed design
Q6. Are you supportive of the parking arrangements in the plan? *Parking arrangements include: new angled parking, additional parking spaces, compliant accessible car space, and relocated taxi rank.	6% indicated that they did not support the parking arrangements in the plan for the following reasons: <ul style="list-style-type: none"> - It is already very congested between the lights and roundabout; 	
Q7. Do you support the proposed pedestrian connections and traffic	7% indicated that they did not support the proposed pedestrian connections and traffic calming improvements for the following reasons:	<ul style="list-style-type: none"> - Some respondents (6 in total out of 85) have expressed concerns in relation to the raised pedestrian crossing

<p>calming treatments? * Includes: raised pedestrian crossing, traffic islands, planting and new path connecting the toilets to the playspace</p>	<ul style="list-style-type: none"> - One respondent felt that the new crossing is too grand and expensive; - Another commented that there are already Traffic lights at the corners of Gellibrand Street and Murray Street and the new crossing will just cause more frustration to drivers on an already congested street; - In addition to the above, 4 respondents indicated that they support the improvements, but not the raised pedestrian crossing. 	
<p>Q9. Do you agree that the number of cubicles and type of cubicles are sufficient?</p>	<ul style="list-style-type: none"> - 33% or 28 respondents disagreed stating: <ul style="list-style-type: none"> o at least 2-3 designated Male and Female cubicles, not all unisex; o should remain male or female only with 1 or 2 as gender neutral; o don't like the idea of my children sharing toilets with other genders; o 10 of the 28 respondents who disagreed were strongly against all cubicles being unisex 	<ul style="list-style-type: none"> - There is some opposition to having all cubicles as unisex
<p>Q12. Do you have any other comments on the Memorial Square Public Toilet Redevelopment?</p>	<p>Some of the comments provided by respondents included:</p> <ul style="list-style-type: none"> - Not all cubicles to be gender neutral just to please just one group of the community; - Retain some women-only toilets; - Concern in relation to women's safety, if all cubicles are unisex; - Query on whether women's sanitary facilities will be made available in all the unisex toilets? - Concern from Trader (Butcher) about further disruption to their business due to construction as they have already suffered due to covid for last two years. 	

	<p>RSL Colac Branch has objected stating the following concerns:</p> <ul style="list-style-type: none"> - Plan to build new, large, permanent and multi-purpose toilet facilities ON the Memorial Square goes against the open space plan; - Memorial Square along with the perimeter elm trees is a hallowed ground and of enormous importance to ex-servicemen & veterans, their descendants and the community as a whole; - Are of opinion that construction of a new playground into a substantially larger 'play space' should not have been given the go ahead; - Possible suggestions could be- Upgrading/replacing toilets on the current site outside the Memorial Square boundary. 	<p>Please refer D21/218316 for full Submission by RSL.</p> <p>The envelope for the existing toilets is 4.4m x 18.6m and including the canopy is 5.8m x 18.6m. The existing toilets are outside the boundary of the square.</p> <p>The envelope for the new toilets is 6.7m x 10.6m, and the canopy is 11.0m x 13.3m</p> <p>The new toilets can fit into the width of the existing toilet block although they would extend another 5.6 meters into the square, including their overhead canopy. They would then straddle the boundary of the square and the road reserve.</p> <p>Doing this, however, would mean that there would be a period of time that the square will be without toilets and some portable toilets may need to be brought in at an additional cost to the project.</p>
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Item: 10.10

Advocacy Framework and Priorities

OFFICER	Louise Harvey
GENERAL MANAGER	Anne Howard
DIVISION	Executive
ATTACHMENTS	1. Colac Otway Shire Advocacy Framework and Advocacy Priorities Draft [10.10.1 - 13 pages]

1. PURPOSE

To consider Council's advocacy framework and affirm Council's proposed advocacy priorities.

2. EXECUTIVE SUMMARY

Advocacy is the action of influencing change in areas out of Council's direct control to bring about positive change that will ultimately improve or maintain the health and wellbeing of the community. For Council, advocacy might mean seeking external funding or in-kind contribution to a project, a new/changed policy or position, or another outcome that is important to the community.

Council's Advocacy Framework articulates:

- Why and when advocacy is important.
- What Council's advocacy looks like.
- Council's advocacy principles.
- Council's advocacy categories and priorities.

A feature of Council's advocacy program is having a defined set of priorities. This strengthens Council's position when discussing opportunities for funding partnerships with state and federal government and ensures potential projects are sufficiently scoped to be ready for grant funding applications.

It is important to note that Council will continue to be pro-active and advocate for other projects in response to changes in the political and funding landscape.

3. RECOMMENDATION

That Council endorses its advocacy framework and advocacy priorities (as detailed in Attachment 1).

4. KEY INFORMATION

Affirming advocacy priorities and implementing actions to gain support gives Council its best chance of advocacy success. Maintaining a clearly defined list of advocacy priorities ensures Council is ready for opportunities that may arise and can tell a compelling story about its advocacy objectives.

Project and advocacy action planning needs to occur to increase the likelihood of attracting funding and Council must consider its contribution to several large projects in future budgets. Advocacy activities include meetings with key community groups and government and non-government organisations; meetings with Members of Parliament, Ministers and senior government officers; and applications to grant funds.

With the upcoming state and federal elections, it is important for Council to be clear on advocacy priorities to seek state and federal Government funding contributions.

Council's proposed advocacy priorities have been grouped into the following categories:

1. Regional and shared priorities
2. Municipal priorities
3. Quick wins for local communities.

Priorities change from year to year, depending on community need and the political environment, as well as changes in importance in the local and regional environment. This means that Council should review its advocacy priorities at least twice-yearly and more often if needed.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

Having an advocacy list will assist Colac Otway Shire Council to give priority to achieving the best outcomes for the municipal community, including future generations. The advocacy program and related priorities also seek to ensure Council's financial viability.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

Council's advocacy program supports strategic objectives in the Council Plan 2021-25 and other key strategies.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

Council's advocacy program supports environmental and financial sustainability.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

The Council Plan 2021-25 cascades directly from the Community Vision, both of which are a product of extensive community consultation. The community engagement process involved community drop-

in sessions, surveys, a deliberative Community Panel and community feedback on the draft plans. Giving consideration to achieving the strategic objectives contained in the Council Plan 2021-25 ensures alignment to important goals/aspirations of the community.

Public Transparency (s58 LGA 2020)

Public transparency of Council's consideration of this matter is evidenced through the decision being subject to a report to the open meeting of Council. Information about Council's advocacy framework and priorities will also be accessible to the public via its website.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 1 - Strong and Resilient Community

Objective 2: Attract, retain and grow business in our Shire

Financial Management (s101 Local Government Act 2020)

Successful advocacy can result in a significant funding boost to Council projects. Typically government grants are allocated on the basis of a contribution from Council. Therefore Council needs to consider how its financial contribution to such projects would impact on its capacity to deliver other capital projects and financial commitments in future budgets.

Service Performance (s106 Local Government Act 2020)

Not applicable.

Risk Assessment

Failure to determine clear advocacy priorities may limit Council's ability to achieve support for its priorities. An advocacy plan that clearly articulates priorities and is regularly reviewed mitigates against this risk.

Communication/Implementation

Council will communicate its advocacy priorities through its own communication channels and invite media coverage on the topic. Updated advocacy priority information will be communicated to the relevant level of government which may include parliamentarians, government departments or partner organisations.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Option 1 – Endorse the advocacy framework and proposed advocacy priorities

This option is recommended by officers to enable strong advocacy on behalf of the community, in the lead up to the State and Federal elections and any pre-budget periods scheduled to take place. Moreover, by affirming its advocacy list, Council can ensure its priorities remain current and aligned to its strategic goals.

Option 2 – Adopt different priorities in the advocacy program

This option is not recommended by officers as the projects included in the program have been identified as having a close alignment to Council's strategic goals and community expectations. Council is able to review the priorities on a regular basis.

Option 3 – Do not adopt advocacy principles

This option is not recommended by officers as Council's ability to attract funding support is reliant on having a clearly articulated set of priorities and by maintaining a positive working relationship with other levels of government, key community groups and organisations.



Colac Otway Shire Council



Advocacy framework and advocacy priorities



Draft 14 April 2022

Acknowledgement of Traditional Owners

Colac Otway Shire Council acknowledges the Gulidjan and Gadubanud peoples of the Eastern Marr nation, past, present and emerging, as the traditional owners of the Colac Otway Region.

Council recognises the enduring culture of traditional owners and their connection to the land and water. Their living traditions inform, build and strengthen a shared understanding and value of the Colac Otway Region and its unique heritage and future prosperity.

These traditions and connections to land and water also help Council to ensure that this region and its unique environment can be protected and celebrated by the current and future generations of residents and visitors to this region.

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INTRODUCTION

- Why is advocacy important?
- When is advocacy important?

PART 1: COUNCIL'S APPROACH

- What does council's advocacy look like?
- What are our advocacy principles?
- What are our advocacy categories and priorities?

PART 2: COUNCIL'S ADVOCACY PRIORITIES

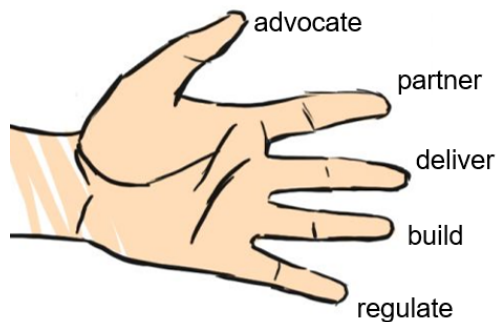
- Table 1 – Regional and shared priorities
- Table 2 – Municipal priorities
- Table 3 – Local priorities and quick wins
- Table 4 – Former advocacy priorities

INTRODUCTION

WHY IS ADVOCACY IMPORTANT?

The Colac Otway Shire Council (Council) supports its municipal community by delivering a wide range of services, projects and programs, facilities and infrastructure. Council also plans and regulates a variety of activities that occur across the Shire.

We can think of Council's various roles through five general groupings as follows:



Many community needs and aspirations remain outside local governments' direct authority and are controlled or heavily influenced by other levels of government, and the private and community sectors. Advocacy therefore remains a critical role for Council to deliver important outcomes for the community.

Council can progress a range of social, environmental and economic matters that are beyond Council's remit and capacity by:

- i. Participating in regional planning and partnerships to ensure Colac Otway aspirations and needs are included in strategic plans; and
- ii. Raising awareness of our community's interests when engaging with other levels of government.

This document provides a framework to support the setting of advocacy priorities so that advocacy initiatives are designed and delivered in the most efficient and effective way. The framework has two parts:

1. Part One: Council's approach
2. Part Two: Council's priorities.

The priorities in Part Two should be reviewed at least annually to ensure Council's focus remains relevant to new issues or opportunities. As things are achieved, Part Two will be updated to show progress and to provide transparency to the community.

When Council has affirmed its current priorities and intends to take a lead or partner role, officers will develop an advocacy plan for the specific priority. The plan will consider the most appropriate advocacy approach including key messages, decision-makers and influencers, and methods of advocacy. The advocacy plans will be shared with councillors and partners to ensure all efforts are understood and aligned.

INTRODUCTION

WHEN IS ADVOCACY IMPORTANT?

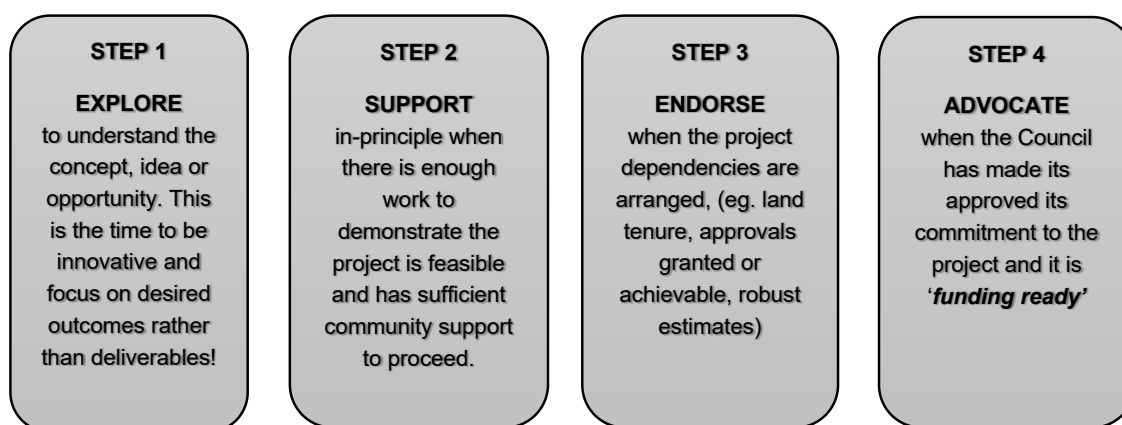
Advocacy takes time and effort, and this equates to financial investment. This means Council needs to focus on advocacy when it is most needed or most likely to be successful.

It is also important that Council and the community understand the difference between:

- **Priority projects** Council will have many priority projects that are important to its community but be successfully progressed at the same time; and
- **Advocacy priorities** This is a targeted list of initiatives drawn from Council's *priorities projects* and other initiatives that need targeted investment of time and effort to achieve the desired outcome.

Council will have many priority projects in its "*project pipeline*" at any time but not all are ready or need advocacy.

The steps in the project pipeline are shown in the following simplistic diagram:



Sometimes Council and the community needs help to progress infrastructure projects to the funding ready stage, and this means help is needed with project planning, design or approvals. Council may advocate for funds or partner support to take 'Step 3' of the project pipeline.

When a project is already at Step 4, Council is ready for 'Step 4' and can advocate for funding to implement or construct a project.

Sometimes for larger projects that will face a more competitive funding environment the advocacy may start earlier to start to raise awareness with key stakeholders, but this should be limited to projects that will be *funding ready* in the near future.



Part 1 – Council’s Approach



PART 1: COUNCIL'S APPROACH

WHAT DOES COUNCIL'S ADVOCACY LOOK LIKE?

Advocacy is the action of influencing change in areas out of Council's direct control to bring about positive change that will ultimately improve or maintain the health and wellbeing of the community. For Council, advocacy might mean seeking external funding or in-kind contribution to a project, a new/changed policy or position, or another outcome that is important to the community.

Advocacy initiatives can be delivered in many different ways and Council will identify the most appropriate forms of advocacy to achieve its desired outcomes. Some common forms of advocacy will include:

Formal submissions

This generally involves communicating Council and community interests, views or experiences to other levels of governments and other regularity bodies, seeking input to their decision-making processes.

Public awareness initiatives

Public awareness campaigns are used to provide the community with the knowledge and awareness to help them to make informed decisions regarding their involvement or response to issues, action or events that have the potential to affect them in a substantial way.

Policy statements

These statements may be published in Council's formal strategies or policy documents, or as stand-alone statements. They support a clear and consistent position of Council's key issues.

Campaigns

For issues that require long term or significant attention, dedicated campaigns are undertaken to help raise awareness of an issue and call for action to bring about positive change, eg. social and affordable housing outcomes.

Presentations

Where council holds a strong view on an issue out of council's direct control, or seeks direct support such as for funding of a priority project, Council will present its position in person and/or writing to local State and Federal Members of Parliament and Ministers.

Some issues or initiatives will need more than one form of advocacy.

Council may partner with others in its advocacy efforts, or act alone. Council may also advocate on behalf of others when they need help to achieve outcomes that are important to our region and where we have a shared interest.

When Council determines that a project or initiative is an advocacy priority, it should be clear about the role it will take (lead, partner, support) and be sure it has the capacity to successfully fulfil that role. Council should also be clear about any financial commitment it will make to the project or initiative. Council should only advocate to implement infrastructure when the initiative is 'funding ready'.

PART 1: COUNCIL'S APPROACH

WHAT ARE OUR ADVOCACY PRINCIPLES?

There are many projects, issues, causes or beliefs that Council can advocate on and many different methods or approaches Council can use to delivery it advocacy message.

Council must ensure its resources are used to their maximum potential and focused on areas with greatest likelihood to see positive change.

The following advocacy principles will underpin all of Council's advocacy approach.

Strategic

Advocacy messages and approaches must align with key strategies, plans and policies for our municipality and our key partners that include the G21 Regional Alliance, SouthWest Alliance, Barwon Region or Large Rural Shires group.

Evidence based

All forms of advocacy should be supported by accepted evidence in line with Council's plans, policies and strategic directions.

Constructive

All forms of advocacy should be framed positively and where appropriate propose constructive solutions, or genuine approaches to address issues of concern.

Collaborative

Where ever possible Council will consult with or partner with relevant organisation or groups when developing, supporting or delivery advocacy initiatives

Timely

Council will focus advocacy efforts and resource investment strategically (eg. aligned to funding programs or election cycles) to maximise likelihood of positive outcomes.

PART 1: COUNCIL'S APPROACH

WHAT ARE OUR ADVOCACY CATEGORIES AND PRIORITIES?

Not all projects and initiatives need active advocacy. Some will already have a strong chance of success through evidence-based assessments, strong policy alignment, effective relationships with partners or external opportunities such as elections.

Different circumstances create a higher level of urgency, effort and importance at different times.

Priorities also change from year to year, depending on community need and the political environment, as well as changes in importance in the local and regional environment. This means that Council should review its advocacy priorities at least twice-yearly and more often if needed.

To help determine appropriate resourcing and timing of advocacy priorities, consideration should be given to the following:

- Contribution to achieving strategic objectives contained in the Council Plan 2021-2025 which has the following strategic themes:
 - Theme 1: Strong and Resilient Economy
 - Theme 2: Valuing the Natural and Built Environment
 - Theme 3: Healthy and Inclusive Community
 - Theme 4: Strong Leadership and Management.
- Contribution to achieving strategic objectives contained in other strategic plans of Council or its regional partners.
- Contribution to addressing significant risks or challenges faced by Council or the municipal community.
- Council's capacity to meet any commitments required if the advocacy is successful.
- Preparedness of Council, community and key partners to implement if the advocacy is successful.
- Fit with political cycles and priorities of other levels of government.

Further to the above, advocacy priorities will also grouped into one of the following advocacy categories:

1. Regional and shared priorities
2. Municipal priorities
3. Quick wins for local communities.

Council may be asked to provide Letters of Support for projects, priorities or initiatives developed and led by community groups or businesses. Where these are identified as advocacy priorities in Part 2 of this document a letter will be provided. For other proposals, the Mayor and Chief Executive Officer will discuss the alignment of the proposal to the matters outlined above.



Part 2 – Advocacy priorities



PART 2: COUNCIL'S ADVOCACY PRIORITIES

TABLE 1 – REGIONAL AND SHARED PRIORITIES

Priority	Partners	Council's Role
<p><u>Regional social and affordable housing</u> Advocacy to Federal Government will primarily focus on policy and regulatory changes. This will complement advocacy to State Government for regulatory change and ongoing funding for social and affordable housing solutions</p>	<ul style="list-style-type: none"> • G21 • SWVA • MAV • ALGA • Apollo Bay Housing Taskforce 	Partner
<p><u>Community rail services and fast rail</u> Advocacy to State Government to increase rail services to and through Colac</p>	<ul style="list-style-type: none"> • G21 • SVWA 	Partner
<p><u>Heritage protection</u> Advocacy to State Government to fund Council's to: (i) research and prepare planning scheme amendments to help manage heritage places for future communities (ii) to implement further VicSmart provisions to streamline planning for applicants and councils.</p>	<ul style="list-style-type: none"> • MAV 	Support
<p><u>Regional renewable organics network</u> Advocate for funding for the RRON facility planned for Black Rock, Breamlea, recognising its potential as a flagship as a Regional Circular Economy project delivering economic and environmental outcomes</p>	<ul style="list-style-type: none"> • Barwon Water • G21 Councils 	Support
<p><u>Circular economy reforms</u> Advocate to State Government to: (i) fund Councils to support implementation of Circular Economy reforms, and (ii) facilitate waste and resource reforms upstream and downstream of kerbside collection.</p>	<ul style="list-style-type: none"> • MAV • Waste and Resource Recovery Groups 	Partner
<p><u>Key skills programs</u> Advocate to State Government to expand the women building surveyors program, and explore similar programs for other key skills shortages including Environmental Health and Town Planning.</p>	<ul style="list-style-type: none"> • MAV 	Support

Key reference documents

- [G21 Regional Alliance Priority Projects](#)
- [Great South Coast Group Regional Priorities](#)
- MAV Opportunities for the 2022 State Budget.

Council recognises that other regional priorities are important to the prosperity and wellbeing of the Colac Otway Shire communities. These may be beyond current Council's capacity to prioritise for active advocacy, however Council is committed to work with partners for regional and sector outcomes.

PART 2: COUNCIL'S ADVOCACY PRIORITIES

TABLE 2 - MUNICIPAL PRIORITIES

Colac Otway Shire priorities	Total project cost	What Council is seeking
Major infrastructure priorities ready for delivery		
<u>Victorian Blue Ocean Safety Skills Centre, Apollo Bay</u> Total redevelopment of aged lifesaving facility plus accommodation at Department of Education land. The project aims to establish capacity for water safety training, bluewater skill development and accommodation. The proposed accommodation may also provide short term worker accommodation over non-school peak periods.	\$15 million	\$15 million (seeking election commitments)
<u>Elliminyt Recreation Reserve pavilion</u> Replacement of sub-standard clubrooms with a contemporary multi-user pavilion to support Colac South community growth and strong outcomes for a healthy and connected community.	\$4 million	\$4 million
<u>Forest Street Colac Upgrades</u> Investment needed to ensure Forest St continues to perform its role as a major connector supporting industry.	\$1.2 million	\$1.2 million
Minor infrastructure priorities ready for delivery		
<u>Elliminyt Recreation Reserve lighting</u> Proposal to upgrade sports lighting to 150 LUX to support multiple recreation users.	\$450,000	\$200,000
<u>COPACC Floor Upgrade</u> Proposal is to provide structural upgrade to part of COPACC to enable COPACC to optimise the use of the venue.	\$240,000	\$180,000
Priorities for project planning funding		
Non-infrastructure priorities		
<u>Anam Cara House Colac</u> Advocating to State Government for funding assistance to extend this service to full year.	\$1.0 million	\$0.5 million
<u>Colac Area Health Urgent Care</u> Urgent Care Centre modelling estimates a continued growth of activity of 1.5-2.4 per cent per annum. This the key area of capacity constraint for Colac Area Health and will necessitate additional treatment spaces to accommodate existing and forecast demand. The current facility is already under strain and will fall substantially below the modelled facility requirements using traditional occupancy benchmarks. Reconfiguration of the Urgent Care Centre should include a dedicated behavioural assessment room as the lack of a purpose-built area in the current facility presents an occupational violence and aggression risk. The expansion of facilities will be a critical element in achieving effective management of the growing demand.		

PART 2: COUNCIL'S ADVOCACY PRIORITIES

TABLE 3 –LOCAL COMMUNITY PRIORITIES AND QUICK WINS

Local community priorities	Total project cost	What Council is seeking
<p><u>Gellibrand Hall, Stage 2 (construction)</u> Internal fit-out and upgrade to support the transition of the Gellibrand Community House and other users, strengthening the role of the hall as a local place of connection for the community. The Gellibrand Community House has indicated it has \$50,000 to contribute as leverage.</p>	\$100,000	\$50,000
<p><u>Highview Trail, Apollo Bay (project planning)</u> Planning project is needed to get this project 'funding ready'. Philanthropic funds are held by Nosedo family for construction contribution and \$90k has been committed to progress the pre-construction works for this project. Council awaits an application for the additional funds through the Regional Tourism Investment Fund.</p>	\$450, 000	\$360, 000
<p><u>Lavers Hill to Crowes and Melba Gully Trail Plan (project planning)</u> Preliminary estimates indicate that the project is likely to cost in the order of \$1.0 million to \$1.5 million, but more work is needed to get this project 'funding ready'. Assistance needed to understand full cost and feasibility issues.</p>	\$100, 000	\$100, 000
<p><u>Colac to Cororooke Share Path Feasibility (project planning)</u> Preliminary estimates indicate that the project is likely to cost in the order of \$1.0-\$1.5 million, but more work is needed to get this project 'funding ready'. Assistance needed to understand full cost and feasibility issues.</p>	\$40, 000	\$40, 000

PART 2: COUNCIL'S ADVOCACY PRIORITIES

TABLE 4 – PREVIOUS ADVOCACY PRIORITIES

As Advocacy initiatives are either successful or no longer relevant they will be listed in the following table. After about three years they will be removed from the table, allowing progressive updates to be maintained at a reasonable level of detail.

Advocacy initiative	Reason no longer an active advocacy priority
<p><u>Beeac Playspace \$200k</u> Replace tired equipment with contemporary accessible playspace, BBQ etc.</p>	Funded through LRCI Round 2
<p><u>Joint G21 Councils' energy efficient lighting</u> Transition Council's street lighting to energy efficient lighting to reduce power costs and carbon emissions.</p>	Street lighting owned and managed directly by Council has been completed. The remaining lights require Department of Transport partnership that is not able to be secured.
<p><u>Blue Church Corner upgrade</u> Address safety issues through the construction of a roundabout at the intersection of Tomahawk Creek Road and Princes Highway, Nalangil.</p>	Project has been funded and will be delivered by Department of Transport.
<p><u>Colac Specialist School Business Case</u> Advocacy was to secure support for the relocation of the Specialist School to former Colac High School site.</p>	Project has been funded and will be delivered by State Government.
<p><u>Elliminyt Wetlands</u> Council's Integrated Water Management (IWM) plan for Colac identified that the town's population growth needed a contemporary and innovative approach to use of water in all forms. The Elliminyt Wetlands is the flagship project in the Colac IWM plan.</p>	Council was successful in securing funding for this project in April 2022 with a \$3 million grant from the Victorian Government through the Regional Infrastructure Fund, announced by Minister for Regional Development on 13 April 2022. The \$1.2 million balance of project funding was sourced through the Federal Government's Local Roads and Community Infrastructure Program.

Item: 10.11

Councillor Code of Conduct Review - Consideration of Submission and Adoption

OFFICER	Marlo Emmitt
CHIEF EXECUTIVE OFFICER	Anne Howard
DIVISION	Executive
ATTACHMENTS	<ol style="list-style-type: none">1. Feedback and Responses for Councillor Code of Conduct [10.11.1 - 1 page]2. Councillor Code of Conduct - final - adopted 24 February 2021 [10.11.2 - 27 pages]

1. PURPOSE

The purpose of this report is for Council to consider a submission received and make a decision in relation to the Councillor Code of Conduct.

2. EXECUTIVE SUMMARY

The Councillor Code of Conduct (Code) was adopted by Council on 24 February 2021 in accordance with the requirements of the *Local Government Act 2020* (Act). The Council resolution also stipulated that there be a review of the Code (to begin within nine months of the resolution being passed), with consideration to be given for public input.

Councillors reviewed the Code at a Councillor Briefing session held on 20 October 2021. No changes to the Code were recommended.

On 24 November 2021, Council resolved to issue the Code for public consultation, for a period of not less than six weeks, and hear any verbal submissions at a meeting of the Submissions Committee at a time and date to be determined.

The Code was promoted on the 'Have Your Say' section of Council's website, via the Colac Herald, community newsletters and Council's social media platforms. The consultation period commenced on 26 November 2021 and concluded on 14 January 2022.

One written submission was received, a summary of which is provided at Attachment 1. The submitter was heard by the Submissions Committee at its meeting on Wednesday 13 April 2022. The

Submissions Committee recommended that Council ‘incorporates community consultation when due for review subject to necessary regulatory requirements.’

3. RECOMMENDATION

That Council:

- 1. Thanks the submitter for their written submission and acknowledges and notes the verbal comments made in support of the written submission at the Submissions Committee meeting held on 13 April 2022.**
- 2. Resolves, in accordance with the recommendation of the Submissions Committee, to adopt the Councillor Code of Conduct (as at Attachment 2), with the inclusion of the following sentence at the end of the Introduction:**
 - 2.1. “Any review of this Code will include a community consultation process.”**
- 3. Declares that the Councillor Code of Conduct adopted through this resolution comes into force the day following the date of this resolution.**

4. KEY INFORMATION

Councillor Code of Conduct

The *Local Government Act 2020* (Act) requires Council to develop and maintain a Councillor Code of Conduct (Code) that includes the standards of conduct expected to be observed by councillors that are prescribed in the *Local Government (Governance and Integrity) Regulations 2020*. A Code may also include any other matters which the Council considers appropriate.

Under the Act, Council must review and adopt the Code within four months of the general election.

The submission received provides feedback on the following topics:

- Inclusion of community consultation in the Code
- Including of procedures to assist the community
- Council decisions resulting from a process that breaches the Code of Conduct.

The feedback has been reviewed and summarised and an officer response provided.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

The Governance Principles have been considered throughout the Councillor Code of Conduct review process, with the following rule being regarded as having particular relevance:

- s(9)(2)(i) the transparency of Council decisions, actions and information is to be ensured; despite there being no legislative requirement, the Code review has undergone a public exhibition and community engagement process. The Submissions Committee meeting is being held to give people an opportunity to verbally address the Committee in support of their written submissions.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

Not applicable.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

Not applicable.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

In accordance with Council's Community Engagement Policy, the Code was exhibited for public consultation, for a period of not less than six weeks. The consultation period commenced on 26 November 2021 and concluded on 14 January 2022. A meeting of the Submissions Committee was subsequently scheduled for 13 April 2022, to hear any person wishing to speak at the Committee meeting in support of their written submission.

Public Transparency (s58 LGA 2020)

Public transparency has been ensured through the public exhibition and community engagement process.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 4 – Strong Leadership and Management

4.1 We commit to a program of best practice and continuous improvement.

Financial Management (s101 Local Government Act 2020)

Not applicable.

Service Performance (s106 Local Government Act 2020)

Not applicable.

Risk Assessment

There are no identified Workplace Health and Safety implications associated with this report.

Communication/Implementation

The outcome of the Code review will be posted on Council's website and individuals who made a submission during the exhibition period will be informed of the outcome separately.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Summary of submission received

Councillor Code of Conduct

Summary of feedback	Officer response
<p><u>Inclusion of community consultation in the Code</u></p> <p>While there is no legislative requirement, I propose that engagement with the community be included in the Councillor Code of Conduct as an action to be undertaken when it is developed or reviewed.</p>	<p>There is no legislative requirement to engage with the public when developing or reviewing the Councillor Code of Conduct, however this does not preclude Council from doing so if it wants to.</p> <p>Officers make no recommendation about this, as it is not a governance matter. The Councillor Code of Conduct is a public commitment by Councillors to each other and the community outlining behaviours that reflect the prescribed standards of conduct.</p>
<p><u>Inclusion of procedures that assist the community</u></p> <p>Recommend that the procedures in relation to reporting a breach of the Code of Conduct, specifically where it relates to a member of the community, be detailed and highlighted in the Code.</p> <p>Perhaps consider grievance resolution procedures (like those in Yarra City Council's Code) that apply equally to grievances reported by Councillors, Council officers and 'another person'.</p>	<p>This inclusion is not recommended. Where members of the public would like to raise a complaint against a Councillor for a possible breach or offence under the Act or this Code, this may be directed to the Local Government Inspectorate or the Colac Otway Shire Councillor Conduct Officer.</p>
<p><u>Council decisions resulting from processes that breach the Code of Conduct</u></p> <p>Recommend Council consider including in the Code provisions that outline the steps to be taken if a Council decision has resulted from a process that was inherently a breach of the Councillor Code of Conduct.</p> <p>The issue is how do we rectify a council decision that is found to have been tainted by a breach in the Councillor Code of Conduct, either through a Councillor's actions in the process leading to the decision that was made or through some other means.</p> <p>Factors to be considered may include, establishing the person/s who are eligible to raise an objection to the council decision on the grounds stated above, the timeframe within which they should do so and the procedures to investigate and where appropriate, address the concerns that were raised.</p> <p>The issue may be addressed as part of the arbitration process and may involve repealing and then retaking the decision after following due process – whether or not the decision remains the same.</p>	<p>Not recommended for inclusion in the Councillor Code of Conduct. The Code sets the standards of conduct expected to be observed by Councillors in the course of their functions and duties as Councillors.</p> <p>Council's Complaints Policy should include procedures for making a complaint about Council as the collective decision-making body.</p> <p>NOTE: Council will be reviewing its Complaints Policy in the near future and will consider procedures relating to complaints about the CEO, Council contractors and decisions made at Council meetings as part of the review process (in recommended in the Victorian Ombudsman's Councils and Complaints Good Practice Guide 2nd edition).</p>



COUNCILLOR CODE OF CONDUCT

Adopted by Council: 24 February 2021





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1. Introduction

The Councillor Code of Conduct (Code) forms part of Colac Otway Shire's Governance Framework, which is set out in the *Local Government Act 2020* (the Act). The primary objective for the Colac Otway Shire Council (Council) is to endeavour to achieve the best outcomes for the local community having regard to the long term cumulative effect of its decisions.

This Code is a public declaration that Councillors of the Council are committed to governing the municipality effectively and will observe the principles of good governance and integrity.

The Code was adopted by Council on 24 February 2021 and is required to be reviewed within four months of a general election.

2. First Nations Acknowledgment

Council proudly acknowledges the Gulidjan (Goole-ee-jan) and Gadubanud (Gad-a-ban-nood) peoples as the traditional custodians of the Colac Otway Region. We acknowledge that the Council is located on and conducts business upon lands of the Gulidjan and Gadubanud people.

We will observe the appropriate protocols for acknowledgement of the original inhabitants of this land. The following Acknowledgement of Council is read by the Mayor (or Chief Executive, as appropriate) at all formal Council meetings and civic receptions prior to commencement of any formal proceedings:

"Colac Otway Shire acknowledges the original custodians and law makers of this land, their elders past, present and emerging and welcomes any descendants here today."

3. Purpose

The purpose of the Code is to set out the standards of conduct expected to be observed by Councillors in the course of their duties and functions as Councillors, including prohibiting discrimination, harassment (including sexual harassment) and vilification.

4. Scope

This Code applies to the Councillors of the Colac Otway Shire Council.

5. Legislative context

The *Local Government Act 2020* requires Council to develop and maintain a Councillor Code of Conduct that includes the standards of conduct expected to be observed by Councillors prescribed in the *Local Government (Governance and Integrity) Regulations 2020*. A Councillor Code of Conduct may also include any other matters which the Council considers appropriate.

6. Councillor Standards of Conduct

Councillors must comply with the prescribed Standards of Conduct in Schedule 1 to the *Local Government (Governance and Integrity) Regulations 2020*.

A breach of the conduct standards constitutes *misconduct* as defined under the Act.



6.1. Standard 1 – Treatment of others

In performing the role of a Councillor, we will treat other Councillors, members of Council staff, the municipal community and members of the public with dignity, fairness, objectivity, courtesy and respect, including by ensuring that we:

- take positive action to eliminate discrimination, sexual harassment and victimisation in accordance with the *Equal Opportunity Act 2010*
- support Council in fulfilling its obligation to achieve and promote gender equality
- do not engage in abusive, obscene or threatening behaviour in our dealings with members of the public, Council staff and Councillors
- in considering the diversity of interests and needs of the municipal community, treat all persons with respect and have due regard for their opinions, beliefs, rights and responsibilities.

6.2. Standard 2 – Performing the role of Councillor

In performing the role of a Councillor, we will do everything reasonably necessary to ensure that we perform the role of a Councillor effectively and responsibly, including by ensuring that we:

- undertake any training or professional development activities the Council decides it is necessary for all Councillors to undertake in order to effectively perform the role of a Councillor
- diligently use Council processes to become informed about matters which are subject to Council decisions
- are fit to conscientiously perform the role of a Councillor when acting in that capacity or purporting to act in that capacity
- represent the interests of the municipal community in performing the role of a Councillor by considering and being responsive to the diversity of interests and needs of the municipal community.

6.3. Standard 3 – Compliance with Good Governance Measures

In performing the role of a Councillor, to ensure the good governance of Council, we will diligently and properly comply with the following:

- any policy, practice or protocol developed and implemented by the Chief Executive Officer in accordance with section 46 of the Act for managing interactions between members of Council staff and Councillors
- the Council Expenses Policy adopted and maintained by the Council under section 41 of the Act
- the Governance Rules developed, adopted and kept in force by the Council under section 60 of the Act
- any directions of the Minister issued under section 175 of the Act.



6.4. Standard 4 – Councillor Must Not Discredit or Mislead Council or Public

In performing the role of a Councillor, we will:

- ensure that our behaviour does not bring discredit upon Council
- not deliberately mislead Council or the public about any matter related to the performance of our public duties.

6.5. Standard 5 – Standards do not Limit Robust Political Debate

Nothing in these standards is intended to limit, restrict or detract from robust public debate in a democracy.

7. Roles and Responsibilities

7.1. Role of Council

The primary role of Council is to provide good governance in its municipal district for the benefit and wellbeing of the municipal community. Council must perform its role in accordance with the Overarching Governance Principles (refer Appendix 2).

7.2. Role of Councillor

The role of every Councillor is to:

- participate in the decision making of the Council
- represent the interests of the municipal community in that decision making
- contribute to the strategic direction of the Council through the development and review of key strategic documents of the Council, including the Council Plan.

In performing the role of Councillor, each Councillor will:

- consider the diversity of interests and needs of the municipal community
- support the role of the Council
- acknowledge and support the role of the Mayor
- act lawfully and in accordance with the oath or affirmation of office
- act in accordance with the standards of conduct
- comply with Council procedures required for good governance.

7.3. Role of the Mayor

The role of the Mayor is to:

- chair Council meetings and be the principal spokesperson for the Council
- lead engagement with the municipal community on the development of the Council Plan
- report to the municipal community, at least once each year, on the implementation of the Council Plan
- promote behaviour among Councillors that meets the standards of conduct set out in the Councillor Code of Conduct
- assist Councillors to understand their role



- take a leadership role in ensuring the regular review of the performance of the Chief Executive Officer
- provide advice to the Chief Executive Officer when the Chief Executive Officer is setting the agenda for Council meetings
- perform civic and ceremonial duties on behalf of the Council.

7.4. Role and Powers of the Deputy Mayor

Where the Mayor is not present but his or her attendance is required to carry out the Mayoral functions or duties, the Deputy Mayor will perform the role of the Mayor and may exercise any of the powers of the Mayor.

7.5. Role of the Chief Executive Officer

The role of the Chief Executive Officer is prescribed in section 46 of the Act, but in general terms the Chief Executive Officer is responsible for supporting the Mayor and Councillors in the performance of their roles and ensuring the effective and efficient management of the day to day operations of the Council.

8. Specific Councillor Conduct Obligations

The following section sets out specific conduct obligations that are agreed by all Councillors.

8.1. Councillor Values and Behaviours

In undertaking our role as Councillors we will uphold the following agreed values of being:

- Community focussed
- Fair and inclusive
- Respectful
- Transparent and open
- Collaborative
- Prepared, efficient and productive
- Strategic, with a view to the future
- Respectful of diversity of opinions and differences
- Supportive of an open and safe environment in which to have robust discussions
- Accountable for delivering results.

In undertaking our roles as Councillors we agree that the following behaviours underpin these values:

- Listening actively and showing respect for one another and our roles
- Greeting each other courteously
- Being prepared when coming together to discuss Council business and engaging with an empathetic approach towards each other's viewpoints
- Maintaining an approach to things with an optimistic perspective
- Acknowledging good work



- Moving on and letting go of things to move forward together.

A list of behaviours we do not want see are included at Appendix 3.

8.2. Council Decision Making

In performing the role of Councillor, we commit to making all decisions impartially and in the best interests of the community. We will actively participate in the decision-making process and appropriately inform ourselves of the matter at hand. We will abide by the Governance Rules, which govern the conduct of Council meetings. Once a decision has been made, we will respect the making of that decision.

We will observe due regard to procedural fairness, the absence of bias in decision-making and will conform with relevant legislation and policies in the consideration of matters, including conflict of interest provisions, and the Councillor Interaction with Council Staff Protocol.

We understand that Council is bound by the decisions made at Council meetings, and that while we may not agree with all decisions made, it is our collective responsibility to ensure the stability of governance in our Shire.

8.3. Conflict of Interest

Each Councillor is required to identify, manage and disclose any conflicts of interest they may have in accordance with sections 126 to 131 of the Act, and Chapter 5 of the Governance Rules.

We acknowledge that we have read and understand these provisions and will abide by them. In the event that we consider that we have an actual or perceived conflict of interest in relation to a matter, we will declare and identify this at the commencement of any discussion on the matter. We will seek advice from the Chief Executive Officer or other appropriate person if we need assistance on interpretation of the legislative provisions.

We understand that the declaration must be in writing, and must be made at any Council meeting, delegated committee meeting or meeting conducted under the auspices of Council, at which the matter is to be discussed. Failure to comply with these provisions may constitute *serious misconduct*.

8.4. Use of Council resources

We commit to using Council resources effectively and economically and in accordance with all Council policies. In particular, we will:

- use Council resources, which may include equipment, information, staff resources, property of any kind and other assets, which have been provided to us only for the purposes of our duties as a Councillor and not for private purposes unless properly authorised to do so
- maintain adequate security over Council property, facilities and resources in our possession or control
- ensure that any claim for expenses that we may make will be in accordance with all legislative obligations and Council policies
- not use public funds or resources in a manner that is improper or unauthorised.



8.5. Councillor and Staff Interactions

The Chief Executive Officer is responsible for managing interactions between Councillors and Council Staff and ensuring the appropriate policy, protocols and practices are in place. Councillors acknowledge that the relationship between Councillors and Council Officers must be one of mutual cooperation and support.

Interactions are guided by the *Council and Staff Interactions – Chief Executive Officer Protocol*.

8.6. Political Activity

We are committed to ensuring that elections conducted by the Colac Otway Shire Council are done so fairly and democratically and in accordance with the highest standards of governance. Where we are a sitting Councillor during an election period we will abide by the requirements of the applicable legislation and the Council-endorsed Election Period Policy (which forms part of the Council's adopted Governance Rules) and, whether or not we are standing for re-election, we will at all times act respectfully towards all candidates for the election.

8.7. Bullying, vilification and victimisation

Council is committed to maintaining a workplace that is free from bullying, vilification and victimisation, where all people are treated with dignity and respect. In performing our role as Councillors, we must take positive action to eliminate victimisation in accordance with the *Equal Opportunity Act 2010*.

We will uphold Council's obligations to support a safe workplace, and will not engage in repeated unreasonable behaviour toward another Councillor or member of Council staff that creates a risk to the health and safety of that other Councillor or member of Council staff.

We will take all reasonable steps to eliminate bullying, vilification and victimisation at Council.

8.8. Human rights and equal opportunity

In performing our role as Councillors we must take positive action to eliminate discrimination in accordance with the *Equal Opportunity Act 2010* and support Council in fulfilling its obligation to achieve and promote gender equality.

We acknowledge the human rights that are protected under the *Victorian Charter of Human Rights and Responsibilities Act 2006* and undertake to exercise our duties in a manner that is compatible with the rights set out in the Charter.

We acknowledge this undertaking extends to all our relationships as a Councillor, including with other Councillors, the Chief Executive Officer and Council employees, as well as any member of the public with whom we may have contact, and any decisions we participate in as a Councillor.

We are committed to treating all people with dignity and respect and recognise that there is no place for unlawful discrimination, harassment (sexual or otherwise), racial and religious vilification and victimisation of any individual. We will:

- take all reasonable steps to eliminate all forms of discrimination at Council
- support Council to fulfil its obligation to achieve and promote gender equality.



8.9. Occupational health and safety

Council is committed to providing and maintaining a safe workplace for all and recognises the provisions of the *Occupational Health and Safety Act 2004* (OHS) apply to Council and Councillors. The Chief Executive Officer has a clear accountability for OHS matters, given their mandate under the Act, and will put policies in place from time to time to ensure a safe workplace for Councillors to carry out their civic duties.

As Councillors, we understand that occupational health and safety is a shared responsibility. Accordingly, we will:

- take reasonable care to protect our own health and safety as well as the health and safety of others in the workplace
- take reasonable care to make sure Council carries out, through the Chief Executive Officer, its general duties to ensure a safe workplace that is without risks to health by ensuring appropriate systems and policies are in place to manage those risks and consider any health and safety implications of Council decisions.

8.10. Sexual Harassment

Sexual harassment is against the law and will not be tolerated under any circumstances. In performing our role as Councillors, we must take positive action to eliminate sexual harassment in accordance with the *Equal Opportunity Act 2010*.

We will not engage in any unwelcome conduct of a sexual nature towards another individual where a reasonable person, having regard to all the circumstances, would have anticipated the possibility that the individual harassed would be offended, humiliated or intimidated. We will take all reasonable steps to eliminate sexual harassment at Council.

8.11. Interacting with children and young people

Council prides itself on being a child safe organisation and has zero tolerance for child abuse. Council adheres to the Victorian Child Safe Standards and related legislation which governs the protection of children and young people and deals with the failure to report harm, failure to protect and grooming offenses.

Accordingly, we undertake to:

- maintain the highest standards of professional conduct in our attitude, behaviour and interactions with children and young people
- support and maintain Council's commitment to the safety and wellbeing of children and young people and including through any decision we participate in as a Councillor
- take all reasonable steps to protect children and young people from harm, including complying with Council's obligations under State and Federal child protection legislation and the Victorian Child Safe Standards.



8.12. Personal Dealings with Council

When dealing with Council in a personal capacity (for example, as a ratepayer, recipient of a Council service or applicant for a permit), we will not expect or request preferential treatment.

To ensure transparency and fairness, complaints received by Councillors should be treated the same way as ones made to Council officers. We must not seek to direct or influence the complaint handling process.

We are aware the same service standards apply to a Councillor request, as a request for service from a community member.

8.13. Councillor and officer engagement

We have read and understood the requirements of Section 124 of the Act and will not seek to improperly direct or influence members of Council staff in the exercise of their duties. We will follow all procedures and protocols which set out interaction between Councillors and the Chief Executive Officer, senior management and other employees.

8.14. Gifts, Benefits or Hospitality

Councillors should avoid situations that give rise to the appearance that a person or body, through the provision of gifts, benefits or hospitality of any kind, is attempting to secure favourable treatment.

We will comply with Council's Gifts, Benefits and Hospitality Policy and other applicable legislation.

8.15. Community Diversity

Council is committed to providing a welcoming and positive experience for all, regardless of background, culture, nationality, sexual orientation, gender identity or accessibility needs.

8.16. Reporting Unethical Behaviour

Ethical behaviour is an integral part of responsible, effective and accountable government. We acknowledge Council's obligations under the *Public Interest Disclosures Act 2012* to facilitate the making of disclosures of improper conduct by public officers and public bodies, including Council, its employees and Councillors.

We will immediately report to the Chief Executive Officer and/or appropriate integrity body, in line with the Council's Public Interest Disclosures Procedures, any suspected, potential or actual fraudulent, criminal, unethical, corrupt or other unacceptable behaviour that comes to our knowledge. We will participate as required to the best of our ability in any subsequent investigation whether undertaken internally or externally.

8.17. Media and Communications

Councillors have an obligation to effectively and satisfactorily communicate the decisions of Council and to respond to the community as required. To ensure that clear and consistent messages are communicated, the Council's Communications Policy sets out the management of media enquiries, release of information and nominated spokespersons.

Whilst it is understood that it is acceptable for an individual Councillor to publicly state that they did or did not vote in favour of any Council decision (made in open session) and the reasons, each Councillor agrees that this is to be done in a manner which is respectful of Council.



We will:

- respect the roles of Council's official spokespersons
- respect Council's decisions by not actively undermining any decisions which have been made
- not bring Council into disrepute through any of our words or actions
- not speak on behalf of Council without authority
- ensure any personal opinions or views we express publicly are identified as our own and not those of Council
- ensure any communications we make are not offensive, derogatory, insulting or otherwise damage the reputation of Council.

8.18. Use of Council Information

We acknowledge that information which is 'confidential information' within the meaning of section 3 and section 125 of the Act, and Chapter 6 of the Governance Rules may not be disclosed by us except in certain specified circumstances (refer Appendix 1).

We understand that Council information may also be subject to other legislation including the *Health Records Act 2001*, *Privacy and Data Protection Act 2014* and *Freedom of Information Act 1982*. We understand that all briefing material provided to Councillors shall be considered confidential unless that information is otherwise made publicly available by resolution of Council or the Chief Executive Officer.

We will comply with any legislative provisions and Council policies concerning our access to, use of, or disclosure of Council information, whether confidential or otherwise.

8.19. Land Use Planning, Development Assessment and Other Regulatory Functions

The safety and integrity of Council and Councillors in performance of their duty is of primary importance.

We recognise the separation of our roles and responsibilities from those of the Chief Executive Officer and Council officers and as such will abstain from involvement in functions such as the issuing of permits (unless referred to Council for a formal resolution), the consideration of fines, prosecutions and other similar regulatory functions of the Council.

When proposing to meet with a planning permit applicant, either for the purpose of discussing the application or where the application is likely to become controversial, we will seek a meeting via the Planning Manager to ensure a Council planning officer is present.

9. Dispute Resolution Process

9.1. Purpose

This part describes the processes for Councillors who wish to report and resolve a dispute with another Councillor under the Code. Councillors recognise that the democratic process of local government involves holding, and expressing, different and sometimes opposing viewpoints. It is a normal, and vital, function of this process that these different views are shared in a considered and informed way. Although all Councillors strive to engage in positive, constructive and respectful interactions, conflict and/or disputes may arise.



All Councillors recognise that they hold an individual and collective responsibility to resolve disputes in a proactive, positive and courteous manner before they are escalated, to avoid such disputes threatening the effective operation of Council.

The primary purpose of an internal resolution procedure is to provide Councillors with support and mechanisms to resolve conflicts and disputes in a manner that enables them to move forward and establish and maintain effective working relationships. The procedure also provides avenues and guidance for escalating more serious issues and allegations where required.

This procedure:

- is not intended to resolve differences in policy or decision making, which are appropriately resolved through discussion and voting in council and committee meetings
- does not include a complaint made against a Councillor or Councillors by a member or members of Council staff, or by any other person, or a “disclosure” under the *Public Interest Disclosures Act 2012*.

9.2. Scope

This procedure operates alongside, and does not displace, any external avenues provided for by legislation for the reporting and resolution of issues and disputes.

For the purposes of this part:

- This procedure does not deal with allegations of criminal misconduct as they are envisaged to be raised with Victoria Police or other relevant mechanisms.
- Nothing in this procedure prevents an individual Councillor with a specific issue or dispute from pursuing other avenues available to them under the law.

Where members of the public would like to raise a complaint against a Councillor for a possible breach or offence under the Act or this Code, this may be directed to the Local Government Inspectorate or the Colac Otway Shire Councillor Conduct Officer. For the avoidance of doubt, a member of the public may raise a formal complaint through any available channel external to Council as provided by law.

In particular, some allegations of Councillor *misconduct* under this Code may also constitute *serious misconduct* under the Act. In these instances, it is open to Council, a Councillor, or a group of Councillors, to make an application for a Councillor Conduct Panel. For allegations of gross misconduct, Council, a Councillor(s) or members of the public can raise complaints to the Local Government Inspectorate.

9.3. Responsibilities

9.3.1. Mayor and Deputy Mayor

The Mayor and Deputy Mayor have a responsibility to:

- establish and promote appropriate standards of conduct
- support good working relations between Councillors
- support Councillors in dispute resolution.



9.3.2. *Councillor Conduct Officer*

The Councillor Conduct Officer has a responsibility to:

- assist Council in the implementation and conduct of the internal resolution procedure
- assist the Principal Councillor Conduct Registrar to perform the functions specified in section 149 of the Act.

9.3.3. *Chief Executive Officer*

The Chief Executive Officer has a responsibility to:

- ensure that support and assistance is available to all Councillors where it is required
- take all reasonable steps to ensure the consistent and accountable application of this policy across Council
- comply with all relevant legislation as the senior officer within Council administration.

9.3.4. *Councillors*

Councillors as defined in this section have a responsibility to:

- co-operate with any investigation into, or arbitration of, a complaint made under this procedure
- maintain confidentiality regarding any complaint.

9.4. **Informal Internal Resolution Between Parties to a Dispute**

9.4.1. *Discussion*

Before commencing a formal dispute resolution process, the Councillors who are parties to a dispute are encouraged to use their best endeavours to resolve their issue or dispute in a courteous and respectful manner between themselves, stop any behaviour that is causing issues, and to avoid the issue escalating and threatening the effective operation of Council.

Where the issue or dispute remains unresolved or where the circumstances make informal resolution inappropriate, the parties may resort to Council's internal dispute resolution processes set out below.

9.5. **Formal Internal Resolution Between Parties to a Dispute**

9.5.1. *Interpersonal Disputes and Alleged Contravention of the Councillor Code of Conduct*

Interpersonal disputes between Councillors involve conflict where there may be a breakdown in communication, a misunderstanding, a disagreement between Councillors, or strained working relationships. Disputes may also relate to an alleged contravention of the Code.

Interpersonal disputes between Councillors or alleged contraventions of the Code may be managed via:

- a resolution discussion (facilitated by the Mayor or Deputy Mayor)
- mediation with an external mediator (via application to the Councillor Conduct Officer)

9.5.1.1. *Internal Resolution Discussion*

Where Councillors who are in dispute have not been able to resolve their dispute informally between themselves, a party may request in writing that the Mayor or Deputy Mayor (the 'Convenor') convene a confidential meeting of the parties to discuss the dispute. The Councillor



requesting the meeting is to provide the Convenor with the name of the other Councillor and the details of the dispute in writing. They should also notify the other Councillor of the request and provide a copy of the written request to them.

The Convenor or the Councillor Conduct Officer is to ascertain whether or not the other party is prepared to attend the meeting. If the other Councillor is not prepared to attend the meeting, the Convenor is to advise the party seeking the meeting. No further action is required of the Convenor.

If the other Councillor consents to a meeting, the Convenor is to hold a confidential meeting of the parties.

Unless one or both parties are unavailable, this should be arranged within ten working days of receipt of the meeting request.

The Convenor may provide the parties with guidelines in advance of the meeting or at the meeting, to help facilitate the meeting. If the parties cannot resolve the dispute at the meeting, a further meeting may be convened.

The role of the Convenor at the meeting is to assist the parties to resolve the dispute. In the process of doing this they may provide guidance about what is expected of a Councillor including in relation to the role of a Councillor under section 28 of the Act and the Code. The Convenor is to document any agreement reached at the meeting. Copies of the agreement are to be provided to both parties and a copy kept by the Councillor Conduct Officer. Where the dispute remains unresolved, a party may request mediation, or make an application for arbitration (where alleged contravention of the Councillor Conduct Standards apply).

9.5.1.2. Internal Independent Mediation

A Councillor or a group of Councillors may request that their dispute be referred to mediation.

The mediation would be conducted by an external accredited mediator.

The party seeking the mediation is to notify the other party of the request and details of the dispute in writing at the same time that it is submitted to the Councillor Conduct Officer. The Councillor Conduct Officer is to ascertain (in writing) whether or not the other Councillor is prepared to participate in the mediation.

If the Councillor declines to participate in the mediation, they are to provide their reasons for not doing so in writing to the Councillor Conduct Officer. These reasons may be taken into account if the matter is subsequently the subject of an application for a Councillor Conduct Panel.

If the other party agrees to participate in mediation, the Councillor Conduct Officer is to advise the party seeking the mediation, the Mayor and Chief Executive Officer.

The Councillor Conduct Officer will engage the services of an external mediator to conduct the mediation at the earliest opportunity. All parties will cooperate with the dispute resolution process and provide reasonable assistance to the external mediator and the Councillor Conduct Officer.

If the parties cannot resolve the dispute at the mediation meeting, a further meeting may be convened with the consent of both parties. The mediator is to document any agreement reached. Copies of the agreement are to be provided to both parties and the Councillor Conduct Officer.



9.5.2. *Internal Arbitration Process for Breaches of the Prescribed Standards of Conduct*

The internal arbitration process applies to any breach by a Councillor of the prescribed standards of conduct.

An internal arbitration involves a party (the Applicant) to a dispute requesting the Principal Councillor Conduct Registrar to appoint an impartial third party (the Arbiter) to make findings in the relation to allegations concerning another Councillor(s) (the Respondent) and whether they have engaged in misconduct under the Act.

An application for an internal arbitration process to make a finding of *misconduct* against a Councillor can be made by:

- Council following a resolution of Council; or
- a Councillor or a group of Councillors.

The application must:

- specify the name of the Councillor alleged to have breached the conduct standards
- specify the clause of the conduct standards in the *Local Government (Governance and Integrity) Regulations 2020* that the Councillor is alleged to have breached
- specify the misconduct that the Councillor is alleged to have engaged in that resulted in the breach of the conduct standards
- include evidence in support of the allegation
- name the Councillor appointed to be their representative where the application is made by a group of Councillors
- be signed and dated by the Applicant or the Applicant's representative
- be made within three months of the alleged misconduct occurring
- be given to the Principal Councillor Conduct Registrar in the manner specified by the Principal Councillor Conduct Registrar in any guidelines published under section 149(1)(c) of the Act.

After receiving an application, the Councillor Conduct Officer will provide the application to the Councillor who is the subject of the application.

On receiving an application, the Principal Councillor Conduct Registrar will:

- advise the Chief Executive Officer (and the Mayor as appropriate) of the application without undue delay
- identify an Arbiter to hear the application
- obtain from the Arbiter written advice that they have no conflict of interest in relation to the Councillors involved
- notify the parties of the name of the proposed Arbiter and provide them with the opportunity (two working days) to object to the person proposed to be the Arbiter
- consider the grounds of any objection and appoint the proposed Arbiter or identify another Arbiter
- provide a copy of the Application to the Arbiter as soon as practicable after the opportunity for the parties to object to an Arbiter has expired
- after consultation with the Arbiter, advise the Applicant and the Respondent of the time and place for the hearing
- attend the hearing(s) and assist the Arbiter in the administration of the process.



The Principal Councillor Conduct Registrar, after examining an application, will appoint an Arbiter to Council to hear the matter if satisfied that:

- the application is not frivolous, vexatious, misconceived or lacking in substance.
- there is sufficient evidence to support an allegation of a breach of the Councillor Code of Conduct as specified in the application.

In identifying an Arbiter to hear the application, the Principal Councillor Conduct Registrar will select an Arbiter who is suitably independent and able to carry out the role fairly.

The Arbiter must be selected from a panel of eligible persons established by the Secretary to conduct an internal arbitration process.

The role of the Arbiter includes:

- consider an application alleging a contravention of the prescribed standards of conduct
- make findings in relation to the application
- provide a written statement of reasons supporting the findings to the parties at the same time as providing the findings to Council
- recommend an appropriate sanction or sanctions where the Arbiter makes a finding of misconduct against a Councillor.

An Arbiter:

- may find that a Councillor who is a Respondent to an application has not engaged in misconduct
- may find that a Councillor has engaged in misconduct
- may hear each party to the matter in person or solely by written or electronic means of communication
- is not bound by the rules of evidence and may be informed in any manner the Arbiter sees fit
- may at any time discontinue the hearing if the Arbiter considers that the application is vexatious, misconceived, frivolous or lacking in substance or the applicant has not responded, or has responded inadequately, to a request for further information
- will suspend the process during the election period for a general election
- must refer the matter in writing to the Principal Councillor Conduct Registrar if the Arbiter believes that the conduct that is the subject of the application for an internal arbitration process appears to involve *serious misconduct* and would more appropriately be dealt with as an application to the Councillor Conduct Panel under section 154 of the Act.

The Arbiter is to provide a copy of his or her findings and the statement of reasons to:

- Council
- The applicant or applicants
- The Councillor who is the subject of the allegation.
- The Principal Councillor Conduct Registrar.

A copy of the Arbiter's decision and statement of reasons must be tabled at the next Council meeting after Council has received the copy of the Arbiter's decision and statement of reasons and recorded in the minutes of the meeting.

If the Arbiter's decision and statement of reasons contains any confidential information, the confidential information must be redacted before submission to the Council meeting.



If an Arbiter has made a finding of *misconduct* the Arbiter may do any one or more of the following:

- direct the Councillor to make an apology in a form or manner specified by the Arbiter
- suspend the Councillor from the office of Councillor for a period specified by the Arbiter not exceeding one month
- direct that the Councillor be removed from any position where the Councillor represents the Council for the period determined by the Arbiter
- direct that the Councillor is removed from being the chair of a delegated committee for the period determined by the Arbiter
- direct a Councillor to attend or undergo training or counselling specified by the Arbiter.

A Councillor will cooperate with the arbitral process and provide reasonable assistance to the Arbiter.

An application cannot be made for an internal resolution by arbitration during the election period for a general election. Any internal resolution procedure that is in progress is to be suspended during the election period for a general election.

9.5.3. Failure to Participate in Internal Arbitration Process

A Councillor who does not participate in the internal arbitration procedure may be guilty of *serious misconduct*.

9.6. Application to Councillor Conduct Panel

Councillor Conduct Panels may hear an application that alleges *serious misconduct* by a Councillor.

An application for a Councillor Conduct Panel to make a finding of *serious misconduct* against a Councillor may be made by:

- The Council following resolution of the Council to do so;
- A Councillor or group of Councillors; or
- The Chief Municipal Inspector.

An application must be made within 12 months of the alleged serious misconduct occurring.

Applications of serious misconduct are reviewed by the Principal Conduct Registrar and are the subject of a Council Conduct Panel (CPP) process of review.



Appendix 1 – Definitions

Chief Executive	The Chief Executive Officer of the Colac Otway Shire Council
Chief Municipal Inspector	The Chief Municipal Inspector is responsible for investigating and prosecuting possible breaches and offences under the Local Government Act 2020, investigating allegations of Councillor misconduct, serious misconduct and gross misconduct, making an application for a Councillor Conduct Panel to make a finding of serious misconduct against a Councillor and making an application to the Victorian Civil and Administrative Tribunal for a finding of gross misconduct by a Councillor.
Conflict of Interest	A Councillor has: <ul style="list-style-type: none"> • a general conflict of interest in a matter if an impartial, fair minded person would consider that the person's private interests could result in that person acting in a manner that is contrary to their public duty. • a material conflict of interest in respect of a matter if an affected person would gain a benefit or suffer a loss depending on the outcome of the matter.
Conduct Standards	The standards of Councillor conduct prescribed under Schedule 1 to the Local Government (Governance and Integrity) Regulations 2020.
Councillor	All references to 'Councillor' include the Mayor, Deputy Mayor and elected members of the Colac Otway Shire Council except as expressly provided.
Councillor Conduct Panel	A panel established under the Local Government Act 2020 to hear applications and make findings of alleged misconduct or serious misconduct by a Councillor.
Employee	An employee of Council includes all members of staff, contractors and volunteers under the direct control or supervision of the Colac Otway Shire Council.
Gross Misconduct	'Gross misconduct' by a Councillor means behaviour that demonstrates that a Councillor is not of good character or is otherwise not a fit and proper person to hold the office of Councillor, including behaviour that is sexual harassment and that is of an egregious nature.
Improper Conduct	'Improper conduct' includes a failure to disclose a conflict of interest, a breach of confidentiality, the improper direction or influence of staff, the



	improper use of Council resources, or a breach of Council policy under the Code of Conduct by a Councillor.
Misconduct	<i>Misconduct</i> by a Councillor means any breach by a Councillor of the prescribed conduct standards included in this Councillor Code of Conduct.
Councillor Conduct Officer	A person appointed by the Chief Executive Officer to assist Council in implementing its internal arbitration process.
Principal Councillor Conduct Registrar	The Principal Councillor Conduct Registrar receives applications for the establishment of Councillor Conduct Panels under the Local Government Act 2020.
Secretary	Secretary to the Department of Environment, Land, Water and Planning
Confidential Information	<p>Confidential information is defined under section 3(1) of the Local Government Act 2020.</p> <p>(a) Council business information, being information that would prejudice the Council's position in commercial negotiations if prematurely released;</p> <p>(b) security information, being information that if released is likely to endanger the security of Council property or the safety of any person;</p> <p>(c) land use planning information, being information that if prematurely released is likely to encourage speculation in land values;</p> <p>(d) law enforcement information, being information which if released would be reasonably likely to prejudice the investigation into an alleged breach of the law or the fair trial or hearing of any person;</p> <p>(e) legal privileged information, being information to which legal professional privilege or client legal privilege applies;</p> <p>(f) personal information, being information which if released would result in the unreasonable disclosure of information about any person or their personal affairs;</p> <p>(g) private commercial information, being information provided by a business, commercial or financial undertaking that—</p> <p>(i) relates to trade secrets; or</p> <p>(ii) if released, would unreasonably expose the business, commercial or financial undertaking to disadvantage;</p> <p>(h) confidential meeting information, being the records of meetings closed to the public under section 66(2)(a);</p>



	<p>(i) internal arbitration information, being information specified in section 145;</p> <p>(j) Councillor Conduct Panel confidential information, being information specified in section 169;</p> <p>(k) information prescribed by the regulations to be confidential information for the purposes of this definition;</p> <p>(l) information that was confidential information for the purposes of section 77 of the <i>Local Government Act 1989</i>.</p> <p>Note: <i>In the interests of transparency, Council may, by resolution, determine to release information to the public even though it is Confidential Information. Refer to Council's Public Transparency Policy for more detail.</i></p>
Vilification	Vilification is behaviour that incites physical harm or hatred, serious contempt, revulsion or severe ridicule of a person or group because of their race or religion. It is unlawful conduct
Victimisation	Victimisation is subjecting, or threatening to subject, someone to reprisal or detriment because they have asserted their rights under equal opportunity law, made a complaint, helped someone else to make a complaint, or refused to do something because it would be discrimination, sexual harassment or victimisation
Bullying	<p>For the purposes of this Code, "bullying behaviour" is any behaviour in which:</p> <ul style="list-style-type: none"> • a person or a group of people repeatedly behaves unreasonably towards another person or a group of persons • the behaviour creates a risk to health and safety. <p>Bullying behaviour may involve, but is not limited to, any of the following types of behaviour:</p> <ul style="list-style-type: none"> • aggressive, threatening or intimidating conduct • belittling or humiliating comments • spreading malicious rumours • teasing, practical jokes or 'initiation ceremonies' • exclusion from work-related events • unreasonable work expectations, including too much or too little work, or work below or beyond a worker's skill level • displaying offensive material • pressure to behave in an inappropriate manner. <p>The following are not bullying behaviours:</p>



	<ul style="list-style-type: none"> • maintaining reasonable workplace goals and standards • legitimately exercising a regulatory function • legitimately implementing a council policy or administrative processes.
<p>Serious misconduct</p>	<p><i>Serious misconduct</i> by a Councillor means:</p> <ul style="list-style-type: none"> • failure by a Councillor to comply with the Council's internal arbitration process • failure by a Councillor to comply with a direction given to the Councillor by an Arbiter under section 147 • the failure of a Councillor to attend a Councillor Conduct Panel hearing in respect of that Councillor. • failure of a Councillor to comply with a direction of a Councillor Conduct Panel • continued or repeated misconduct by a Councillor after a finding of misconduct has already been made in respect of the Councillor by an Arbiter or by a Councillor Conduct Panel under section 167(1)(b) of the <i>Local Government Act 2020</i> • bullying by a Councillor of another Councillor or a member of Council staff • conduct by a Councillor that is conduct of the type that is sexual harassment of a Councillor or member of Council staff • the disclosure by a Councillor of information the Councillor knows or should reasonably know, is confidential information • conduct by a Councillor that contravenes the requirement that a Councillor must not direct, or seek to direct, a member of Council staff • the failure by a Councillor to disclose a conflict of interest and to exclude themselves from the decision making process when required to do so in accordance with the <i>Local Government Act 2020</i>.
<p>The Act</p>	<p>All references to 'the Act' are to the <i>Local Government Act 2020</i>.</p>



Appendix 2 - Overarching Governance Principles

A Council must in the performance of its role give effect to the overarching governance principles. (Section 8 & 9 of the Local Government Act 2020).

- 1 The following are the overarching governance principles—
 - (a) Council decisions are to be made and actions taken in accordance with the relevant law;
 - (b) priority is to be given to achieving the best outcomes for the municipal community, including future generations;
 - (c) the economic, social and environmental sustainability of the municipal district, including mitigation and planning for climate change risks, is to be promoted;
 - (d) the municipal community is to be engaged in strategic planning and strategic decision making;
 - (e) innovation and continuous improvement is to be pursued;
 - (f) collaboration with other Councils and Governments and statutory bodies is to be sought;
 - (g) the ongoing financial viability of the Council is to be ensured;
 - (h) regional, state and national plans and policies are to be taken into account in strategic planning and decision making;
 - (i) the transparency of Council decisions, actions and information is to be ensured.

- 2 In giving effect to the overarching governance principles, a Council must take into account the following supporting principles—
 - (a) the community engagement principles;
 - (b) the public transparency principles;
 - (c) the strategic planning principles;
 - (d) the financial management principles;
 - (e) the service performance principals.



Appendix 3 – Undesirable Behaviours

To support and foster good working relationships, Councillors agree they do not want to see the following behaviours:

- Personal vindictiveness
 - Disrespect
 - Hostility
 - Aggression
- Closed mindedness to other people's opinions
- Manipulativeness, game playing and dishonesty
- Rude/abusive behaviour
- Badgering, belittling and put downs
- Being underprepared for meetings.



Appendix 4 - Relevant Legislation

Local Government Act 2020 (Vic)

Local Government (Governance and Integrity) Regulations 2020 (Vic)

Child Wellbeing and Safety Act 2005 (Vic)

Equal Opportunity Act 2010 (Vic)

Occupational Health and Safety Act 2004 (Vic)

Public Interest Disclosures Act 2012 (Vic)

Sex Discrimination Act 1984 (Cth)

Victorian Charter of Human Rights and Responsibilities Act 2006 (Vic)



Appendix 5 - Relevant Council Policies

Councillor and Staff Interactions – Chief Executive Officer Protocols

Fraud and Corruption Control Policy

Public Interest Disclosures Procedures

Governance Rules

Election Period Policy (incorporated in the Governance Rules)

Gifts, Benefits and Hospitality Policy

Public Transparency Policy

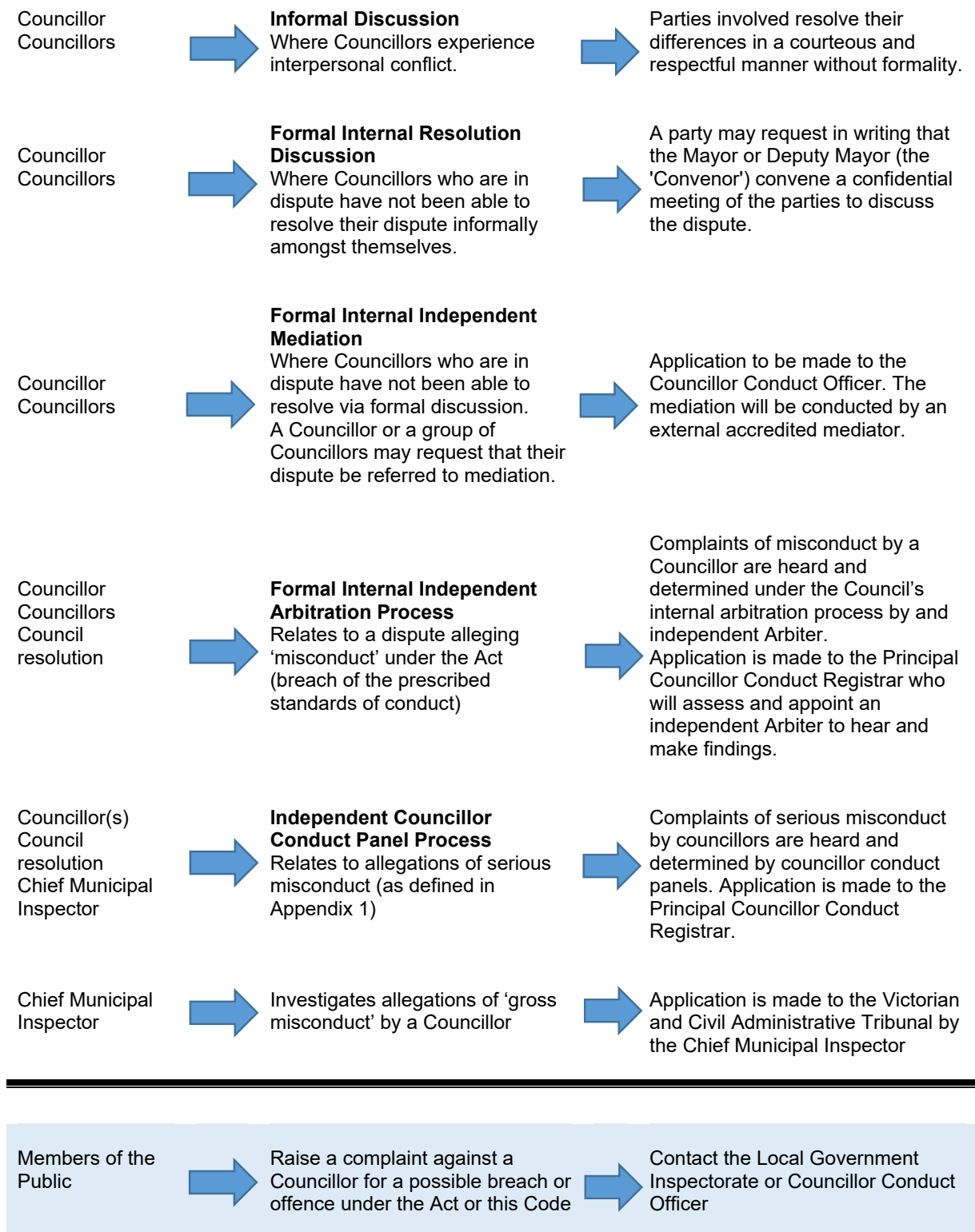
Council Expenses Policy

Information Privacy Policy

Complaints Policy



Appendix 6 – Dispute resolution flowchart



Item: 10.12

Governance Rules and Public Transparency Policy Review - Consideration of Submissions and Adoption

OFFICER	Marlo Emmitt
CHIEF EXECUTIVE OFFICER	Anne Howard
DIVISION	Executive
ATTACHMENTS	<ol style="list-style-type: none">1. Feedback and Responses for Governance Rules [10.12.1 - 3 pages]2. Table of changes to Governance Rules [10.12.2 - 4 pages]3. Marked up changes to Governance Rules [10.12.3 - 46 pages]4. Feedback and Responses for Public Transparency Policy [10.12.4 - 1 page]5. Marked up changes to Public Transparency Policy [10.12.5 - 11 pages]

1. PURPOSE

The purpose of this report is for Council to consider the submissions received and make a decision in relation to the revised Governance Rules and Public Transparency Policy.

2. EXECUTIVE SUMMARY

At its scheduled meeting held on 26 August 2020, Council adopted the Governance Rules (Rules) and Public Transparency Policy (Policy) in accordance with the requirements of the *Local Government Act 2020*. Council also:

1. Noted its previous resolution of 24 June 2020, recommending that the Rules be reviewed within 12 months of adoption, with Council to consider a report in April 2021 in relation to commencing a review.
2. Resolved at the 26 August 2020 meeting, that the Policy be reviewed within 12 months of adoption, with Council to consider a report in April 2021 in relation to commencing a review.

Workshops were held at Briefing sessions with Councillors to review the Rules and Policy on the following dates:

1. 21 April 2021
2. 14 July 2021
3. 13 October 2021
4. 20 October 2021.

At its meeting on 24 November 2021, Council resolved to issue the revised Rules and Policy for public consultation, for a period of not less than six weeks, and hear any verbal submissions at a meeting of the Submissions Committee at a time and date to be determined.

Both documents were promoted on the 'Have Your Say' section of Council's website, via the Colac Herald, community newsletters and Council's social media platforms. The consultation period commenced on 26 November 2021 and concluded on 14 January 2022.

One written submission was received for each document, a summary of which is provided at Attachment 1. The submitter was heard by the Submissions Committee at its meeting on Wednesday 13 April 2022.

3. RECOMMENDATION

That Council:

1. ***Thanks the submitter for their written submissions and acknowledges and notes the verbal comments made in support of written submissions at the Submissions Committee meeting held on 13 April 2022.***
2. ***Adopts the revised Governance Rules (as at Attachment 3).***
3. ***Resolves, in response to the submission, to adopt the revised Public Transparency Policy (as at Attachment 4), with the following change:***
 - 3.1. ***Replace the words "... Part 5 of this Policy", with the words "... Part 6 of this Policy" under the definition of "Public Transparency Principles" in Part 4.***
4. ***Declares that the Governance Rules and Public Transparency Policy adopted through this resolution come into force the day following the date of this resolution.***
5. ***Authorises the officers to make any necessary alterations to the numbering and appendices to ensure consistency and accuracy within the adopted documents.***

4. KEY INFORMATION

Governance Rules

Under section 60 of the *Local Government Act 2020*, a Council must develop, adopt and keep in force Governance Rules for or with respect to the conduct of Council and delegated committee meetings, form and availability of meeting records, election of the Mayor and Deputy Mayor, appointment of an Acting Mayor, an election period policy, conflict of interest disclosure procedures for Councillors and staff and any other matters prescribed by the regulations.

The submission received provides feedback on the following seven topics:

1. Question time duration
2. Discussion on question asked
3. Unasked questions
4. Councillors answering questions
5. Electronic petitions and Council action on petitions
6. Community participation in Council decision
7. Citizens' Agenda Item.

Public Transparency Policy

Under section 57 of the *Local Government Act 2020*, a Council must adopt and maintain a Public Transparency Policy which gives effect to the public transparency principles, describes the ways in which Council information is to be made publicly available, specify which information must be publicly available and include any other matters prescribed by the regulations.

The submission received provides feedback on the following three topics:

1. Definitions
2. Community engagement in the Council decision-making process
3. Councillors to explain reasons for their decisions and opportunity be given to public to counter the reasons before vote is taken.

The feedback has been reviewed and summarised and an officer response provided.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

The Governance Principles have been considered throughout the Rules and Policy review process, with the following principles being regarded as having particular relevance:

- s9(2)(a) – Council decisions are to be made and actions taken in accordance with the relevant law. The revised Rules and Policy have been reviewed in accordance with the requirements of section 60 of the *Local Government Act 2020*.
- s(9)(2)(i) the transparency of Council decisions, actions and information is to be ensured. The Rules and Policy reviews have undergone a comprehensive public exhibition and community engagement process. The Submissions Committee meeting is being held to give people an opportunity to verbally address the Committee in support of their written submissions.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

The Rules and Policy have been developed and reviewed to ensure compliance with section 60 of the *Local Government Act 2020*.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

Not applicable.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

In accordance with Council's Community Engagement Policy, the revised Rules and Policy were exhibited for public consultation, for a period of not less than six weeks. The consultation period commenced on 26 November 2021 and concluded on 14 January 2022. A meeting of the Submissions Committee was subsequently scheduled for 13 April 2022 to hear any person wishing to speak at the Committee meeting in support of their written submission.

Public Transparency (s58 LGA 2020)

Public transparency has been ensured through the public exhibition and community engagement process.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 4 – Strong Leadership and Management

4.1 We commit to a program of best practice and continuous improvement.

Financial Management (s101 Local Government Act 2020)

Not applicable.

Service Performance (s106 Local Government Act 2020)

Not applicable.

Risk Assessment

There are no identified Workplace Health and Safety implications associated with this report.

Communication/Implementation

The outcome of the Rules and Policy reviews will be posted on Council's website and individuals who made a submission during the exhibition period will be informed of the outcome separately.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Summary of submission received

Governance Rules

Summary of feedback	Officer response
<p><u>Question time duration</u></p> <p>Recommend the time allocated for public questions in Rule 56.3 be extended from 30 minutes to 1 hour to accommodate more questions, should there be any. This also applies to unscheduled meetings and time limits outlined in Rule 56.8.</p> <p>Council meetings are the only opportunity that the community is guaranteed an audience with all/most of the Councillors present for their issues/concerns to be addressed.</p>	<p>Extending public question time in the Governance Rules beyond 30 minutes is not recommended. If required, Public Question time may be extended at the discretion of the Chair.</p> <p>Unscheduled meetings are essentially for urgent matters that cannot be held over until the next scheduled meeting. Agendas are typically small for unscheduled meetings. It is therefore recommended that only questions relating to the items on the agenda be permitted during these meetings, with a reduced time allocation of 15 minutes (as proposed in the revised Governance Rules).</p>
<p><u>Discussion on question asked</u></p> <p>Recommend the words ‘no discussion allowed’ be removed from Rule 56.19, to allow the questioner to seek further clarification on the answer provided. Unless Council proposes to provide an alternative forum for members of the community to ask questions/have discussion.</p>	<p>Removing the words ‘no discussion allowed’ from Rule 56.16 is not recommended. Formal meetings of Council are not the appropriate forum for ‘extended dialogue’ between elected officials and members of the public, which may be perceived as debate.</p> <p>Ongoing discussion may compromise future decisions if it creates perception of bias.</p> <p>Council is considering re-establishing the ‘Community Conversations’ sessions, or a variation thereof, now that pandemic restrictions have been eased.</p>
<p><u>Unasked questions</u></p> <p>The absence of the person submitting a question should not be a reason to not ask or answer their question (once the questions of those present are addressed).</p> <p>Questions not asked due to time constraints should be published on Council’s website together with the written response provided. Questions asked may be of interest to the broader community, add to the discussion and lead to Council being more informed prior to making a decision.</p>	<p>The sub-rule giving the Chair the discretion to refrain from reading out a question if a person is not physically in the gallery has been removed. This was deliberate to avoid disenfranchising people who were not able to attend the meeting in person.</p> <p>Questions not asked/read out due to time constraints do not form part of the formal Council meeting. A response will be provided to the individual in writing after the meeting.</p>
<p><u>Councillors answering questions</u></p> <p>Believe the rule that Councillors will not answer questions runs contrary to the transparency and accountability provisions of the Act as well as Council’s Public Transparency Policy.</p> <p>While it makes sense that operational questions are directed to staff for a response, Councillors should respond to questions about their decisions and reasons for them (as staff are not in a position to do so).</p>	<p>Questions should not be directed to individual Councillors, but to the collective Council group. Formal Council meetings are not the forum for members of the public to question Councillors about their decisions or individual opinions and/or reasons for them.</p> <p>The contact details of all individual Councillors are publicly available and people are encouraged to contact individual Councillors directly if they want to discuss any matter.</p>

<p><u>Rule 57: Petitions</u></p> <p>Do not believe full consideration has been given to the variations in process between electronic and written petitions.</p> <p>Rule 57.4 requires the address of every petitioner and proprietary petition websites do not release the addresses of signatories to a petition (though some do provide the suburb and post code, if this would suffice)?</p> <p>Rule 57.4 requires a petitioner’s signature, so need clarity around whether a typed name would meet the definition of an electronic signature.</p> <p>Rule 57.5 requires a signature to appear on a page that includes the whole text of the petition, but it may not be possible to print the petition out in the format required by the rule.</p> <p>Recommend Council set up an electronic petition page similar to the one in operation in Australian Parliament House, as believe it is more efficient, reliable and easy to manage.</p>	<p>Full consideration has been given to the variation in process, but including every detail in the Governance Rules makes for a long document.</p> <p>Clause 57.9 of the revised Governance Rules addresses this insofar as it says ‘to the satisfaction of the Chief Executive Officer’.</p> <p>Clause 57.9 of the revised Governance Rules addresses this insofar as it says ‘to the satisfaction of the Chief Executive Officer’.</p> <p>Clause 57.9 of the revised Governance Rules addresses this insofar as it says ‘to the satisfaction of the Chief Executive Officer’.</p> <p>While this is a valuable suggestion, Council does not receive enough petitions to warrant spending the time and resources on creating an electronic petition page at this point in time.</p>
<p><u>Council action on petitions</u></p> <p>Propose the following additions to the rules governing petitions:</p> <ol style="list-style-type: none"> 1. To avoid any delays in action on petitions, a rule be included to specify a clear timeframe (preferably within one meeting of the petition being presented), when Council must act on the petition. 2. Prior to Council making a decision on a petition, the petition organisers must be given the opportunity to meet with <u>all</u> Councillors so as to provide clarification on and promote their petition. 3. In addressing the petition, any motion put forward by Councillors at a Council meeting must not serve to vary the essence of the petition. In addition, the petition organiser must be given the opportunity to address the motion if they so desire. 	<p>The practice is that the Council ‘receives the petition’ at the first Council meeting and brings a report back to the earliest meeting on next steps. The subject of the petition will determine the time in which Council may act on it. Do not recommend specifying a timeline, as suggested in point 1.</p> <p>Do not recommend including point 2 in the Governance Rules. The contact details of all individual Councillors are publicly available and petitioners are encouraged to contact individual Councillors directly if they want to discuss matters.</p> <p>Do not recommend including point 3 in the Governance Rules. Councillors may move any motion they choose to, and where a petition is concerned, there may be a need to achieve a ‘middle ground’, depending on the matter. Moreover, mandating that the petition organiser be given an opportunity to address the motion before the Council if they so desire is not recommended. If Councillors wish to ask the petitioner if the motion before the meeting meets their needs, then that is at the discretion of individual Councillors.</p>
<p><u>Community participation in council decisions</u></p> <p>This recommendation draws inspiration from the overarching principles outlined in section 9(2) of the <i>Local Government Act 2020</i>. In particular, those requiring Council to engage the community in strategic decision making and to pursue innovation and continuous improvement. Council should take advantage of technological advances and innovations</p>	<p>This is a valuable suggestion. There are many ways in which Council can engage with its community and the Communications team will be canvassing a variety of methods in the near future and will report back to Council on options and costs. This suggestion will be reviewed as one of the options.</p>

<p>and use technology to advance the 'demo' in democracy. Specifically by providing greater opportunities for the community to contribute towards Council decisions. This can be achieved through the use of mobile phones. This involves establishing a structured communications network (based on post codes) which enables targeted messaging and well as whole of shire messaging. This is an 'opt in' model and once the network is set up, as simple as sending a text message with a link.</p>	
<p><u>Citizen's agenda item</u></p> <p>Propose Council consider allowing room for one citizens' agenda item at Council meetings. This would provide community members with an opportunity to fast track pressing issues of interest to them and give Council insight into issues that are of interest to the community.</p>	<p>This is not recommended as part of the formal Council meeting. Council meetings are primarily a forum for Council's decision-making, and there should be no expectation that Councillors deal with 'on the run' decisions raised by the community.</p> <p>Council is considering re-establishing the 'Community Conversations' sessions, or a variation thereof, now that pandemic restrictions have been eased. This would be a more appropriate forum.</p>

Table of changes to Governance Rules

Document Reference	Summary of changes	Date discussed
Chapter 1 – Governance Framework Rule 1 - Context (Page 3)	Included the following additional reference documents: <ul style="list-style-type: none"> Public Transparency Policy Livestreaming and Recording Policy. 	Councillor Briefing 21 April 2021
Part A - Introduction Rule 3 - Definitions (Page 7)	<ul style="list-style-type: none"> Added definitions for 'Joint Letter' and 'Petitions' to provide more clarity. 	Councillor Briefing 21 April 2021
Part C – Meetings Procedure Division 1 – Notices of Meetings and Delivery of Agendas (Pages 10 and 11)	<ul style="list-style-type: none"> Rules 9 and 11 – addition of reference to Scheduled and Unscheduled Council meetings (fixed and not fixed). Rule 10 – reference added to cancelling meetings. Rule 11 – added that Council may by resolution call an unscheduled meeting. Rule 12 – defined 'reasonable notice' of meeting (seven days) and added wording around where extraordinary circumstances prevent giving 'reasonable notice' there is a requirement to minuted the reasons. New Rule 14 added (Availability of Council Meeting Documentation) to address availability of meeting documentation (to Councillors six days prior to meeting and members of the public five days prior to meeting). 	Councillor Briefing 21 April 2021
Part C – Meetings Procedure Division 2 - Quorums (Pages 11 and 12)	<ul style="list-style-type: none"> Sub-rule 16.1 – update to refer to correct Rule (15). Sub-rule 16.2 - added further reason where sub-rule 15.2 and 15.3 doesn't apply – where it is the intention of the Council for the meeting to lapse/not proceed and prior notice is given. New Rule 18 - added (Time Limits for Meetings) to address length of meetings and impact on decision making (includes adjournments/breaks). 	Councillor Briefing 21 April 2021 Councillor Briefing 13 and 20 October 2021
Part C – Meetings Procedure Division 3 – Business of Meetings (Pages 12 and 13)	<ul style="list-style-type: none"> Sub-Rule 20 amended to add in reference to 'consultation with the Mayor', in line with the requirements of section 18(h) of the <i>Local Government Act 2020</i>. Rule 21 amended to include the words 'through resolution of Council' as opposed to 'with the consent of Council'. It is a procedural motion. New Rule 22 added to introduce <i>En Bloc</i> voting (for meeting efficiency) and provide guidance around process and which items shouldn't be moved <i>En Bloc</i>. 	Councillor Briefing 21 April 2021 Councillor Briefing 13 October 2021

Attachment 10.12.2 Table of changes to Governance Rules

	<p>instances where Council meets on a day other than Wednesday).</p> <ul style="list-style-type: none"> Amended sub-Rule 56.21 – so that the Chair asks the Chief Executive Officer to determine the most appropriate staff member to respond to a question (Councillors will not respond to questions). Remove sub-Rule that gives the Chair the discretion to refrain from reading out a question if person not physically in public gallery. Information condensed and reordered more generally. 	
<p>Part C – Meetings Procedure Division 9 – Petitions and Joint Letters</p> <p>(Pages 29 and 30)</p>	<ul style="list-style-type: none"> Removed sub-Rules referring to Councillors presenting petitions/joint letters – not reflective of current practice. More guidance provided around electronic petitions and process generally. 	<p>Councillor Briefing 21 April 2021 and 20 October 2021</p>
<p>Part C – Meetings Procedure Division 10 - Voting</p> <p>(Page 32)</p>	<ul style="list-style-type: none"> Sub-Rule 64.1 - Removed reference to ‘maintaining a register’, dealt with in minutes of meeting. Removed example box/text – not necessary. 	<p>Councillor Briefing 20 October 2021</p>
<p>Part C – Meetings Procedure Division 11 - Minutes</p> <p>(Pages 32 to 35)</p>	<ul style="list-style-type: none"> Condensed the section on Confirmation of Minutes (too prescriptive). Removed requirement to record the names of Council staff present at the meeting (not necessary and time consuming for Governance) – prior sub-Rule 71.1.3. Limit to Executive and Governance Officers. Only a very brief summary of public questions and responses to be provided in the minutes – recording of meeting on YouTube if people want to refer to it. Sub-Rule 67.1.13. 	<p>Councillor Briefing 14 July 2021</p> <p>Councillor Briefing 20 October 2021</p>
<p>Part C – Meetings Procedure Division 14 – Suspension of Meetings Procedure</p> <p>(Pages 36)</p>	<ul style="list-style-type: none"> Changed reference from ‘standing orders’ to ‘meetings procedure’ – easier to understand for public. 	<p>Councillor Briefing 14 July 2021</p>
<p>Part C – Meetings Procedure Division 15 – Miscellaneous</p> <p>(Pages 36 and 37)</p>	<ul style="list-style-type: none"> Deleted old Rules 79 and 80 - never going to refer to the Standing Orders and Rules of Practice of the Upper House of the Victorian Parliament. Added new section ‘Recording Proceedings’ to refer to recording of meetings and authorisation to edit where comments are defamatory etc. 	<p>Councillor Briefing 14 July 2021</p>
<p>Chapter 3 – Meeting Procedure for Delegated Committees</p> <p>(Page 38)</p>	<ul style="list-style-type: none"> Added new Rule 1 to address the fact the Mayor can appoint a Councillor to be the Chair of a Delegated Committee (section 19(1)(a) of the <i>Local Government Act 2020</i>). Added new Rule 4 to make clear members of the public can address a delegated committee where the Instrument of Delegation permits. 	<p>Councillor Briefing 14 July 2021</p> <p>Councillor Briefing 20 October 2021</p>

Attachment 10.12.2 Table of changes to Governance Rules

	<ul style="list-style-type: none"> Added new Rule 5 to make clear there will be no public question time at Delegated Committee meetings. 	
Chapter 5 – Disclosure of Conflicts of Interest (Page 40)	<ul style="list-style-type: none"> Rule 1 – removed reference to the <i>Local Government Act 1989</i> because the relevant section has been repealed. Expanded definition (sub-Rule 3.1) of what a ‘meeting conducted under the auspices of Council’ means – so stand alone and people don’t have to refer elsewhere. 	Councillor Briefing 14 July 2021
Chapter 6 - Miscellaneous (Page 45)	<ul style="list-style-type: none"> Clause 2 – remove reference to <i>Local Government Act 1989</i> because relevant section has been repealed. Tidied up references to Chief Executive Officer ‘designating’ information as confidential (changed to ‘advise’). 	Councillor Briefing 14 July 2021



GOVERNANCE RULES

Adopted by Council: 26 August 2020

Effective: 1 September 2020



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GOVERNANCE RULES

Introduction

1. Nature of Rules

These are the Governance Rules of Colac Otway Shire Council, made in accordance with section 60 of the *Local Government Act 2020*.

2. Date of Commencement

These Governance Rules commence on 1 September 2020.

3. Contents

These Governance Rules are divided into the following Chapters:

Chapter	Name
Chapter 1	Governance Framework
Chapter 2	Meeting Procedure for Council Meetings
Chapter 3	Meeting Procedure for Delegated Committees
Chapter 4	Meeting Procedure for Community Asset Committees
Chapter 5	Disclosure of Conflicts Of Interest
Chapter 6	Miscellaneous
Chapter 7	Election Period Policy

4. Definitions

In these Governance Rules, unless the context suggests otherwise the following words and phrases mean:

Act means the *Local Government Act 2020*.

Chief Executive Officer includes an Acting Chief Executive Officer.

Community Asset Committee means a Community Asset Committee established under section 65 of the Act.

Council means Colac Otway Shire Council.

Council meeting has the same meaning as in the Act.

Delegated Committee means a Delegated Committee established under section 63 of the Act.

Mayor means the Mayor of Council.

Special Unscheduled Council Meeting means a Council meeting not fixed by Council.

these Rules means these Governance Rules.

Chapter 1 – Governance Framework

1. Context

These Rules should be read in the context of and in conjunction with:

- (a) the overarching governance principles specified in section 9(2) of the *Act*; and
- (b) the following documents adopted or approved by *Council*:
 - (i) Council Plan; ~~and~~
 - (ii) Councillor Code of Conduct;-
 - (iii) Public Transparency Policy; and
 - ~~(iii)~~(iv) Livestreaming and Recording of Council and Planning Committee Meetings Policy.

2. Decision Making

- (a) In any matter in which a decision must be made by *Council* (including persons acting with the delegated authority of *Council*), *Council* must consider the matter and make a decision:
 - (i) fairly, by giving consideration and making a decision which is balanced, ethical and impartial; and
 - (ii) on the merits, free from favouritism or self-interest and without regard to irrelevant or unauthorised considerations
- (b) *Council* must, when making any decision to which the principles of natural justice apply, adhere to the principles of natural justice (including, without limitation, ensuring that any person whose rights will be directly affected by a decision of *Council* is entitled to communicate their views and have their interests considered).
- (c) Without limiting anything in paragraph (b) of this sub-Rule:
 - (i) before making a decision that will directly affect the rights of a person, *Council* (including any person acting with the delegated authority of *Council*) must identify the person or persons whose rights will be directly affected, give notice of the decision which *Council* must make and ensure that such person or persons have an opportunity to communicate their views and have their interests considered before the decision is made;
 - (ii) if a report to be considered at a *Council meeting* concerns subject-matter which will directly affect the rights of a person or persons, the Report must record whether the person has or persons have been provided with an opportunity to communicate their views and have their interests considered;
 - (iii) if a report to be considered at a *Delegated Committee* meeting concerns subject-matter which will directly affect the rights of a person or persons, the Report must record whether the person has or persons have been provided with an opportunity to communicate their views and have their interests considered; and
 - (iv) if a member of Council staff proposes to make a decision under delegation and that decision will directly affect the rights of a person or persons, the member of Council staff must, when making that decision, complete a Delegate Report that records that notice of the decision to be made was given to the person or persons and such person or persons were provided with an opportunity to communicate their views and their interests considered.



Chapter 2 – Meeting Procedure for Council Meetings

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Part A – Introduction

1. Title

This Chapter will be known as the "Meeting Procedure Local Law".

2. Purpose of this Chapter

The purpose of this Chapter is to:

- 2.1 provide for the election of the Mayor and any Deputy Mayor;
- 2.2 provide for the appointment of any Acting Mayor; and
- 2.3 provide for the procedures governing the conduct of *Council meetings*.

3. Definitions and Notes

3.1 In this Chapter:

"*agenda*" means the notice of a meeting setting out the business to be transacted at the meeting;

"*Chair*" means the Chairperson of a meeting and includes a Councillor who is appointed by resolution to chair a meeting under section 61(3) of the *Act*;

"*joint letter*" means a formal application to Council in the form of a letter which has been signed by at least 12 people or executive/committee representatives from ten separate entities whose names and physical addresses also appear on the letter. A letter from a single entity or organisation that is signed by multiple parties from that organisation or entity will not be classed as a joint letter.

"*minute book*" means the collective record of proceedings of *Council*;

"*municipal district*" means the municipal district of *Council*;

"*notice of motion*" means a notice setting out the text of a motion, which it is proposed to move at the next relevant meeting;

"*notice of rescission*" means a *notice of motion* to rescind a resolution made by *Council*; ~~and~~

"*petition*" means a formal written application addressed to Council, submitted in printed or electronic format without erasure, signed or electronically endorsed by at least 12 people whose names and physical addresses also appear, and on which each page of the petition bears the wording of the whole of the petition; and

"*written*" includes duplicated, lithographed, photocopied, printed and typed, and extends to both hard copy and soft copy form, and *writing* has a corresponding meaning.

3.2 Introductions to Parts, headings and notes are explanatory notes and do not form part of this Chapter. They are provided to assist understanding.



Part B – Election of Mayor

Introduction: This Part is concerned with the annual election of the *Mayor*. It describes how the *Mayor* is to be elected.

4. Election of the *Mayor*

The *Chief Executive Officer* must facilitate the election of the *Mayor* in accordance with the provisions of the *Act*.

5. Method of Voting

The election of the *Mayor* must be carried out by a show of hands.

6. Determining the election of the *Mayor*

6.1 The *Chief Executive Officer* must open the meeting at which the *Mayor* is to be elected, and invite nominations for the office of *Mayor*.

6.2 Any nominations for the office of *Mayor* must be seconded by another Councillor.

6.3 Once nominations for the office of *Mayor* have been received, the following provisions will govern the election of the *Mayor*:

6.3.1 if there is only one nomination, the candidate nominated must be declared to be duly elected;

6.3.2 if there is more than one nomination, the Councillors present at the meeting must vote for one of the candidates;

6.3.3 in the event of a candidate receiving an absolute majority of the votes, that candidate is declared to have been elected;

6.3.4 in the event that no candidate receives an absolute majority of the votes, and it is not resolved to conduct a new election at a later date and time, the candidate with the fewest number of votes must be declared to be a defeated candidate. The Councillors present at the meeting must then vote for one of the remaining candidates;

6.3.5 if one of the remaining candidates receives an absolute majority of the votes, he or she is duly elected. If none of the remaining candidates receives an absolute majority of the votes, the process of declaring the candidates with the fewest number of votes a defeated candidate and voting for the remaining candidates must be repeated until one of the candidates receives an absolute majority of the votes. That candidate must then be declared to have been duly elected;

6.3.6 in the event of two or more candidates having an equality of votes and one of them having to be declared:

(a) a defeated candidate; and

(b) duly elected

the declaration will be determined by lot.

6.3.7 if a lot is conducted, the *Chief Executive Officer* will have the conduct of the lot and the following provisions will apply:



- (a) each candidate will draw one lot;
- (b) the order of drawing lots will be determined by the alphabetical order of the surnames of the Councillors who received an equal number of votes except that if two or more such Councillors' surnames are identical, the order will be determined by the alphabetical order of the Councillors' first names; and
- (c) as many identical pieces of paper as there are Councillors who received an equal number of votes must be placed in a receptacle. If the lot is being conducted to determine who is a defeated candidate, the word "Defeated" shall be written on one of the pieces of paper, and the Councillor who draws the paper with the word "Defeated" written on it must be declared the defeated candidate (in which event a further vote must be taken on the remaining candidates unless there is only one candidate remaining, in which case that candidate will be declared to have been duly elected).

7. Election of Deputy Mayor and Chairs of Delegated Committees

Any election for:

- 7.1 any office of Deputy Mayor; or
- 7.2 Chair of a *Delegated Committee*

will be regulated by Rules 4-6 (inclusive) of this Chapter, as if the reference to the:

- 7.3 *Chief Executive Officer* is a reference to the *Mayor*; and
- 7.4 *Mayor* is a reference to the Deputy Mayor or the Chair of the *Delegated Committee* (as the case may be).

8. Appointment of Acting Mayor

If *Council* has not established an office of Deputy Mayor and it becomes required to appoint an Acting Mayor, it can do so by:

- 8.1 resolving that a specified Councillor be so appointed; or
- 8.2 following the procedure set out in Rules 5 and 6 (inclusive) of this Chapter, at its discretion.



Part C – Meetings Procedure

Introduction: This Part is divided into a number of Divisions. Each Division addresses a distinct aspect of the holding of a meeting. Collectively, the Divisions describe how and when a meeting is convened, when and how business may be transacted at a meeting.

Division 1 – Notices of Meetings and Delivery of Agendas

9. Dates and Times of Meetings Fixed by Council (Scheduled Meetings)

Subject to Rule 11, Council must from time to time fix the date, time and place of all Council meetings.

10. Council May Cancel or Alter Meeting Dates

Council may cancel or change the date, time and place of any Council meeting which has been fixed by it and must provide reasonable notice of the change to the public.

11. ~~Special~~ Meetings Not Fixed by Council (Unscheduled Meetings)

11.1 The Council may be resolution, call an unscheduled meeting of the Council. The resolution must specify the date, time and place of the meeting and the business to be transacted.

~~11.1~~11.2 The Mayor or at least ~~three~~3 Councillors may by a written notice call an unscheduled~~Special~~ Council Mmeeting.

~~11.2~~11.3 The notice must specify the date and time of the unscheduled~~Special~~ Council Mmeeting and the business to be transacted.

~~11.3~~11.4 The Chief Executive Officer must convene the unscheduled~~Special~~ Council Mmeeting as specified in the notice.

~~11.4~~11.5 Unless all Councillors are present and unanimously agree to deal with any other matter, only the business specified in the written notice can be transacted at the Special~~unscheduled~~ Council Mmeeting.

12. Notice of Meeting

12.1 A notice of meeting, incorporating or accompanied by an agenda of the business to be dealt with, must be delivered or sent electronically to every Councillor for all Council meetings at least 48 hours before the meeting.

12.2 Notwithstanding sub-Rule 12.1, a notice of meeting need not be delivered or sent electronically to any Councillor who has been granted leave of absence unless the Councillor has requested the Chief Executive Officer in writing to continue to give notice of any meeting during the period of his or her absence.

12.3 Reasonable notice of each Council meeting must be provided to the public at least seven days before the meeting. Council may do this:

12.3.1 for meetings which it has fixed by preparing a schedule of meetings annually, twice yearly or from time to time, and arranging publication of such schedule in a newspaper generally circulating in the municipal district either at various times throughout the year, or prior to each such Council meeting; and

12.3.2 for any meeting by giving notice on its website and:



(a) in each of its Customer Service Centres; and/or

(b) in at least one newspaper generally circulating in the *municipal district*.

12.4 If urgent or extraordinary circumstances prevent Council from complying with sub-Rule 12.3, the Council must:

12.4.1 give such notice as is practicable; and

12.4.2 specify the urgent or extraordinary circumstances which prevented the Council from complying with sub-Rule 12.3 in the minutes of the meeting.

13. Prohibition of Unauthorised Recording of Meetings

Other than an official *Council* recording, no video or audio recording of proceedings of *Council meetings* will be permitted without specific approval by resolution of the relevant *Council meeting*.

14. Availability of Council Meeting Documentation

14.1 All endeavours will be made to make Council meeting documentation available:

14.1.1 to Councillors and relevant staff members six days prior to a scheduled meetings; and

14.1.2 on Council's website five days prior to a schedule meeting and hard copies provided at its Customer Service centres.

14.2 Council may, on occasion, be unable to comply with sub-Rule 14.1, where the meeting is an unscheduled meeting.

Division 2 – Quorums

~~14-15.~~ Inability to Obtain a Quorum

If after 30 minutes from the scheduled starting time of any *Council meeting*, a quorum cannot be obtained:

~~14.1~~15.1 the meeting will be deemed to have lapsed;

~~14.2~~15.2 the *Mayor* must convene another *Council meeting*, the *agenda* for which will be identical to the *agenda* for the lapsed meeting; and

~~14.3~~15.3 the *Chief Executive Officer* must give all Councillors *written* notice of the meeting convened by the *Mayor*.

~~15-16.~~ Inability to Maintain a Quorum

~~15.1~~16.1 If during any *Council meeting*, a quorum cannot be maintained then Rule ~~13-15~~ will apply as if the reference to the meeting is a reference to so much of the meeting as remains.

~~15.2~~16.2 Sub-Rule ~~14~~15.1 does not apply if the inability to maintain a quorum is because of the number of Councillors who have a conflict of interest in the matter to be



considered, or where prior notification has been given that the meeting will not proceed and there was no opportunity for Council to formally resolve to cancel it.

16-17. Adjourned Meetings

16-17.1 Council may adjourn any meeting to another date or time but cannot in the absence of disorder or a threat to the safety of any Councillor or member of Council staff adjourn a meeting in session to another place.

16-217.2 The *Chief Executive Officer* must give *written* notice to each Councillor of the date, time and place to which the meeting stands adjourned and of the business remaining to be considered.

17.3 If it is impracticable for the notice given under sub-Rule 1517.2 to be in *writing*, the *Chief Executive Officer* must give notice to each Councillor by telephone or in person.

18. Time Limits for Meetings

18.1 The Chair will pause a Council meeting after four hours and the Council will consider if it wants to continue. A majority of Councillors present must vote in favour of its continuance.

18.2 In the absence of a continuance, the meeting must stand adjourned to a time and date to be announced by the Chair, immediately prior to the meeting standing adjourned and where possible, within two business days.

18.3 No meeting is to continue past six hours. In that event, the provisions of sub-Rules 17.2 and 17.3 will apply.

16-318.4 The Council may adjourn for a short break every hour, after a period of two hours, or at the Chair's discretion.

17-19. Cancellation or Postponement of a Meeting

17-119.1 The *Chief Executive Officer* may, in the case of an emergency necessitating the cancellation or postponement of a *Council meeting*, cancel or postpone a *Council meeting*.

17-219.2 The *Chief Executive Officer* must present to the immediately following *Council meeting* a *written* report on any exercise of the power conferred by sub-Rule 1719.1.

Division 3 – Business of Meetings

18-20. Agenda and the Order of Business

The *agenda* for and the order of business for a *Council meeting* is to be determined by the *Chief Executive Officer*, following consultation with the Mayor, so as to facilitate and maintain open, efficient and effective processes of government.

19-21. Change to Order of Business

Once an *agenda* has been sent to Councillors, the order of business for that *Council meeting* may be altered with the consent through resolution of *Council*.



22. En Bloc Voting

- 22.1 Subject to sub-Rule 22.4 below, Council may move agenda items *en bloc*, so long as the *motion* is moved, seconded and carried unanimously.
- 22.2 During discussion on any items to be moved *en bloc*, the Chair will ask Councillors if any of the items to be considered are:
- 22.2.1 Items where the motion is expected to be different to the officer recommendation?
- 22.2.2 Items where a disclosure of conflict of interest is to be declared by a Councillor?
- 22.2.3 Items where a Councillor would like the recommendation to be considered separately?
- 22.3 If a Councillor indicates an item falls within sub-Rule 22.2, then the Chair will request the item be removed from the group of items to be considered *en bloc*.
- 22.4 The following items must not be considered *en bloc*:
- 22.4.1 Items that relate to planning matters or that involve statutory third-party rights;
- 22.4.2 Items of a controversial nature which may attract a large amount of interest; and
- 22.4.3 Items where a special majority vote is required (eg Councillor Code of Conduct is required to be passed at a meeting by at least two-thirds of the total number of Councillors elected to the Council).
- 22.5 Questions/discussion from Councillors are permitted on the items moved *en bloc*.
- 22.6 The minutes of the meeting must clearly identify which matters are decided *en bloc* and each individual resolution must be recorded in full.

20.23. Urgent Business

If the *agenda* for a *Council meeting* makes provision for urgent business, business cannot be admitted as urgent business other than by resolution of *Council* and only then if it:

20.423.1 relates to or arises out of a matter which has arisen since distribution of the *agenda*; and

20.223.2 cannot safely or conveniently be deferred until the next *Council meeting*.

Division 4 – Motions and Debate

21.24. Councillors May ~~Propose Notices of Motion~~ Give Notice of Motions

Councillors may ensure that an ~~issue is listed on an agenda by lodging a~~ matter is considered by a scheduled Council meeting by giving Notice of a Motion.

22.25. Notice of Motion

22.125.1 A *notice of motion* must be in *writing* signed by a Councillor, and be lodged with or sent to the *Chief Executive Officer* at least ~~8~~ eight days prior to the Council



meeting, to allow sufficient time for the *Chief Executive Officer* to include the *notice of motion* in the agenda papers for a *Council meeting*.

~~22.2~~25.2 The *Chief Executive Officer* may reject any *notice of motion* which:

~~22.2.1~~25.2.1 is vague or unclear in intention

~~22.2.2~~25.2.2 it is beyond *Council's* power to pass; or

~~22.2.3~~25.2.3 if passed would result in *Council* otherwise acting invalidly

but must:

~~22.2.4~~25.2.4 give the Councillor who lodged it an opportunity to amend it prior to rejection, if it is practicable to do so; and

~~22.2.5~~25.2.5 notify in *writing* the Councillor who lodged it of the rejection and reasons for the rejection.

~~22.3~~25.3 The full text of any *notice of motion* accepted by the *Chief Executive Officer* must be included in the *agenda*; and include an officer comment. No officer comment will be provided for a *notice of rescission*.

~~22.4~~25.4 The *Chief Executive Officer* must cause all notices of motion to be numbered, dated and entered in the notice of motion register in the order in which they were received.

~~22.5~~25.5 Except by leave of *Council*, each *notice of motion* before any meeting must be considered in the order in which they were entered in the notice of motion register.

~~25.6~~ Where a *notice of motion* is listed on an agenda, the *Chair* will first invite the Councillor who gave the *notice of motion* to move it, in accordance with clause 25.

~~22.6~~25.7 No material changes may be made to a Notice of Motion at the meeting.

~~22.7~~25.8 If a Councillor who has given a *notice of motion* is absent from the meeting or fails to move the motion when called upon by the *Chair*, any other Councillor may move the motion.

~~22.8~~25.9 If a *notice of motion* is not moved at the *Council meeting* at which it is listed, it lapses.

~~22.9~~25.10 Unless Council resolves to re-list at a future *Council meeting* a *notice of motion* which has been lost, a similar motion must not be put before Council for at least three months from the date it was lost.

~~23-26.~~ **Chair's Duty**

Any motion which is determined by the *Chair* to be:

~~23.1~~26.1 defamatory;

~~23.2~~26.2 objectionable in language or nature;

~~23.3~~26.3 vague or unclear in intention;

~~23.4~~26.4 outside the powers of *Council*; or



~~23.5~~~~26.5~~ irrelevant to the item of business on the *agenda* and has not been admitted as urgent, or purports to be an amendment but is not,

must not be accepted by the *Chair*.

~~24-27.~~ **Introducing a Report**

~~24.1~~~~27.1~~ Before a *written* report is considered by *Council* and any motion moved in relation to such report, a member of Council staff may introduce the report if invited by the *Chair* by indicating:

~~24.1.1~~~~27.1.1~~ its background; or

~~24.1.2~~~~27.1.2~~ the reasons for any recommendation which appears.

~~24.2~~~~27.2~~ Unless *Council* resolves otherwise, a member of Council staff need not read any written report to *Council* in full.

~~25-28.~~ **Introducing a Motion or an Amendment**

The procedure for moving any motion or amendment is:

~~25.1~~~~28.1~~ the mover must state the motion without speaking to it;

~~25.2~~~~28.2~~ the motion must be seconded and the seconder must be a Councillor other than the mover. If a motion is not seconded, the motion lapses for want of a seconder;

~~25.3~~~~28.3~~ if a motion or an amendment is moved and seconded the *Chair* must ask:

"Is the motion or amendment opposed? Does any Councillor wish to speak to the motion or amendment?"

~~25.4~~~~28.4~~ if no Councillor indicates opposition or a desire to speak to it, the *Chair* may declare the motion or amendment carried without discussion;

~~25.5~~~~28.5~~ if a Councillor indicates opposition or a desire to speak to it, then the *Chair* must call on the mover to address the meeting;

~~25.6~~~~28.6~~ after the mover has addressed the meeting, the seconder may address the meeting;

~~25.7~~~~28.7~~ after the seconder has addressed the meeting, or has, without speaking on the motion, reserved ~~his or her~~their address until later in debate (or after the mover has addressed the meeting if the seconder does not address the meeting,) the *Chair* must invite debate by calling on any Councillor who wishes to speak to the motion, providing an opportunity to alternate between those wishing to speak against the motion and those wishing to speak for the motion, prior to the seconder addressing the meeting, if ~~he or she~~they chose to reserve ~~his or her~~their address;

~~25.8~~~~28.8~~ the mover of the original motion retains the right of reply to that motion; and

~~25.9~~~~28.9~~ if, after the mover has addressed the meeting, the *Chair* has invited debate and no Councillor speaks to the motion, then the *Chair* must put the motion to the vote.

~~26-29.~~ **Right of Reply**

~~26.1~~~~29.1~~ The mover of a motion, including an amendment, has a right of reply to matters raised during debate.



~~26-2~~29.2 After the right of reply has been taken but subject to any Councillor exercising ~~his~~ ~~or her~~their right to ask any question concerning or arising out of the motion, the motion must be put to the vote without any further discussion or debate.

~~27-30.~~ **Moving an Amendment**

~~27-4~~30.1 Subject to sub-Rule ~~27-2~~30.2 a motion which has been moved and seconded may be amended by leaving out or adding words. Any added words must be relevant to the subject of the motion.

~~27-2~~30.2 A motion to confirm a previous resolution of *Council* cannot be amended.

~~27-3~~30.3 An amendment must not be directly opposite to the motion.

~~28-31.~~ **Who May Propose an Amendment**

~~28-4~~31.1 An amendment may be proposed or seconded by any Councillor, except the mover or seconder of the original motion.

~~28-2~~31.2 Any one Councillor cannot move more than two amendments in succession without the leave of the *Chair* and that leave will not be unreasonably withheld.

~~29-32.~~ **How Many Amendments May be Proposed**

~~29-4~~32.1 Any number of amendments may be proposed to a motion but only one amendment may be accepted by the *Chair* at any one time.

~~29-2~~32.2 No second or subsequent amendment, whether to the motion or an amendment of it, may be taken into consideration until the previous amendment has been dealt with.

~~30-33.~~ **An Amendment Once Carried**

~~33.1~~ If the amendment is carried, the motion as amended then becomes the motion before the meeting (substantive motion), and ~~the amended motion~~ may be debated before it is put.

~~30-4~~33.2 Debate on the substantive motion doesn't recommence. Only Councillors who didn't speak to the original motion have a right to speak to the substantive motion.

~~30-2~~33.3 The mover of the original motion retains the right of reply to that motion.

~~31-34.~~ **Foreshadowing Motions**

~~31-4~~34.1 At any time during debate a Councillor may foreshadow a motion so as to inform *Council* of ~~his or her~~their intention to move a motion at a later stage in the meeting, but this does not extend any special right to the foreshadowed motion.

~~31-2~~34.2 A motion foreshadowed may be prefaced with a statement that in the event of a particular motion before the *Chair* being resolved in a certain way, a Councillor intends to move an alternative or additional motion.

~~31-3~~34.3 The *Chief Executive Officer* or person taking the minutes of the meeting is not expected to record foreshadowed motions in the minutes until the foreshadowed motion is formally moved.



~~32-35.~~ 32-35. Withdrawal of Motions

Before any motion is put to the vote, it may be withdrawn by the mover and seconder with the leave of *Council*.

~~33-36.~~ 33-36. Separation of Motions

Where a motion contains more than one part, a Councillor may request the *Chair* to put the motion to the vote in separate parts.

~~34-37.~~ 34-37. Chair May Separate Motions

The *Chair* may decide to put any motion to the vote in several parts.

~~35-38.~~ 35-38. Priority of address

Outside of the specific application of Rule ~~25~~28 in the case of competition for the right to speak, the *Chair* must decide the order in which the Councillors concerned will be heard.

~~36-39.~~ 36-39. Motions in Writing

~~36-1~~39.1 The *Chair* may require that a complex or detailed motion be in writing.

~~36-2~~39.2 *Council* may adjourn the meeting while the motion is being *written* or *Council* may defer the matter until the motion has been *written*, allowing the meeting to proceed uninterrupted.

~~37-40.~~ 37-40. Repeating Motion and/or Amendment

The *Chair* may request the person taking the minutes of the *Council meeting* to read the motion or amendment to the meeting before the vote is taken.

~~38-41.~~ 38-41. Debate Must Be Relevant to the Motion

~~38-1~~41.1 Debate must always be relevant to the motion before the Chair, and, if not, the *Chair* must request the speaker to confine debate to the motion.

~~38-2~~41.2 If after being requested to confine debate to the motion before the Chair, the speaker continues to debate irrelevant matters, the *Chair* may direct the speaker to be seated and not speak further in respect of the motion then before the Chair.

~~38-3~~41.3 A speaker to whom a direction has been given under sub-Rule ~~38-2~~41.2 must comply with that direction.

~~39-42.~~ 39-42. Speaking Times

~~39-1~~42.1 A Councillor must not speak longer than the time set out below, unless granted an extension by the *Chair*:

~~39-1-1~~42.1.1 _____ the mover of a motion or an amendment which has been opposed: ~~5~~five minutes ~~and three minutes if no opposition~~;

~~39-1-2~~42.1.2 _____ any other Councillor: ~~3~~three minutes; and

~~39-1-3~~42.1.3 _____ the mover of a motion exercising a right of reply/closing statement: ~~2~~two minutes.



~~39.2~~42.2 Where the *Chair* allows discussion on an item, the maximum speaking time for a Councillor will be ~~3~~three minutes.

~~40.43.~~ 43. Addressing the Meeting

If the *Chair* so determines:

~~40.1.43.1~~ any person addressing the *Chair* must refer to the *Chair* as:

~~40.1.1~~43.1.1 ~~Madam~~ Mayor; or

~~40.1.2~~ Mr Mayor; or

~~40.1.3~~43.1.2 ~~Madam~~ Chair or Acting Chair; or

~~40.1.4~~ Mr Chair

as the case may be;

~~40.2~~43.2 all Councillors, other than the *Mayor*, must be addressed as

Cr(name).

~~40.3~~43.3 all members of Council staff, must be addressed as ~~Mr or Ms~~

.....(name) as appropriate or by their official title.

~~41.44.~~ 44. Right to Ask Questions

~~41.1~~44.1 A Councillor may, when no other Councillor is speaking, ask any question concerning or arising out of the motion or amendment before the *Chair*.

~~41.2~~44.2 The *Chair* has the right to limit questions and direct that debate be commenced or resumed.

Division 5 – Procedural Motions

~~42.45.~~ 45. Procedural Motions

~~42.1~~45.1 Unless otherwise prohibited, a procedural motion may be moved at any time and must be dealt with immediately by the *Chair*.

~~42.2~~45.2 Notwithstanding any other provision in this Chapter, procedural motions must be dealt with in accordance with the following table:



PROCEDURAL MOTIONS TABLE

Procedural Motion	Form	Mover	When Motion Prohibited	Effect if Carried	Effect if Lost	Debate Permitted on Motion
1. Adjournment of debate to later hour and/or date	That this matter be adjourned to *am/pm and/or *date	Any Councillor who has not moved or seconded the original motion or otherwise spoken to the original motion	(a) During the election of a <i>Chair</i> ; (b) When another Councillor is speaking	Motion and amendment is postponed to the stated time and/or date	Debate continues unaffected	Yes
2. Adjournment of debate indefinitely	That this matter be adjourned until further notice	Any Councillor who has not moved or seconded the original motion or otherwise spoken to the original motion	(a) During the election of a <i>Chair</i> ; (b) When another Councillor is speaking; or (c) When the motion would have the effect of causing <i>Council</i> to be in breach of a legislative requirement	Motion and any amendment postponed but may be resumed at any later meeting if on the agenda	Debate continues unaffected	Yes
3. The closure <u>(of debate)</u>	That the motion be now put	Any Councillor who has not moved or seconded the original motion or otherwise spoken to the original motion	During nominations for <i>Chair</i>	Motion or amendment in respect of which the closure is carried is put to the vote immediately without debate of this motion, subject to any Councillor exercising his or her right to ask any question concerning or arising out of the motion	Debate continues unaffected	No



Procedural Motion	Form	Mover	When Motion Prohibited	Effect if Carried	Effect if Lost	Debate Permitted on Motion
<u>4. Deferral of a matter (to a future meeting)</u>	<u>'That the debate on this matter be deferred until (insert meeting/date) to allow (purpose of deferral)'...</u>	<u>Any Councillor who has not moved or seconded the original motion or otherwise spoken to the original motion</u>	<u>(a) During the election of the Mayor/Deputy Mayor;</u> <u>(b) During the election of a Chairperson; or</u> <u>(c) When another Councillor is speaking</u>	<u>Consideration/debate on the motion and/or amendment is postponed to the stated date and the item is re-listed for consideration at the resolved future meeting, where a fresh motion may be put and debated</u>	<u>Debate continues unaffected</u>	<u>Yes</u>
<u>5. Laying a motion on the table (pausing debate)</u>	<u>'That the motion be laid on the table'</u>	<u>A Councillor who has not spoken for/against the motion</u>	<u>During the election of the Mayor/Deputy Mayor</u>	<u>Motion not further discussed or voted on until Council resolves to take the question from the table at the same meeting</u>	<u>Debate continues unaffected N</u>	<u>No</u>
<u>6. Take a motion from the table (resume debate on a matter)</u>	<u>'That the motion in relation to xx be taken from the table'</u>	<u>Any Councillor</u>	<u>When no motion is on the table</u>	<u>Debate of the item resumes</u>	<u>Debate of the item remains paused</u>	<u>No</u>
<u>7. Alter the order of business</u>	<u>'That the item listed at xx on the agenda be considered before/after the item listed as xy'</u>	<u>Any Councillor</u>	<u>(a) At a Meeting to elect the Mayor; or</u> <u>(b) During any debate</u>	<u>Alters the order of business for the meeting</u>	<u>Items are considered in the order as listed in the Agenda</u>	<u>No</u>
<u>8. Suspension of Meetings Procedure</u>	<u>'That the Meetings Procedure be suspended to ...' (reason must be provided)</u>	<u>Any Councillor</u>		<u>The rules of the meeting are temporarily suspended for the specific reason given in the motion. No debate or decision on any matter, other than a decision to resume Meetings Procedure, is permitted</u>	<u>The meeting continues unaffected</u>	<u>No</u>



Procedural Motion	Form	Mover	When Motion Prohibited	Effect if Carried	Effect if Lost	Debate Permitted on Motion
<u>9. Resumption of Meetings Procedure</u>	<u>'That the Meetings Procedure be resumed'</u>	<u>Any Councillor</u>	<u>When Meeting Procedures have not been suspended</u>	<u>The temporary suspension of the rules of the meeting is removed</u>	<u>The meeting cannot continue</u>	<u>No</u>
<u>10. Consideration of confidential matter(s) (Close the meeting to members of the public)</u>	<u>That, in accordance with Section 66(2)(a) of the Local Government Act 2020 the meeting be closed to members of the public for the consideration of item xx is confidential as it relates to [insert reason]</u>	<u>Any Councillor</u>	<u>During the election of the Mayor/Deputy Mayor</u>	<u>The meeting is closed to members of the public</u>	<u>The meeting continues to be open to the public</u>	<u>Yes</u>
<u>11. Reopen the meeting</u>	<u>'That the meeting be reopened to members of the public'</u>	<u>Any Councillor</u>		<u>The meeting is reopened to the public</u>	<u>The meeting remains closed to the public</u>	<u>No</u>



Division 6 – Rescission Motions

~~43.46.~~ 46. Notice of Rescission

~~43.1~~46.1 A Councillor may ~~propose~~ propose ~~give~~ give notice of ~~rescission~~ a motion to rescind a previous resolution of Council provided:

~~46.1.1~~ 46.1.1 the resolution proposed to be rescinded has not been acted on; ~~and~~

~~43.1~~46.1.2 the effect of rescinding the resolution will not place the Council at significant legal, financial or other risk, including non-compliance with statutory obligations; and

~~43.1~~46.1.3 the ~~#~~Notice of ~~#~~Rescission is delivered to the Chief Executive Officer within 48 hours of the resolution having been made setting out -

(a) the resolution to be rescinded; and

(b) the meeting and date when the resolution was carried.

It should be remembered that a notice of rescission is a form of notice of motion. Accordingly, all provisions in this Chapter regulating notices of motion equally apply to notices of rescission.

~~43.2~~46.2 A resolution will be deemed to have been acted on if:

~~43.2~~46.2.1 its contents have or substance has been communicated in writing to a person whose interests are materially affected by it; or

~~43.2~~46.2.2 a statutory process has been commenced

so as to vest enforceable rights in or obligations on *Council* or any other person.

~~43.3~~46.3 The *Chief Executive Officer* or an appropriate member of Council staff must defer implementing a resolution which:

~~43.3~~46.3.1 has not been acted on; and

~~43.3~~46.3.2 is the subject of a notice of rescission which has been delivered to the Chief Executive Officer in accordance with sub-Rule ~~43.1.2~~46.1.3,

unless deferring implementation of the resolution would have the effect of depriving the resolution of efficacy.

~~43.4~~46.4 This section does not apply to an officer recommendation to supersede a previous resolution of Council.

~~By way of example, assume that, on a Monday evening, Council resolves to have legal representation at a planning appeal to be heard on the following Monday. Assume also that, immediately after that resolution is made, a Councillor lodges a notice of motion to rescind that resolution. Finally, assume that the notice of rescission would not be dealt with until the next Monday evening (being the evening of the day on which the planning appeal is to be heard).~~

~~In these circumstances, deferring implementation of the resolution would have the effect of~~



~~depriving the resolution of efficacy. This is because the notice of rescission would not be debated until after the very thing contemplated by the resolution had come and gone. In other words, by the time the notice of rescission was dealt with the opportunity for legal representation at the planning appeal would have been lost.~~

~~Sub-Rule 43.3 would, in such circumstances, justify the Chief Executive Officer or an appropriate member of Council staff actioning the resolution rather than deferring implementation of it.~~

44.47. If Lost

If a motion for rescission is lost, a similar motion may not be put before *Council* for at least three months from the date it was last lost, unless *Council* resolves that the *notice of motion* be re-listed at a future meeting.

45.48. If Not Moved

If a motion for rescission is not moved at the meeting at which it is listed, it lapses.

46.49. May be Moved by any Councillor

A motion for rescission listed on an *agenda* may be moved by any Councillor present but may not be amended.

47.50. When Not Required

~~47.1~~50.1 ~~Unless sub-Rule 47.2 applies, a~~ motion for rescission is not required where *Council* wishes to change policy.

~~47.2~~ — The following standards apply if *Council* wishes to change policy:

~~47.2.1~~ — if the policy has been in force in its original or amended form for less than 12 months, a *notice of rescission* must be presented to *Council*; and

~~47.2.2~~ — any intention to change a *Council* policy, which may result in a significant impact on any person, should be communicated to those affected and this may include publication and consultation, either formally or informally.

Division 7 – Points of Order

51. Valid Points of Order

A point of order may be raised in relation to anything which, a motion, amendment or statement made that:

51.1 is contrary to *these Rules*;

51.2 is defamatory;

51.3 is irrelevant to the matter under consideration or offensive;

51.4 is outside *Council's* legal powers;

51.5 constitutes improper behaviour;

_____ is offensive;



51.6 constitutes a tedious repetition of something already said;

51.7 a motion, which, under Rule ~~23~~26, or a question which, under Rule ~~53~~56, should not be accepted by the *Chair*.

51.8 a question of procedure; or

51.9 any act of disorder.

~~Rising to express~~Expressing a difference of opinion or to contradict a speaker is not a valid point of order.

52. Procedure for Point of Order

52.1 A Councillor raising a point of order must:

52.1.1 state the point of order; and

52.1.2 state any section, Rule, paragraph or provision of *these Rules* or the Councillor Code of Conduct relevant to the point of order.

~~before resuming his or her seat.~~

52.2 A Councillor who is interrupted by another Councillor calling for a point of order must immediately stop speaking and remain silent until the Councillor raising the point of order has been heard and the question disposed of by the *Chair*.

53. Chair May Adjourn to Consider

53.1 The Chair may adjourn the meeting to consider a point of order which has been raised but otherwise must rule on it as soon as it is raised.

53.2 All other questions or matters before the meeting are suspended until the point of order is decided.

~~48-54.~~ Chair to Decide

The *Chair* must decide all points of order by stating the provision, rule, practice or precedent which ~~he or she~~they considers applicable to the point raised without entering into any discussion or comment.

~~49.1.~~ Chair May Adjourn to Consider

~~49.11.1~~ ~~The Chair may adjourn the meeting to consider a point of order which has been raised but otherwise must rule on it as soon as it is raised.~~

~~49.21.1~~ ~~All other questions or matters before the meeting are suspended until the point of order is decided.~~

~~50-55.~~ Final Ruling on a Point of Order

~~50.1~~55.1 The decision of the Chair in respect of a point of order raised will not be open for discussion and will be final and conclusive unless the majority of Councillors present carry a motion of dissent.



~~50.2~~55.2 A motion of dissent on a point of order must contain the provision, rule, practice or precedent in substitution for the *Chair's* ruling.

~~50.3~~55.3 A motion of dissent in relation to a point of order is not a motion of dissent in the Chair, and the Chair must at all times remain in the Chair and ~~he or she~~they will retain ~~his or her~~their right to a second vote.

~~50.4~~55.4 A motion of dissent on a point of order will take precedence over all other business and, if carried, must be acted on instead of the ruling given by the *Chair*.

~~51.1.~~51.1. ~~Procedure for Point of Order~~

~~51.11.1~~ A Councillor raising a point of order must:

~~51.1.11.1.1~~ state the point of order; and

~~51.1.21.1.1~~ state any section, Rule, paragraph or provision of ~~these Rules~~ or the Councillor Code of Conduct relevant to the point of order

~~before resuming his or her seat.~~

~~51.21.1~~ A Councillor who is interrupted by another Councillor calling for a point of order must immediately stop speaking and remain silent until the Councillor raising the point of order has been heard and the question disposed of by the *Chair*.

~~52.1.~~52.1. ~~Valid Points of Order~~

A point of order may be raised in relation to anything which:

~~52.11.1~~ is contrary to ~~these Rules~~;

~~52.21.1~~ is irrelevant to the matter under consideration;

~~52.31.1~~ is outside *Council's* legal powers;

~~52.41.1~~ constitutes improper behaviour;

~~52.51.1~~ is offensive;

~~52.61.1~~ constitutes a tedious repetition of something already said;

~~52.71.1~~ a motion, which, under Rule 23, or a question which, under Rule 53, should not be accepted by the *Chair*;

~~52.81.1~~ a question of procedure; or

~~52.01.1~~ any act of disorder.

~~Rising to express a difference of opinion or to contradict a speaker is not a valid point of order.~~



Division 8 – Public Question Time

~~53-56.~~ Question Time

~~53-4~~56.1 Unless Council resolves differently, there must be a public question time at every Council meeting fixed under Rule 9 or every ~~Special~~Unscheduled Council Meeting fixed under Rule 11 to enable members of the public to submit written questions and to ask verbal questions of ~~Council~~the meeting. Question time is specifically for succinct questions in form and character, rather than forums for making statements and discussion.

56.2 Sub-Rule ~~53-4~~56.1 does not apply during any period when a meeting is closed to members of the public in accordance with section 66(2) of the Act.

Scheduled meetings

56.3 A 30 minute period shall be provided for questions at the beginning of Scheduled Council meetings.

56.4 Each question asked/submitted must not be greater than 90 seconds in duration (or 225 words if in writing).

56.5 During public question time, members of the public may either:

56.5.1 Raise their hand and ask their question from the public gallery;

56.5.2 Register by no later than 5pm two days prior to the scheduled meeting to join the meeting virtually or by phone to ask their question.

56.5.3 Submit a question (online, by post or hand delivered to our Customer Service centre) by no later than 5pm two days prior to the scheduled meeting, to be read out at the meeting.

56.6 A time limit of ~~5~~five minutes per person applies, irrespective of the number of questions submitted/asked by that person. If a person has submitted or wants to ask more questions to at a meeting than can be answered in the ~~5~~five minutes allocated, their remaining questions may:

56.6.1 at the discretion of the Chair, be dealt with after all other persons have had their ~~first~~questions asked and answered (or their ~~five~~5 minutes has expired), time permitting; or

56.6.2 not be asked and answered if the time allotted for public question time has expired; and

56.6.3 where questions have not been asked and answered at the relevant Council meeting, a response ~~can~~will be provided in writing after the meeting.

56.7 The Chair or a member of Council staff nominated by the Chair may read to those present at the meeting a question which has been submitted in accordance with this Rule.

Unscheduled meetings

56.8 A 15 minute period shall be provided for questions at the beginning of Unscheduled Council meetings.



~~56.9~~ Only questions related to the agenda for that meeting will be accepted for *Special* ~~Unscheduled~~ *Council Meetings* ~~fixed under Rule 11~~.

~~53.2~~~~56.10~~ Sub-Rules 56.4 to 56.7 apply to questions at *Unscheduled Council meetings*.

~~53.3~~~~56.11~~ Public question time will not exceed 30 minutes in duration.

~~53.4~~~~56.12~~ Public question time may be extended at the discretion of the *Chair*.

~~53.5~~~~56.13~~ Written questions submitted to *Council* will be given preference and will take precedence at the *Council meeting*. Written questions must state the name and address (and organisation if applicable), of the person submitting the question, and generally be in a form approved or permitted by Council. and must be:

~~53.5.1~~ ~~in writing, state the name and address, and the organisation if applicable, of the person submitting the question, and generally be in a form approved or permitted by Council; and~~

~~53.5.2~~ ~~physically received by Council or lodged electronically at the prescribed email address or via the electronic form on Council's website, clearly marked as a question for the Council meeting, prior to 5pm on the Monday preceding the relevant Council meeting.~~

~~53.6~~~~56.14~~ If a member of the public intends to ask a question that is unrelated to an item on the agenda, they are *particularly* encouraged to register a question, in writing, prior to the relevant *Scheduled Council meeting* so that a better-researched and more complete response can be provided.

~~53.7~~~~56.15~~ The *Chair* will exercise discretion so that the maximum number of people present will be permitted to ask their questions within the time available for public question time.

~~53.8.1.1~~ A time limit of 5 minutes per person applies, irrespective of the number of questions submitted by that person. ~~If a person has submitted more questions to a meeting than can be answered in the 5 minutes allocated, their remaining questions may:~~

~~53.8.11.1.1~~ ~~at the discretion of the Chair, be dealt with after all other persons have had their first question asked and answered (or their 5 minutes has expired), time permitting; or~~

~~53.8.21.1.1~~ ~~not be asked and answered if the time allotted for public question time has expired; and~~

~~53.8.31.1.1~~ ~~where questions have not been asked and answered at the relevant Council meeting, a response can be provided in writing after the meeting.~~

~~53.9.1.1~~ ~~The Chair or a member of Council staff nominated by the Chair may read to those present at the meeting a question which has been submitted in accordance with this Rule.~~

~~53.10~~ ~~Notwithstanding sub-Rule 53.9, the Chair may refrain from reading a question or having a question read if the person who submitted the question is not present in the gallery at the time when the question is due to be read.~~



~~53.14~~56.16 The Chair of the meeting may disallow any question on the ground that it is repetitive of a question already asked (including at previous meetings), objectionable, irrelevant, raises an issue that is the type of information deemed confidential (including questions relating to compliance or enforcement matters or other legal proceedings), is asked to embarrass a Councillor or member of the administration. A question may be disallowed by the Chair if the Chair determines that it:

~~53.11.1~~ relates to a matter outside the duties, functions and powers of Council;

~~53.11.2~~ is defamatory, indecent, abusive, offensive, irrelevant, trivial or objectionable in language or substance;

~~53.11.3~~ deals with a subject matter already answered;

~~53.11.4~~ is aimed at embarrassing a Councillor or a member of Council staff;

~~53.11.5~~ is a not question of Council, but rather is seeking the views of a particular Councillor or officer.

~~53.11.6~~ relates to personnel matters;

~~53.11.7~~ relates to the personal hardship of any resident or ratepayer;

~~53.11.8~~ relates to industrial matters;

~~53.11.9~~ relates to contractual matters;

~~53.11.10~~ relates to proposed developments;

~~53.11.11~~ relates to legal advice;

~~53.11.12~~ relates to matters affecting the security of Council property; or

~~53.11.13~~ relates to any other matter which Council considers would prejudice Council or any person.

~~53.12~~56.17 Any question which has been disallowed by the Chair must be made available to any other Councillor upon request.

~~53.13~~56.18 Any member of the public asking a question of Council must extend due courtesy and respect to Council and the processes under which it operates, and must take direction from the Chair whenever called upon to do so.

~~53.14~~56.19 All questions and answers must be as brief as possible, and no discussion may be allowed other than by Councillors for the purposes of clarification.

~~53.15~~56.20 Like questions may be grouped together and a single answer provided.

~~53.16~~56.21 Questions from the public gallery or virtually/by phone, shall be addressed to the Chair. The Chair will then ask the Chief Executive Officer to determine who will answer each the question. The Chair may nominate a Councillor, the Chief Executive Officer, or a senior officer may be nominated to General Manager to respond to a question.



~~53.17~~56.22 If the *Chair* so permits, a second speaker may support or add to an answer given, but questions shall not be debated by *Council* during public question time.

~~53.18~~56.23 ~~A Councillor or the~~The *Chief Executive Officer* may require a question to be put on notice. If a question is put on notice, a *written* copy of the answer will be sent to the person who asked the question and will be included in the minutes of the following *Council meeting*.

~~53.19~~56.24 ~~A Councillor or the~~The *Chief Executive Officer* may advise *Council* that it is his or her opinion that the reply to a question should be given in a meeting closed to members of the public. The ~~Councillor or Chief Executive Officer~~ ~~(as the case may be)~~ must state briefly the reason why the reply should be so given and, unless *Council* resolves to the contrary, the reply to such question must be so given.

Division 9 – Petitions and Joint Letters

~~54-57.~~ 56. Petitions and Joint Letters

~~57.1~~ 56.1 A petition or joint letter must be presented to the next available scheduled meeting of Council where the petition or joint letter is received at least 10 days before the Council meeting.

~~54.1~~57.2 Unless *Council* determines to consider it as an item of urgent business, no motion (other than a motion to receive the same) may be made on any petition, ~~or joint letter, memorial or other like application,~~ until the next *Council meeting* after that at which it has been presented.

~~54.2~~ — It is incumbent on every Councillor presenting a petition or joint letter to acquaint himself or herself with the contents of that petition or joint letter, and to ascertain that it does not contain language disrespectful to *Council*.

~~54.3~~ — Every Councillor presenting a petition or joint letter to *Council* must:

~~54.3.1~~ — write or otherwise record his or her name at the beginning of the petition or joint letter; and

~~54.3.2~~ — confine himself or herself to a statement of the persons from whom it comes, the number of signatories to it, the material matters expressed in it and the text of the request.

~~54.4~~57.3 Every petition or joint letter presented to *Council*:

~~54.4.1~~57.3.1 must be in *writing* (other than pencil), typing or printing, contain the request of the petitioners or signatories and be signed by at least 12 people;

~~54.4.2~~57.3.2 must be addressed to the *Council*, *Mayor*, a Councillor or Councillors, containing a request for action to be taken by *Council*;

~~54.4.3~~57.3.3 may be submitted electronically, by post or delivered in person;

~~54.4.4~~57.3.4 must be in the English language, or accompanied by a translation, which will need to be certified by the *Chief Executive Officer* who will present it to be correct;



~~54.4.5~~57.3.5 must not be defamatory or objectionable in language or nature;
and

~~54.4.6~~57.3.6 must not relate to matters outside the powers of Council or relate to neighbourhood disputes/issues;

~~54.4.7~~57.3.7 must be received by Council in its original form ~~eight (8)~~10 days prior to a Council ~~M~~mmeeting and, if it is not, will be presented at the next Council ~~M~~mmeeting; and

~~54.4.8~~57.3.8 may, at the discretion of the *Chief Executive Officer*, be refused if the same, or substantially the same, petition is received more than once in a twelve (12) month period during the course of a term of *Council*.

~~54.5~~57.4 Every petition or joint letter must be signed by the persons whose names are appended to it by their names or marks, and, except in cases of incapacity or sickness, by no one else and the address of every petitioner or signatory must be clearly stated.

~~54.6~~57.5 Any signature appearing on a page which does not bear the text of the whole of the petition or request may not be considered by *Council*.

~~54.7~~57.6 Every page of a petition or joint letter must be a single page of paper and not be posted, stapled, pinned or otherwise affixed or attached to any piece of paper other than another page of the petition or joint letter.

~~54.8~~57.7 If a petition, or joint letter, ~~memorial or other like application~~, relates to an operational matter, *Council* must refer it to the *Chief Executive Officer* for consideration.

~~54.9~~57.8 If a petition relates to:

~~54.9.1~~57.8.1 a 'planning matter' which is the subject of a public notification process under the *Planning and Environment Act 1987*; or

~~54.9.2~~57.8.2 a 'statutory matter' which is the subject of ~~a public submissions process under section 223 of the Local Government Act 1989~~a community engagement process;

the petition will be treated as a joint submission in relation to the 'planning matter' or the 'statutory matter' (as the case may be).

~~57.9~~ The Chief Executive Officer may accept electronic petitions received via online websites if they are satisfied that the petition is authentic and from a legitimate website and provided that the electronic petition has been closed and a copy has been forwarded to Council.

~~57.10~~ A petition or joint letter shall not be presented at a meeting of Council or received by Council unless it meets the definition under these Governance Rules, unless it is specifically resolved by Council to receive the petition or joint letter in a non-conforming format. Only the wording of the request and the number of signatories will be included in the public agenda for a Council meeting.

~~57.11~~ If the petition or joint letter relates to any item already on the agenda for the Council meeting at which the petition or joint letter is submitted, the Chair may decide that the petition or joint letter will be dealt with in conjunction with that agenda item.

~~57.12~~ A petition or joint letter may nominate a person to whom a reply must be sent, but if no person is nominated or if it is not obvious who the intended contact person is, Council will reply to the first signatory who appears on the petition or joint letter.



Division 10 – Voting

~~55-58.~~ 58. How Motion Determined

To determine a motion before a meeting, the *Chair* must first call for those in favour of the motion and then those opposed to the motion, and must then declare the result to the meeting.

~~56-59.~~ 59. Silence

Voting must take place in silence.

~~57-60.~~ 60. Recount

The *Chair* may direct that a vote be recounted to satisfy himself or herself of the result.

~~58-61.~~ 61. Casting Vote

~~58-1~~61.1 In the event of a tied vote, the *Chair* must exercise a casting vote.

~~58-2~~61.2 In the event of an item first coming before Council having an equality of votes, Council's expectation is that the Chair will generally vote in the negative unless there is an imminent deadline that requires an immediate decision.

~~58-3~~61.3 Council's expectation is that the item should then be listed for the next Council meeting. If there is an equality of votes when the item is re-presented to Council, then the expectation is that the Chair will use the casting vote to finally resolve the matter.

~~58-4~~61.4 Council acknowledges that the Chair is always free to exercise the casting vote as ~~he or she~~they sees fit, notwithstanding the expectations outlined in sub-Clauses ~~58-2~~61.2 and ~~58-3~~61.3.

~~59-62.~~ 62. By Show of Hands

Voting on any matter is by show of hands.

~~60-63.~~ 63. Procedure for a Division

~~60-1~~63.1 Immediately after any question is put to a meeting and before the next item of business has commenced, a Councillor may call for a division.

~~60-2~~63.2 When a division is called for, the vote already taken must be treated as set aside and the division shall decide the question, motion or amendment.

~~60-3~~63.3 When a division is called for, the *Chair* must:

~~60-3-1~~63.3.1 first ask each Councillor wishing to vote in the affirmative to raise a hand and, upon such request being made, each Councillor wishing to vote in the affirmative must raise one of ~~his or her~~their hands. The Chair must then state, and the Chief Executive Officer or any authorised officer must record, the names of those Councillors voting in the affirmative; and

~~60-3-2~~63.3.2 then ask each Councillor wishing to vote in the negative to raise a hand and, upon such request being made, each Councillor wishing to



vote in the negative must raise one of ~~his or her~~their hands. The *Chair* must then state, and the *Chief Executive Officer* or any *authorised officer* must record, the names of those Councillors voting in the negative.

~~61.64.~~ **No Discussion Once Declared**

Once a vote on a question has been taken, no further discussion relating to the question is allowed unless the discussion involves:

~~61.1~~64.1 a Councillor requesting, before the next item of business is considered, that his or her opposition to a resolution be recorded in the minutes ~~or a register maintained for that purpose~~;

~~61.2~~64.2 foreshadowing a *notice of rescission* where a resolution has just been made, or a positive motion where a resolution has just been rescinded.

For example, Rule 61 would allow some discussion if, immediately after a resolution was made, a Councillor foreshadowed lodging a notice of rescission to rescind that resolution.

Equally, Rule 61 would permit discussion about a matter which would otherwise be left in limbo because a notice of rescission had been successful. For instance, assume that Council resolved to refuse a planning permit application. Assume further that this resolution was rescinded.

Without a positive resolution — to the effect that a planning permit now be granted — the planning permit application will be left in limbo. Hence the reference, in sub-Rule 61.2, to discussion about a positive motion were a resolution has just been rescinded.

Division 11 – Minutes

~~62.65.~~ **Confirmation of Minutes**

~~62.1~~65.1 At every *Council meeting* the minutes of the preceding meeting(s) must be dealt with as follows:

~~62.1.1~~65.1.1 a copy of the minutes must be delivered to each Councillor no later than 48 hours before the meeting;

~~65.1.2~~ no discussion or debate on the confirmation of the minutes is permitted except where their accuracy as a record of the proceedings of the meeting to which they relate is questioned;

~~65.1.3~~ following the moving and seconding of the minutes, if no Councillor indicates opposition, the question is put to the vote; and

~~62.1.2~~ — if no Councillor indicates opposition, the minutes must be declared to be confirmed;

~~62.1.3~~ — if a Councillor indicates opposition to the minutes:

(a) — he or she must specify the item(s) to which he or she objects;

(b) — the objected item(s) must be considered separately and in the order in which they appear in the minutes;



- ~~(c) — the Councillor objecting must move accordingly without speaking to the motion;~~
- ~~(d) — the motion must be seconded;~~
- ~~(e) — the Chair must ask:
"Is the motion opposed?"~~
- ~~(f) — if no Councillor indicates opposition, then the Chair must declare the motion carried without discussion and then ask the second of the questions described in sub-Rule 62.1.3(k);~~
- ~~(g) — if a Councillor indicates opposition, then the Chair must call on the mover to address the meeting;~~
- ~~(h) — after the mover has addressed the meeting, the seconder may address the meeting;~~
- ~~(i) — after the seconder has addressed the meeting (or after the mover has addressed the meeting if the seconder does not address the meeting), the Chair must invite debate by calling on any Councillor who wishes to speak to the motion, providing an opportunity to alternate between those wishing to speak against the motion and those wishing to speak for the motion;~~
- ~~(j) — if, after the mover has addressed the meeting, the Chair invites debate and no Councillor speaks to the motion, the Chair must put the motion; and~~
- ~~(k) — the Chair must, after all objections have been dealt with, ultimately ask:
"The question is that the minutes be confirmed" or
"The question is that the minutes, as amended, be confirmed",
and he or she must put the question to the vote accordingly;~~

~~62.1.4~~65.1.4 a resolution of *Council* must confirm the minutes and the minutes must, if practicable, be signed by the *Chair* of the meeting at which they have been confirmed;.

~~62.1.5~~ the minutes must be entered in the *minute book* and each item in the *minute book* must be entered consecutively; and

~~62.1.6~~ unless otherwise resolved or required by law, minutes of a *Delegated Committee* requiring confirmation by *Council* must not be available to the public until confirmed by *Council*.

~~63.~~ **No Debate on Confirmation of Minutes**

~~No discussion or debate on the confirmation of minutes is permitted except where their accuracy as a record of the proceedings of the meeting to which they relate is questioned.~~



~~64-66.~~ **Deferral of Confirmation of Minutes**

Council may defer the confirmation of minutes until later in the *Council meeting* or until the next meeting if considered appropriate.

~~65-67.~~ **Form and Availability of Minutes**

~~65.1-67.1~~ The *Chief Executive Officer* (or other person authorised by the *Chief Executive Officer* to attend the meeting and to take the minutes of such meeting) must keep minutes of each *Council meeting*, and those minutes must record:

~~65.1.1-67.1.1~~ the date, place, time and nature of the meeting;

~~65.1.2-67.1.2~~ the names of the Councillors present and the names of any Councillors who apologised in advance for their non-attendance;

~~65.1.3~~ the names of the members of Council staff present for the purpose of participation in the *Council meeting*;

~~65.1.4-67.1.3~~ any disclosure of a conflict of interest made by a Councillor, including the explanation given by the Councillor under Chapter 5;

~~65.1.5-67.1.4~~ arrivals and departures (including temporary departures) of Councillors during the course of the meeting;

~~65.1.6-67.1.5~~ each motion and amendment moved (including motions and amendments that lapse for the want of a seconder);

~~65.1.7-67.1.6~~ the outcome of every motion, that is, whether it was put to the vote and the result of either carried, lost, withdrawn, lapsed, amended, etc.;

~~65.1.8-67.1.7~~ the vote cast by each Councillor upon a division;

~~65.1.9-67.1.8~~ the vote cast by any Councillor who has requested that his or her vote be recorded in the minutes;

~~65.1.10-67.1.9~~ questions upon notice;

~~65.1.11-67.1.10~~ the failure of a quorum;

~~65.1.12-67.1.11~~ any adjournment of the meeting and the reasons for that adjournment;

~~67.1.12~~ the time at which standing orders were suspended and resumed; ~~and~~

~~65.1.13-67.1.13~~ a brief summary of any public questions and responses provided by the *Chief Executive Officer* or their nominee; ~~and~~

~~65.1.14-67.1.14~~ any other matter which the *Chief Executive Officer* thinks should be recorded to clarify the intention of the *Council meeting* or the recording of the minutes.

~~65.2-67.2~~ The *Chief Executive Officer* must ensure that the minutes of any *Council meeting* are:

~~65.2.1-67.2.1~~ published on *Council's* website; and



~~65.2.2~~67.2.2 available for inspection at *Council's* office during normal business hours.

~~65.3~~67.3 Nothing in sub-Rule ~~65.2~~67.2 requires *Council* or the *Chief Executive Officer* to make public any minutes relating to a *Council meeting* or part of a *Council meeting* closed to members of the public in accordance with section 66 of the *Act*.

Division 12 – Behaviour

~~66.68.~~ 68. Public Addressing the Meeting

~~66.1~~68.1 Members of the public do not have a right to address *Council* and may only do so with the consent of the *Chair* or by prior arrangement.

~~66.2~~68.2 Any member of the public addressing *Council* must extend due courtesy and respect to *Council* and the processes under which it operates and must take direction from the *Chair* whenever called on to do so.

~~66.3~~68.3 A member of the public present at a *Council meeting* must not disrupt the meeting.

~~67.69.~~ 69. Chair May Remove

The *Chair* may order and cause the removal of any person, other than a Councillor, who disrupts any meeting or fails to comply with a direction given under sub-Rule ~~66.2~~68.2.

It is intended that this power be exercisable by the Chair, without the need for any Council resolution. The Chair may choose to order the removal of a person whose actions immediately threaten the stability of the meeting or wrongly threatens his or her authority in chairing the meeting.

~~68.70.~~ 70. Chair may adjourn disorderly meeting

If the *Chair* is of the opinion that disorder at the *Council* table or in the gallery makes it desirable to adjourn the *Council meeting*, ~~he or she~~the Chair may adjourn the meeting to a later time on the same day or to some later day as ~~he or she~~the Chair thinks proper. In that event, the provisions of sub-Rules ~~45.2~~47.2 and ~~45.3~~47.3 apply.

~~69.71.~~ 71. Removal from Chamber

The *Chair*, or *Council* in the case of a suspension, may ask the *Chief Executive Officer* or a member of the Victoria Police to remove from the Chamber any person who acts in breach of this Chapter and whom the *Chair* has ordered to be removed from the gallery under Rule ~~70~~69.

Division 13 – Additional Duties of Chair

~~70.72.~~ 72. The Chair's Duties and Discretions

In addition to the duties and discretions provided in this Chapter, the *Chair*:

~~70.1~~72.1 must not accept any motion, question or statement which is derogatory, or defamatory of any Councillor, member of Council staff, or member of the community; and

~~70.2~~72.2 must call to order any person who is disruptive or unruly during any meeting.



Division 14 – Suspension of ~~Standing Orders~~ Meetings Procedure

~~71.73.~~ 73. Suspension of ~~Standing Orders~~ Meetings Procedure

~~71.1~~73.1 To expedite the business of a meeting, *Council* may suspend ~~standing orders~~ meetings procedure.

The suspension of ~~standing orders~~ meetings procedure should be used to enable full discussion of any issue without the constraints of ~~formal meeting procedure~~ formality.

Its purpose is to enable the formalities of meeting procedure to be temporarily disposed of while an issue is discussed.

~~71.2~~73.2 The suspension of ~~standing orders~~ meetings procedure should not be used purely to dispense with the processes and protocol of the government of *Council*. An appropriate motion would be:

"That ~~standing order~~ meetings procedure be suspended to enable discussion on....."

~~71.3~~73.3 No motion can be accepted by the *Chair* or lawfully be dealt with during any suspension of ~~standing orders~~ meetings procedure.

~~71.4~~73.4 Once the discussion has taken place and before any motions can be put, the resumption of ~~standing orders~~ meetings procedure will be necessary. An appropriate motion would be:

"That ~~standing orders~~ meetings procedure be resumed."

Division 15 – Miscellaneous

~~72.74.~~ 74. Meetings Conducted Remotely

If:

~~72.1~~74.1 by law a meeting may be conducted electronically; and

~~72.2~~74.2 *Council* decides that a meeting is to be conducted electronically,

the *Chair* may, with the consent of the meeting, modify the application of any of the Rules in this Chapter to facilitate the more efficient and effective transaction of the business of the meeting.

~~73.~~ 73. Procedure not provided in this Chapter

~~In all cases not specifically provided for by this Chapter, resort must be had to the Standing Orders and Rules of Practice of the Upper House of the Victorian Parliament (so far as the same are capable of being applied to Council proceedings).~~

75. Recording Proceedings

75.1 The proceedings of open Council meetings will be audio recorded to facilitate the preparation of the minutes of the meeting and to ensure their accuracy.

75.2 Where practicable, the proceedings of open Council meetings will be streamed live on Colac Otway Shire Council's website so that interested parties can watch the



proceedings in real time. A recording of the live stream will be made available on the Colac Otway Shire's website the day following the meeting.

75.3 The Chief Executive Officer has the discretion and authority to delay publication of a recording in instances where comments made by members of the public at the meeting are considered to be objectionable, offensive, defamatory or inappropriate.

75.4 The Council is authorised to resolve that audio and live stream recordings of meetings be edited by the deletion of comments from the public which the Council considers to be objectionable, offensive, defamatory or inappropriate.

74.76. Criticism of members of Council staff

74.176.1 The *Chief Executive Officer* may make a brief statement at a *Council meeting* in respect of any statement by a Councillor made at the *Council meeting* criticising him or her or any member of Council staff.

74.276.2 A statement under sub-Rule 74.176.1 must be made by the *Chief Executive Officer*, through the *Chair*, as soon as it practicable after the Councillor who made the statement has resumed his or her seat.



Chapter 3 – Meeting Procedure for Delegated Committees

1. Appointing Chairs of Delegated Committees

The Act provides the Mayor with specific power to appoint a Councillor to be the Chair of a Delegated Committee.

The Council may also resolve to appoint a Councillor to be Chair of a Delegated Committee (however the appointment by the Mayor prevails).

1.2. Meeting Procedure Generally

If *Council* establishes a *Delegated Committee*:

1.2.1 all of the provisions of Chapter 2 apply to meetings of the *Delegated Committee*; and

1.2.2 any reference in Chapter 2 to:

1.2.1.2.1 a *Council meeting* is to be read as a reference to a *Delegated Committee meeting*;

1.2.2.2.2 a Councillor is to be read as a reference to a member of the *Delegated Committee*; and

1.2.3.2.3 the Mayor is to be read as a reference to the Chair of the *Delegated Committee*.

2.3. Meeting Procedure Can Be Varied

Notwithstanding Rule 4.2, if *Council* establishes a *Delegated Committee* that is not composed solely of Councillors:

2.3.1 *Council* may; or

2.3.2 the *Delegated Committee* may, with the approval of *Council*

resolve that any or all of the provisions of Chapter 2 are not to apply to a meeting of the *Delegated Committee*, in which case the provision or those provisions will not apply until *Council* resolves, or the *Delegated Committee* with the approval of *Council* resolves, otherwise.

4. Requests to address a Delegated Committee

Where the Instrument of Delegation specifically permits, a person may request to be heard at a Delegated Committee meeting, comprising all Councillors, in relation to a matter listed on the Agenda.

5. No Public Question Time

There will be no public question public time at Delegated Committee meetings.



Chapter 4 – Meeting Procedure for Community Asset Committees

1. Introduction

In this Chapter, “Instrument of Delegation” means an instrument of delegation made by the *Chief Executive Officer* under section 47(1)(b) of the *Act*.

2. Meeting Procedure

Unless anything in the instrument of delegation provides otherwise, the conduct of a meeting of a *Community Asset Committee* is in the discretion of the *Community Asset Committee*.



Chapter 5 – Disclosure of Conflicts of Interest

1. Introduction

The following Rules in this Chapter apply only upon Division 1A of Part 4 of the *Local Government Act 1989* being repealed.⁵

2.3. Definition

In this Chapter:

~~2.1~~3.1 “meeting conducted under the auspices of *Council*” means a meeting of the kind described in section 131(1) of the Act, and ~~includes a meeting referred to in Rule 1 of Chapter 6 (whether such a meeting is known as a ‘Councillor Briefing’ or by some other name)~~ is a meeting of Councillors that is a scheduled or planned meeting for the purpose of discussing the business of Council or briefing Councillors, which is attended by at least one member of Council staff, and is not a Council meeting, Delegated Committee meeting or Community Asset Committee meeting; and

~~2.2~~3.2 a member of a *Delegated Committee* includes a Councillor.

3.4. Disclosure of a Conflict of Interest at a Council Meeting

A Councillor who has a conflict of interest in a matter being considered at a *Council meeting* at which ~~he or she~~they:

~~3.1~~4.1 ~~is~~ are present must disclose that conflict of interest by explaining the nature of the conflict of interest to those present at the *Council meeting* immediately before the matter is considered; or

~~3.2~~4.2 intends to be present must disclose that conflict of interest by providing to the *Chief Executive Officer* before the *Council meeting* commences a written notice:

~~3.2.1~~4.2.1 advising of the conflict of interest;

~~3.2.2~~4.2.2 explaining the nature of the conflict of interest; and

~~3.2.3~~4.2.3 detailing, if the nature of the conflict of interest involves a Councillor’s relationship with or a gift from another person, the:

- (a) name of the other person;
- (b) nature of the relationship with that other person or the date of receipt, value and type of gift received from the other person; and
- (c) nature of that other person’s interest in the matter,

and then immediately before the matter is considered at the meeting announcing to those present that ~~he or she has~~ they have a conflict of interest and that a written notice has been given to the *Chief Executive Officer* under this sub-Rule.

The Councillor must, in either event, leave the *Council meeting* immediately after giving the explanation or making the announcement (as the case may be) and not return to the meeting until after the matter has been disposed of.

⁵-At the time of making these Rules the date on which Division 1A of Part 4 of the *Local Government Act 1989* is expected to be repealed is 24 October 2020.



4.5. Disclosure of Conflict of Interest at a Delegated Committee Meeting

A member of a *Delegated Committee* who has a conflict of interest in a matter being considered at a *Delegated Committee* meeting at which ~~he or she~~they:

~~4.1~~5.1 ~~is~~are present must disclose that conflict of interest by explaining the nature of the conflict of interest to those present at the *Delegated Committee* meeting immediately before the matter is considered; or

~~4.2~~5.2 intends to present must disclose that conflict of interest by providing to the *Chief Executive Officer* before the *Delegated Committee* meeting commences a written notice:

~~4.2.1~~5.2.1 _____ advising of the conflict of interest;

~~4.2.2~~5.2.2 _____ explaining the nature of the conflict of interest; and

~~4.2.3~~5.2.3 _____ detailing, if the nature of the conflict of interest involves a member of a *Delegated Committee*'s relationship with or a gift from another person the:

- (a) name of the other person;
- (b) nature of the relationship with that other person or the date of receipt, value and type of gift received from the other person; and

~~4.2.4~~5.2.4 _____ nature of that other person's interest in the matter,

and then immediately before the matter is considered at the meeting announcing to those present that ~~he or she has~~they have a conflict of interest and that a written notice has been given to the *Chief Executive Officer* under this sub-Rule.

The member of a *Delegated Committee* must, in either event, leave the *Delegated Committee* meeting immediately after giving the explanation or making the announcement (as the case may be) and not return to the meeting until after the matter has been disposed of.

5.6. Disclosure of a Conflict of Interest at a Community Asset Committee Meeting

A Councillor who has a conflict of interest in a matter being considered at a *Community Asset Committee* meeting at which ~~he or she~~they:

~~5.1~~6.1 ~~is~~are present must disclose that conflict of interest by explaining the nature of the conflict of interest to those present at the *Community Asset Committee* meeting immediately before the matter is considered; or

~~5.2~~6.2 intends to present must disclose that conflict of interest by providing to the *Chief Executive Officer* before the *Community Asset Committee* meeting commences a written notice:

~~5.2.1~~6.2.1 _____ advising of the conflict of interest;

~~5.2.2~~6.2.2 _____ explaining the nature of the conflict of interest; and

~~5.2.3~~6.2.3 _____ detailing, if the nature of the conflict of interest involves a member of a Councillor's relationship with or a gift from another person the:



- (a) name of the other person;
- (b) nature of the relationship with that other person or the date of receipt, value and type of gift received from the other person; and

~~5.2.4~~6.2.4 nature of that other person's interest in the matter,

and then immediately before the matter is considered at the meeting announcing to those present that ~~he or she has~~they have a conflict of interest and that a written notice has been given to the *Chief Executive Officer* under this sub-Rule.

The Councillor must, in either event, leave the *Committee Asset Committee* meeting immediately after giving the explanation or making the announcement (as the case may be) and not return to the meeting until after the matter has been disposed of.

~~6.7.~~6.7. Disclosure at a Meeting Conducted Under the Auspices of Council

A Councillor who has a conflict of interest in a matter being considered by a meeting held under the auspices of *Council* at which ~~he or she is~~they are present must:

~~6.4~~7.1 disclose that conflict of interest by explaining the nature of the conflict of interest to those present at the meeting immediately before the matter is considered;

~~6.2~~7.2 absent ~~himself or herself~~themselves from any discussion of the matter; and

~~6.3~~7.3 as soon as practicable after the meeting concludes provide to the *Chief Executive Officer* a written notice recording that the disclosure was made and accurately summarising the explanation given to those present at the meeting.

~~7.8.~~7.8. Disclosure by Members of Council Staff Preparing Reports for Meetings

~~7.4~~8.1 A member of Council staff who, in ~~his or her~~their capacity as a member of Council staff, has a conflict of interest in a matter in respect of which ~~he or she is~~they are preparing or contributing to the preparation of a Report for the consideration of a:

~~7.1~~8.1.1 *Council meeting*;

~~7.1~~8.1.2 *Delegated Committee meeting*;

~~7.1~~8.1.3 *Community Asset Committee meeting*

must, immediately upon becoming aware of the conflict of interest, provide a written notice to the *Chief Executive Officer* disclosing the conflict of interest and explaining the nature of the conflict of interest.

~~7.2~~8.2 The *Chief Executive Officer* must ensure that the Report referred to in sub-Rule ~~7.4~~8.1 records the fact that a member of Council staff disclosed a conflict of interest in the subject-matter of the Report.

~~7.3~~8.3 If the member of Council staff referred to in sub-Rule ~~7.4~~8.1 is the *Chief Executive Officer*:

~~7.3~~8.3.1 the written notice referred to in sub-Rule ~~7.4~~8.1 must be given to the *Mayor*; and

~~7.3~~8.3.2 the obligation imposed by sub-Rule ~~7.2~~8.2 may be discharged by any other member of Council staff responsible for the preparation of the Report.



~~8-9.~~ Disclosure of Conflict of Interest by Members of Council Staff in the Exercise of Delegated Power

~~8-4~~9.1 A member of Council staff who has a conflict of interest in a matter requiring a decision to be made by the member of Council staff as delegate must, immediately upon becoming aware of the conflict of interest, provide a written notice to the *Chief Executive Officer* explaining the nature of the conflict of interest.

~~8-2~~9.2 If the member of Council staff referred to in sub-Rule ~~8-4~~9.1 is the *Chief Executive Officer* the written notice must be given to the *Mayor*.

~~9-10.~~ Disclosure by a Member of Council Staff in the Exercise of a Statutory Function

~~9-4~~10.1 A member of Council staff who has a conflict of interest in a matter requiring a statutory function to be performed under an Act by the member of Council staff must, upon becoming aware of the conflict of interest, immediately provide a written notice to the *Chief Executive Officer* explaining the nature of the conflict of interest.

~~9-2~~10.2 If the member of Council staff referred to in sub-Rule ~~9-4~~10.1 is the *Chief Executive Officer* the written notice must be given to the *Mayor*.

~~10-11.~~ Retention of Written Notices

The *Chief Executive Officer* must retain all written notices received under this Chapter for a period of three years.



Chapter 6 – Miscellaneous

1. Informal Meetings of Councillors

If there is a meeting of Councillors that:

- 1.1 is scheduled or planned for the purpose of discussing the business of *Council* or briefing Councillors;
- 1.2 is attended by at least one member of Council staff; and
- 1.3 is not a *Council meeting*, *Delegated Committee* meeting or *Community Asset Committee* meeting

the *Chief Executive Officer* must ensure that a summary of the matters discussed at the meeting are:

- (a) tabled at the next convenient *Council meeting*; and
- (b) recorded in the minutes of that *Council meeting*.

2. Confidential Information

- 2.1 ~~If, after the repeal of section 77(2)(c) of the Local Government Act 1989,~~ Where the *Chief Executive Officer* is of the opinion that information relating to a meeting is confidential information within the meaning of the *Act*, ~~he or she~~ they may ~~designate~~ advise the information ~~as is~~ confidential and advise Councillors and/or members of Council staff in writing accordingly. If not advised then the information may still be confidential by virtue of the Act.
- 2.2 Information which has been ~~designated~~ advised by the *Chief Executive Officer* as confidential information within the meaning of the *Act*, and in respect of which advice has been given to Councillors and/or members of Council staff in writing accordingly, will be presumed to be confidential information.
- 2.3 Notwithstanding sub-Clauses 2.1 and 2.2, *Council* may resolve to release confidential information within the meaning of the *Act*, or that which has been ~~designated~~ advised by the *Chief Executive Officer* as confidential information within the meaning of the *Act*.



Chapter 7 – Election Period Policy

[Election Period Policy not part of review]

Summary of submission received

Public Transparency Policy

Summary of feedback	Officer response
<p><u>Definitions</u></p> <p>Correct the typo under the Definition of ‘public transparency’.</p> <p>I think the principles are reproduced in clause 6 of this policy rather than clause 5.</p>	<p>Good pick up. Recommend incorporating suggested change.</p>
<p><u>7.1</u></p> <p>The policy needs to include some detail on how this commitment is ensured and during which stage of the decision making process this will be achieved. It is not enough for the ‘transparency’ box to be ticked by allowing the community to witness councillors make decisions at Council meetings without any meaningful engagement on the part of the community towards that decision – especially in relation to matters initiated by the community and/or of interest to them.</p>	<p>The Public Transparency is a high level Policy. Clause 7.2 adequately addresses this, along with reference to Chapter 1 of the Governance Rules and other related Policies and Legislation – such as the Community Engagement Policy.</p>
<p><u>7.3.2</u></p> <p>Provision should be made (either in the Public Transparency Policy or the Governance Rules) for Councillors to explain what factors they have included in their decision (particularly in relation to matters put forward be the public) and reasons for their decision. The community should also have the opportunity to counter the reasons before any final vote is taken. Ideally, this should happen during the engagement stage so that there are no surprises for the community when Council makes the decision.</p>	<p>This is not recommended. Councillors are not compelled to comment on matters or their decision-making process at Council or Delegated Committee meetings. Councillors will generally provide comment about the reasons they vote for or against a motion as part of the formally constituted meeting.</p> <p>Councillors should always bring an open mind to the decision-making process (to avoid perception of pre-determined bias). A form of engagement that results in the community knowing what the decision of Council is before it convenes and votes on the matter, is not recommended.</p>



18.14 - Public Transparency Policy

COUNCIL POLICY

1. PURPOSE

This purpose of this Policy is to:

- 1.1 give effect to the Public Transparency Principles;
- 1.2 describe the ways in which Council Information will be made publicly available;
- 1.3 specify which Council Information will be made publicly available as of course; and
- 1.4 describe the categories of Council Information that may be unavailable to the public.

This Policy is adopted under section 57 of the Act.

2. OBJECTIVE

The objective of this Policy is to formalise Council's support for transparency in its decision-making processes and availability of Council Information and to achieve the purpose stated in Part 1 of this Policy.

3. SCOPE

This Policy applies to Councillors and Officers.

4. DEFINITIONS

In this Policy, the following words and phrases mean:

"Act" means the *Local Government Act 2020*.

"Chief Executive Officer" includes an Acting Chief Executive Officer.

"Closed Meeting" means a Meeting that is closed to members of the public.

"Community" means the residents and ratepayers of, and visitors to, the Municipal District and may, depending on the context, refer to all of those people or to particular subsets of those people.

"Confidential Information" means confidential information as defined in section 3(1) of the Act.

"Council" means Colac Otway Shire Council.

"Council Information" means all documents and other information held by Council.

"Council Offices" means the offices of Council located at 2-6 Rae Street, Colac and 100 Great Ocean Road, Apollo Bay.

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“Council Website” means Council’s website at www.colacotway.vic.gov.au.

“Governance Rules” means the governance rules adopted by Council under section 60 of the Act, as amended from time to time.

“Health Information” means health information as defined in section 3(1) of the *Health Records Act 2001*.

“Meeting” means a meeting of Council or a Delegated Committee.

“Municipal District” means the municipal district of Council.

“Officer” means a member of Council staff, and includes the Chief Executive Officer.

“Personal Information” means personal information as defined in section 3(1) of the *Privacy and Data Protection Act 2014*.

“Public Transparency Principles” means the public transparency principles set out in section 58 of the Act and reproduced in Part 5 of this Policy.

“Requestor” means a person making a request to access Council Information under and in accordance with this Policy.

5. RESPONSIBILITY FOR THIS POLICY

- 5.1 The Chief Executive Officer is responsible for the application and operation of this Policy.
- 5.2 The Chief Executive Officer may, from time to time, authorise another Officer or Officers to fulfil any of the Chief Executive Officer’s functions and duties under this Policy.
- 5.3 Where another Officer is, or other Officers are, authorised under clause 5.2, any reference in this Policy to the Chief Executive Officer is to be read as a reference to that Officer or those Officers.

6. PUBLIC TRANSPARENCY PRINCIPLES

- 6.1 The Public Transparency Principles are set out in section 58 of the Act as follows:
 - 6.1.1 Council decision-making processes must be transparent, except when Council is dealing with information that is confidential by virtue of the Act or any other Act.
 - 6.1.2 Council Information must be publicly available, unless:
 - (a) the information is confidential by virtue of the Act or any other Act; or
 - (b) public availability of the information would be contrary to the public interest.

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6.1.3 Council Information must be understandable and accessible to members of the Municipal District.

6.1.4 Public awareness of the availability of Council Information must be facilitated.

6.2 Council will give effect to and implement the Public Transparency Principles in accordance with this Policy.

7. COUNCIL DECISION-MAKING PROCESSES

7.1 Council will ensure that the decision-making processes that it adopts are transparent and open to the Community so that the Community is provided with an opportunity for meaningful engagement with Council and its decision-making processes.

7.2 Without limiting the generality of clause 7.1, Council's decision-making processes will:

7.2.1 be conducted in accordance with the Act and the Governance Rules;

7.2.2 unless considering Confidential Information, be conducted in a forum that is open to, and accessible by, the Community; and

7.2.3 be informed by the:

(a) views of those members of the Community whose rights and interests will be directly affected by the decision; and

(b) responses, if any, to any process of community engagement conducted by Council in respect of the decision, whether in accordance with its Community Engagement Policy or otherwise.

7.3.1 Further details of Council's decision-making process can be found in Chapter 1 of the Governance Rules.

8. AVAILABILITY OF COUNCIL INFORMATION

8.1 All Council Information will be made available to the public, unless the:

8.1.1 Council Information is Confidential Information; or

8.1.2 release of the Council Information is assessed by the Chief Executive Officer as being contrary to the public interest.

8.2 A list of the categories of Council Information which will generally, subject to this Policy, be made available either on the Council Website, at the Council Offices or on request is set out at Appendix 1 to this Policy.

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9. PUBLICATIONS

Council publishes a range of newsletters, reports and handbooks for residents, businesses and visitors to the Municipal District. These publications are available on the Council Website, at the Council Offices or on request to Council.

10. ACCESSIBILITY OF COUNCIL INFORMATION

- 10.1 Council Information will be made available on the Council Website, at the Council Offices and/or on request.
- 10.2 Council will, to the extent possible, facilitate access to Council Information by:
- 10.2.1 making Council Information available in accordance with this Policy;
 - 10.2.2 endeavouring to make Council Information accessible electronically and in hard copy, where requested; and
 - 10.2.3 endeavouring to convert Council Information to different accessible formats where necessary for members of the Community for whom either:
 - (a) English is their second language; or
 - (b) their disability requires an alternative means of access to be provided.
- 10.3 Where a request is made for access to Council Information that is not on the Council Website or otherwise available at the Council Offices, the Chief Executive Officer will:
- 10.3.1 review the request;
 - 10.3.2 assess whether the Council Information requested is Confidential Information, or its release would be contrary to the public interest; and
 - 10.3.3 notify the Requestor of the outcome of that assessment.
- 10.4 If the Council Information requested is assessed under clause ~~10.2~~10.3 as not being Confidential Information, or its release is assessed as not being contrary to the public interest, the Council Information will be provided to the Requestor.
- 10.5 The Council Information will be provided to the Requestor by email unless either the:
- 10.5.1 Requestor seeks access in a different form, including by reference to the matters stated in clause 10.2.3, in which case the Council Information will be provided in that form, unless it is impracticable to do so; or
 - 10.5.2 Chief Executive Officer, having regard to the nature of the Council Information requested, determines that the Council Information should be provided in a different form, such as by inspection.

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- 10.6 Council will provide such support to the Requestor as it considers reasonable to ensure that the Council Information provided is understood by them.
- 10.7 If, under clause ~~10.2~~10.3, the Council Information requested is assessed as being Confidential Information, or its release is assessed as being contrary to the public interest, the Requestor will be advised:
- 10.7.1 that the request has been denied;
 - 10.7.2 of the reasons for the request being denied; and
 - 10.7.3 of alternative mechanisms by which they may seek access to the Council Information (eg by making a request made under the *Freedom of Information Act 1982*).
- 10.8 Any request for access to Council Information by way of an alternative mechanism under clause 10.7.3 will be assessed according to the process applicable to it, however:
- 10.8.1 if the Council Information has previously been provided in the course of processing a request made under the *Freedom of Information Act 1982*, it will be provided but may be subject to Council's fees and charges in its provision.
- 10.9 Where:
- 10.9.1 Council Information requested is assessed under clause ~~10.2~~10.3 as being Confidential Information, or its release is assessed as being contrary to the public interest; but
 - 10.9.2 it is practicable for that Council Information to be provided with deletions so that it is suitable for release to the Requestor; and
 - 10.9.3 the Chief Executive Officer believes that the Requestor would want the Council Information in that format,
- the Council Information will be provided in that format.

11. COUNCIL INFORMATION THAT IS NOT AVAILABLE

Some Council information may not be made publicly available. This will occur if the information is Confidential Information, or its release would be contrary to the public interest.

11.1 Confidential Information

- 11.1.1 What constitutes Confidential Information is set out in section 3(1) of the Act and includes information within the following categories:

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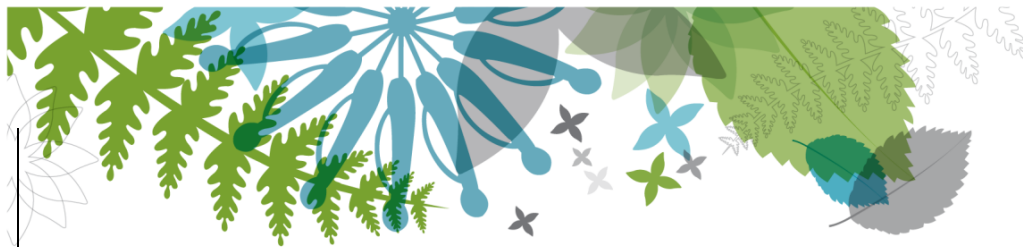
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Type	Description
Council business information	Information that would prejudice Council's position in commercial negotiations if prematurely released.
Security information	Information that is likely to endanger the security of Council property or the safety of any person if released.
Land use planning information	Information that is likely to encourage speculation in land values if prematurely released.
Law enforcement information	Information which would be reasonably likely to prejudice the investigation into an alleged breach of the law or the fair trial or hearing of any person if released.
Legal privileged information	Information to which legal professional privilege or client legal privilege applies.
Personal information	Information which would result in the unreasonable disclosure of information about any person or their personal affairs, if released, <u>or the disclosure of which would involve an interference with personal privacy under the <i>Privacy and Data Protection Act 2014</i>.</u>
Private commercial information	Information provided by a business, commercial or financial undertaking that relates to trade secrets or that, if released, would unreasonably expose the business, commercial or financial undertaking to disadvantage.
Confidential meeting information	Records of Council and Delegated Committee meetings that are closed to the public to consider confidential information <u>under section 66(2)(a) of the <i>Local Government Act 2020</i>.</u>
Internal arbitration information	Information provided to, or produced by, an arbiter for the purpose of an internal arbitration process, other than the findings and the reasons.
Councillor Conduct Panel information	Information: <ul style="list-style-type: none"> ▪ provided to, or produced by, a Principal Councillor Conduct Registrar, for the purposes of an application to form a Councillor Conduct Panel; or ▪ provided to, or produced by, a Councillor Conduct Panel for the purposes of conducting a hearing, other than a decision or reasons for a decision; or ▪ comprising any part of a statement of reasons or other document under the control of a Councillor Conduct Panel that the Councillor Conduct Panel determines contains confidential information.
Confidential information under the 1989 Act	Information that was confidential information for the purposes of section 77 of the <i>Local Government Act 1989</i> .

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11.1.2 In the interests of transparency, Council may, by resolution, determine to release information to the public even though it is Confidential Information.

11.1.3 A decision under clause 11.1.2 will generally only be made if Council, on the advice of the Chief Executive Officer, is satisfied that releasing the Confidential Information would not:

- (a) be inconsistent with any legal or contractual obligation;
- (b) cause unreasonable disadvantage to any person, including Council; and
- (c) otherwise be contrary to the public interest.

11.2 **Contrary to the Public Interest**

11.2.1 Council Information will not be made publicly available if doing so would be contrary to the public interest.

11.2.2 When assessing whether making certain Council Information publicly available would be contrary to the public interest, the Chief Executive Officer will have regard to, among other things:

- (a) the sensitivity of the Council Information;
- (b) whether the Council Information comprises a draft, or otherwise is no longer current; and
- (c) any adverse effect that releasing the Council Information would have on the effectiveness of Council's decision-making processes.

11.2.3 Without limiting clause 11.2.2, factors that might lead to a decision that the release of Council Information is contrary to the public interest might include whether release would be likely to:

- (a) disclose Personal Information or Health Information;
- (b) disclose information or opinions of a preliminary nature such that they might:
 - (i) mislead the Community with respect to Council's position on a matter; or
 - (ii) have a substantial adverse effect on the economy of the Municipal District;
- (c) prejudice discussions or negotiations between Council and any other party, in relation to a contract, legal proceedings or any other matter;
- (d) impair or otherwise impact on:
 - (i) Council's ability to obtain information in future that is similar in nature to the Council Information;
 - (ii) negotiations with respect to employment arrangements for Officers; or
 - (iii) defence, prosecution and settlement of legal proceedings; or

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- (e) impact on the reasonable allocation of Council's resources, including in responding to requests for Council Information that are assessed by the Chief Executive Officer as being frivolous, vexatious or repetitious in nature.

12. ~~COUNCIL INFORMATION THAT IS NOT AVAILABLE~~ PUBLIC AWARENESS FO AVAILABILITY OF COUNCIL INFORMATION

Council will ensure public awareness of this Policy and the availability of Council Information by:

- 12.1 publishing this Policy on the Council Website;
- 12.2 making this Policy available for public inspection at Council's offices;
- 12.3 converting this Policy to such accessible formats, having regard to clause 10.2.3, as the Chief Executive Officer determines; and
- 12.4 ensuring that all Officers:
- 12.4.1 are aware of this Policy and its effect; and
- 12.4.2 direct members of the Community to this Policy when access to Council Information is sought.

13. HUMAN RIGHTS CHARTER

This Policy has been assessed against the *Charter of Human Rights and Responsibilities Act 2006* as being consistent with that Act and, in particular, as promoting the rights of members of the Community:

- 13.1 not to have their privacy interfered with (section 13); and
- 13.2 take part in public life (section 18), by having the opportunity to:
- 13.2.1 participate in the conduct of Council's affairs; and
- 13.2.2 have access to Council and Council Information.

14. DISSATISFACTION WITH THE APPLICATION OF THIS POLICY

- 14.1 If a Requestor is dissatisfied with Council's application of, or believes that Council has acted inconsistently with⁷ this Policy, they can report their dissatisfaction to Council's Manager⁷ Governance ~~and~~ & Communications by:
- 14.1.1 email to inq@colacotway.vic.gov.au; or
- 14.1.2 telephone on 03 5232 9400.

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- 14.2 If the Requestor believes that the matter remains unresolved, it can be reported to the Victorian Ombudsman by:
- 14.3 making a complaint online at <https://www.ombudsman.vic.gov.au/complaints>; or
- 14.4 telephoning the Victorian Ombudsman on 03 9613 6222.

15. APPLICATION OF THIS POLICY

- 15.1 This Policy applies to all Council Information, except Council Information which is made available, or is otherwise accessible, under another Act (other than an Act which refers to this Policy).
- 15.2 Without limiting the generality of clause 15.1, this Policy does not apply to Council Information which is:
- 15.2.1 required to be made available under the *Planning and Environment Act 1987*;
- 15.2.2 required to be made available under the *Building Act 1993*; or
- 15.2.3 otherwise required to be made available on payment of a fee or charge.

16. RESPONSIBILITIES

<u>Party/parties</u>	<u>Roles and Responsibilities</u>	<u>Timelines</u>
<u>Council</u>	<u>Champion the commitment and principles for public transparency through leadership, modelling practice and decision-making.</u>	<u>Ongoing</u>
<u>Executive Management Team</u>	<u>Champion behaviours that foster transparency and drive the principles through policy, process and leadership.</u> <u>Monitor implementation of this policy.</u>	<u>Ongoing</u>
<u>Senior Leadership Team</u>	<u>Manage areas of responsibility to ensure public transparency, good governance and community engagement is consistent with this policy.</u>	<u>Ongoing</u>
<u>All Staff</u>	<u>Public transparency is the responsibility of all employees as appropriate to their role and function.</u> <u>All staff respond to requests for information and facilitate provision of information in consultation with their manager and in alignment with the Policy.</u>	<u>Ongoing</u>
<u>Manager Governance and Communications</u>	<u>To monitor implementation of this policy and conduct periodic reviews to drive continuous improvement.</u>	<u>Ongoing</u>
<u>Coordinator Governance</u>	<u>To monitor implementation of this policy and conduct periodic reviews to drive continuous improvement.</u>	<u>Ongoing</u>

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1-17. MONITORING, EVALUATION AND REVIEW

Council will review this Policy periodically to ensure that it continues to reflect the expectations of the Community with respect to the availability and accessibility of Council Information.

18. RELATED POLICIES AND LEGISLATION

Council's:

- Governance Rules
- Community Engagement Policy
- Information Privacy Policy

Charter of Human Rights and Responsibilities Act 2006

Freedom of Information Act 1982

Local Government Act 2020

Privacy and Data Protection Act 2014

Equal Opportunity Act 2010

2-19. DOCUMENT CONTROL

Policy owner	Manager, Governance & Communications	Division	Executive
Adopted by Council	26 August 2020	Policy Number	18.14
File Number	F18/5081	Review date	August 2024, or sooner if required

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APPENDIX 1

For the purposes of clause 8 of this Policy, the following Council Information will generally, and subject to this Policy, be made available either on the Council Website or on request by a member of the Community.

1. Documents such as:

- Plans and Reports adopted by Council;
- Council Policies;
- Project and Service Plans;
- Service Agreements, Contracts, Leases and Licences; and
- relevant technical reports and/or research that inform Council's decision-making.

2. Process information such as:

- application processes for approvals, permits, grants, access to Council services;
- decision-making processes;
- Guidelines and Manuals;
- Community Engagement Processes; and
- Complaints Handling Processes.

3. The following Council Information will be available on Council's website:

- Meeting Agendas and Reports to Council and Delegated Committees;
- Minutes of Meetings Council meetings and meetings of Delegated Committees;
- Audit and Risk Committee Charter;
- Terms of Reference for Delegated Committees, Community Asset Committees and Advisory Committees of Council;
- Gift Registers for Councillors and Council Staff;
- Travel Registers for Councillors and Council Staff;
- Registers of Conflicts of Interest disclosed by Councillors and Council Staff;
- Registers of Leases entered into by Council;
- Register of Delegations;
- Register of Authorised Officers;
- Register of Election Campaign Donations;
- Summary of Personal Interests;
- Councillor Allowances; ~~and~~
- any other Registers or Records required by the Act or any other Act.

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Item: 10.13

Authorisation of Officers under the Planning and Environment Act 1987

OFFICER	Maree Powell
GENERAL MANAGER	Errol Lawrence
DIVISION	Corporate Services
ATTACHMENTS	1. Instrument of Appointment and Authorisation - Nicholas Benyon [10.13.1 - 1 page]

1. PURPOSE

The purpose of the report is for Council to appoint Nicholas Benyon, Compliance Officer as an authorised officer under section 147(4) of the *Planning and Environment Act 1987*.

2. EXECUTIVE SUMMARY

The *Planning and Environment Act 1987* (the Act) establishes a framework for planning the use, development and protection of land in Victoria in the present and long-term interests of all Victorians.

Various staff members within the Council's Planning, Environment and Community Safety Departments are required to undertake assessments, give advice or investigate various issues in relation to the Act. In order to undertake these assessments legally, particularly during issues of non-compliance, authorisation under the Act is required.

3. RECOMMENDATION

That Council:

- 1. Appoints Nicholas Benyon as an authorised officer pursuant to section 147(4) of the Planning and Environment Act 1987;**
- 2. Authorises the use of the common seal in accordance with Colac Otway Shire's Governance Local Law No 4 – 2020; and**

3. **Notes that the Instrument of Appointment and Authorisation (Instrument) comes into force immediately the common seal of Council is affixed to the Instrument and remains in force until Council determines to vary or revoke it.**

4. KEY INFORMATION

It is required that Council appoint new officer Nicholas Benyon as a Compliance Officer under the Act due to the following:

- The *Planning and Environment Act 1987* regulates enforcement and is reliant on authorised officers acting on behalf of the Responsible Authority.
- Legal advice recommends that authorised officers be appointed by Council using an instrument to address specific authorisation provisions of section 147(4) of the *Planning and Environment Act 1987* versus the broader authorisations of section 224 of the *Local Government Act 1989*.

It is important to note that the broader Instrument of Appointment and Authorisation by the Chief Executive Officer pursuant to section 224 of the *Local Government Act 1989* must also be retained as it appoints the officer's position as an authorised officer for the administration and enforcement of other acts.

5. CONSIDERATIONS

Overarching Governance Principles (s(9)(2) LGA 2020)

Council decisions are to be made and actions taken in accordance with the relevant law.

Policies and Relevant Law (s(9)(2)(a) LGA 2020)

Not applicable.

Environmental and Sustainability Implications (s(9)(2)(c) LGA 2020)

Authorisation is required for officers to investigate and enforce planning and land use issues as outlined in this report serve to protect the wider environment in line with the requirements of the planning scheme and *Planning and Environment Act 1987*.

Community Engagement (s56 LGA 2020 and Council's Community Engagement Policy)

Not applicable.

Public Transparency (s58 LGA 2020)

Not applicable.

Alignment to Plans and Strategies

Alignment to Council Plan 2021-2025:

Theme 4 – Strong Leadership and Management

Objective 1: We commit to a program of best practice and continuous improvement

Financial Management (s101 Local Government Act 2020)

Not applicable.

Service Performance (s106 *Local Government Act 2020*)

Not applicable.

Risk Assessment

Not applicable.

Communication/Implementation

The attached Instrument of Appointment and Authorisation (*Planning and Environment Act 1987*) comes into force immediately upon execution.

Human Rights Charter

Not applicable.

Officer General or Material Interest

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.

Options

Option 1 – Appoint the officer as an Authorised Officer.

This option is recommended by officers as various staff members within the Council's Planning, Environment and Community Safety Departments are required to undertake assessments, give advice or investigate various issues in relation to the Act. In order to undertake these assessments legally, particularly during issues of non-compliance, authorisation under the Act is required.

Option 2 – Not Appoint the officer as an Authorised Officer.

This option is not recommended by officers as the staff members will be unable to undertake various aspects required of the position.



INSTRUMENT OF APPOINTMENT AND AUTHORISATION

(Planning and Environment Act 1987)

In this Instrument “**officer**” means –

NICHOLAS BENYON

By this Instrument of Appointment and Authorisation Colac Otway Shire Council –

1. Under section 147(4) of the *Planning and Environment Act 1987* appoints the officer to be an authorised officer for the purposes of the *Planning and Environment Act 1987* and the regulations made under that Act; and
2. Under section 313 of the *Local Government Act 2020* authorises the officer generally to institute proceedings for offences against the Acts and Regulations prescribed in this Instrument.

It is declared that this Instrument –

- (a) comes into force immediately upon its execution;
- (b) remains in force until varied or revoked

This Instrument is authorised by a resolution of the Colac Otway Shire Council on 27 April 2022.

THE COMMON SEAL of Colac Otway Shire)
 Council was hereunto affixed in accordance)
 with Local Law No 4)

.....
 Anne Howard
 Chief Executive Officer

Dated

Item: 10.14

Report of Informal Meetings of Councillors

OFFICER	Lyndal Redford
CHIEF EXECUTIVE OFFICER	Anne Howard
DIVISION	Executive
ATTACHMENTS	<ol style="list-style-type: none"> 1. Informal Meeting of Councillors - Friends of the Botanic Gardens - 10 March 2022 [10.14.1 - 1 page] 2. Informal Meeting of Councillors - Councillor Briefing - 16 March 2022 - CB 20220316 [10.14.2 - 2 pages] 3. Informal Meeting of Councillors - Councillor Budget 2022-23 Workshop - 23 March 2022 - CB 20220323 [10.14.3 - 2 pages] 4. Informal Meeting of Councillors - Council Meeting Preparation - 23 March 2022 - CM 20220323 [10.14.4 - 2 pages] 5. Informal Meeting of Councillors Record - Lake Colac Coordinating Meeting - 20220329 [10.14.5 - 1 page] 6. Informal Meeting of Councillors - Councillor Briefing - 6 April 2022 - CB 20220406 [10.14.6 - 3 pages] 7. Informal Meeting of Councillors - City Deals Executive Steering Committee - 12 April 2022 - CM 20220 [10.14.7 - 1 page]
PURPOSE	To report the Informal Meetings of Councillors

1. EXECUTIVE SUMMARY

INFORMAL MEETINGS OF COUNCILLORS

The Colac Otway Shire Governance Rules require that records of informal meetings of Councillors which meet the following criteria:

If there is a meeting of Councillors that:

- *is scheduled or planned for the purpose of discussing the business of Council or briefing Councillors;*
- *is attended by at least one member of Council staff; and*

- *is not a Council meeting, Delegated Committee meeting or Community Asset Committee meeting*

be tabled at the next convenient meeting of Council and recorded in the minutes of that Council meeting.

All relevant meetings have been recorded and documented, as attached.

2. REPORTING

The Informal Meetings of Councillors are reported herewith.

1. Friends of the Botanic Gardens	10 March 2022
2. Councillor Briefing	16 March 2022
3. Councillor Workshop	23 March 2022
4. Council Meeting Preparation	23 March 2022
5. Lake Colac Coordinating Committee	29 March 2022
6. Councillor Briefing	6 April 2022
7. City Deals Executive Steering Committee Meeting	12 April 2022

3. KEY INFORMATION

The following Informal Meetings of Councillors have been held and are attached to this report:

1. Friends of the Botanic Gardens	10 March 2022
2. Councillor Briefing	16 March 2022
3. Councillor Workshop	23 March 2022
4. Council Meeting Preparation	23 March 2022
5. Lake Colac Coordinating Committee	29 March 2022
6. Councillor Briefing	6 April 2022
7. City Deals Executive Steering Committee Meeting	12 April 2022

4. OFFICER DIRECT OR INDIRECT INTEREST

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.



Informal Meeting of Councillors Record

This form must be completed by the attending Council Officer and the completed form must be provided to governance@colacotway.vic.gov.au for reporting at the next practicable Council Meeting.

Please refer to Chapter 5 (Disclosure of Conflict of Interest) and Chapter 6 (Informal Meetings of Councillors) of the Governance Rules and the guidelines over page.

Meeting Details

Meeting name: Friends of the Botanic Gardens 2022 Annual General Meeting

Date: 10/03/2022 **Time:** 7:30pm

Meeting Location: Geelong Regional Library – Colac Branch, Queen Street, Colac

Matter/s Discussed: President's report (Meetings to be held quarterly), Treasurer's report, Curator's report (damage to rainforest area and update on grey headed flying foxes), election of office bearers, general business (council wide approach for terms of reference committees and sub committees).

In Attendance:

Councillors:
Cr Margaret White
Officers:
Mark Robinson

Conflict of Interest Disclosures for Councillors and Officers: (refer to over page for guidelines)

Name	Type of interest	Left meeting at	Returned to meeting at
Nil		am / pm	am / pm

Completed by: Mark Robinson



Informal Meeting of Councillors Record

Councillor Briefing

Date: 16 March 2022

Time: 1.15pm

Meeting Location: Meeting Rooms 1 and 2 COPACC and by videoconference

Invitees:
Cr Jamie Bell, Cr Graham Costin, Cr Kate Hanson, Cr Stephen Hart, Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard, Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt
Attendees:
Cr Jamie Bell (by videoconference), Cr Graham Costin, Cr Kate Hanson, Cr Stephen Hart, Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard, Tony McGann, Ian Seuren, Errol Lawrence, Marlo Emmitt, Jo Grainger, James Myatt, Lucy Moloney, Dora Novak, Madeleine Bisits (by videoconference), Doug McNeill
External attendees:
Project Officer - Barwon SouthWest Key Worker Housing Project
Apologies:
Nil
Absent:
Nil

Meeting Commenced at: 1.35pm

Declarations of Interest:

Name	Type of Disclosure	Item	Reason
Nil			



Councillor Briefing – 16 March 2022		
Time	Item	Attendees
1.35pm – 1.59pm	Gender Equality Action Plan	Jo Grainger
1.59pm – 2.16pm	Bluewater Electrification Feasibility Project	James Myatt Lucy Maloney Dora Novak Madeleine Bisits
2.16pm – 2.19pm	Break	
2.19pm – 2.47pm	Social and Affordable Housing Update	Project Officer - Barwon SouthWest Key Worker Housing Project Doug McNeill
2.47pm – 2.55pm	General Business: <ul style="list-style-type: none"> ▪ Councillor Allowances 	
2.55pm – 2.56pm	Strategic Planning Update	Doug McNeill
2.56pm – 3.09pm	Break	
3.09pm – 3.37pm	General Business: <ul style="list-style-type: none"> ▪ 69 McLachlan Street, Apollo Bay ▪ Civic thank you event ▪ April 2022 Council meeting ▪ Submissions Committee meeting ▪ GovernWith <p>Cr Hanson left the meeting at 3.19pm and did not return.</p>	
3.37pm	Meeting closed	



Informal Meeting of Councillors Record

Councillor Budget 2022-23 Workshop

Date: 23 March 2022

Time: 11.30am

Meeting Location: Meeting Rooms 1 and 2 COPACC, and by videoconference

Invitees:
Cr Jamie Bell, Cr Graham Costin, Cr Kate Hanson, Cr Stephen Hart, Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard, Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt, Lyndal McLean
Attendees:
Cr Jamie Bell, Cr Graham Costin, Cr Kate Hanson, Cr Stephen Hart, Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard (by videoconference), Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt, Amanda Barber, Toni Uphill, Chris Saw (by videoconference), Steve Baker (by videoconference), Madeleine Bisits, Paul Carmichael (by videoconference)
External attendees:
Associate Director and Certified Practicing Valuer - Preston Rowe Paterson (by videoconference), Certified Practicing Valuer (by videoconference) - Preston Rowe Paterson, Property Valuer – Valuer General Victoria (by videoconference)
Apologies:
Nil
Absent:
Nil

Meeting Commenced at: 11.32am

Declarations of Interest:

Name	Type of Disclosure	Item	Reason
Nil			



Councillor Budget 2022-23 Workshop- 23 March 2022		
Time	Item	Attendees
11.32am-1.43pm	<p>Councillor Budget 2022-23 Workshop</p> <p>Cr Bell attended the meeting at 12.22pm. Cr McCracken left the meeting at 12.40pm; returned at 12.53pm.</p>	<p>Property Valuer Associate Director and Certified Practicing Valuer Certified Practicing Valuer</p> <p>Amanda Barber Toni Uphill Chris Saw Steve Baker Madeleine Bisits Paul Carmichael</p>
1.43pm-1.52pm	Break	
1.52pm-2.36pm	Councillor Budget 2022-23 Workshop	<p>Amanda Barber Toni Uphill Chris Saw Steve Baker Madeleine Bisits Paul Carmichael</p>
2.36pm	Meeting closed	



Informal Meeting of Councillors Record

Council Meeting Preparation

Date: 23 March 2022

Time: 2.00pm

Meeting Location: Meeting Rooms 1 and 2 COPACC, and by videoconference

Invitees:
Cr Jamie Bell, Cr Graham Costin, Cr Kate Hanson, Cr Stephen Hart, Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard, Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt, Lyndal McLean
Attendees:
Cr Jamie Bell, Cr Graham Costin, Cr Kate Hanson, Cr Stephen Hart, Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard (by videoconference), Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt, Lyndal McLean, Simon McBeth (by videoconference), Frank Castles, Doug McNeill, Ravi Ayyagari, Bláithín Butler
External attendees:
Nil
Apologies:
Nil
Absent:
Nil

Meeting Commenced at: 2.49pm

Declarations of Interest:

Name	Type of Disclosure	Item	Reason
Nil			



Council Meeting Preparation - 23 March 2022		
Time	Item	Attendees
2.49pm-3.23pm	Council Meeting Preparation Cr Bell attended the meeting at 2.53pm.	Simon McBeth Frank Castles Doug McNeill Ravi Ayyagari Bláithín Butler
3.23pm	Meeting closed	



Informal Meeting of Councillors Record

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Meeting Details

Meeting name: Lake Colac Coordinating Committee Meeting

Date: 29/03/2022 **Time:** 1 pm – 3.00 pm

Meeting Location: COPACC – Meeting Rooms 1 & 2

Matter/s Discussed: Lake Colac Coordinating Committee Meeting –

Discussions regarding coordinated efforts of community, Local Government and State Government agencies to implement the Lake Colac Management Plan and the Lake Colac Foreshore Master Plan.

Discussions regarding the revitalisation and development of Lake Colac as a recreational, tourism, social, environmental and economic asset

In Attendance:

Councillors:
Councillor Margaret White
Officers:
Tony McGann, Dora Novak, Jasmina Neill

Conflict of Interest Disclosures for Councillors and Officers: (refer to over page for guidelines)

Name	Type of interest	Left meeting at	Returned to meeting at
Nil	Choose an item.	am / pm	am / pm

Completed by: Jasmina Neill



Informal Meeting of Councillors Record

Councillor Briefing

Date: 6 April 2022

Time: 11.30am

Meeting Location: Meeting Rooms 1 and 2 COPACC and by videoconference

Invitees:

Cr Jamie Bell, Cr Graham Costin, Cr Kate Hanson, Cr Stephen Hart, Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard, Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt

Attendees:

Cr Jamie Bell, Cr Kate Hanson, Cr Stephen Hart, Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard, Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt, Mark Robinson, Madeleine Bisits, Cameron Duthie, Lyndal McLean, Amanda Barber, Toni Uphill, Chris Saw (by videoconference), Steven Baker (by videoconference), Mark McLennan (by videoconference), Robert Uebergang (by videoconference), Amila Wijekoon, Dora Novak, James Myatt, Nicole Frampton, Kristy Cochrane, Jagdish Kancharla (by videoconference), Chris Leonard, Paula Gardiner, Belinda Rocka

External attendees:

Director - Regional Roads Victoria, Chair – Colac RoadSafe, Secretary - Colac RoadSafe, Treasurer - Australian Plant Society Colac-Otway, Secretary - Australian Plant Society Colac-Otway

Apologies:

Cr Graham Costin

Absent:

Nil

Meeting Commenced at: 11.30am

Declarations of Interest:

Name	Type of Disclosure	Item	Reason
Cr Chris Potter	General Conflict of Interest	1.7 - Memorial Square Public Toilets – Summary of submissions and finalisation of Concept Plan	Colac RSL sub branch president made a submission to the project and I have been a RSL Board member and continue to provide assistance to the Board.



Councillor Briefing – 6 April 2022		
Time	Item	Attendees
11.30am-12.04pm	Colac East Entrance Roundabout	Director - Regional Roads Victoria Chair – Colac RoadSafe, Secretary - Colac RoadSafe Treasurer -Australian Plant Society Colac-Otway Secretary - Australian Plant Society Colac-Otway Mark Robinson Madeleine Bisits Cameron Duthie
12.04pm-12.10pm	Break Cr Bell attended the meeting at 12.07pm	
12.10pm-12.23pm	Councillor Code of Conduct Review (post public consultation) and Governance Rules and Public Transparency Policy (post public consultation)	Lyndal McLean
12.23pm-12.28pm	Councillor and EA to CEO, Mayor and Councillors catch up	Belinda Rocka
12.28pm-1.15pm	Break	
1.15pm-1.53pm	Council Workshop - 22/23 Budget V4.1	Amanda Barber Toni Uphill Chris Saw Steven Baker
1.53pm-2.07pm	Draft Asset Plan	Robert Uebergang Amila Wijekoon Madeleine Bisits Paula Gardiner
2.07pm-2.29pm	Break	
2.29pm-2.40pm	General Business: <ul style="list-style-type: none"> June Council Meeting date 	



Councillor Briefing – 6 April 2022		
Time	Item	Attendees
2.40pm-3.18pm	Proposed Sale of 69 McLachlan Street Apollo Bay - Method of Sale	Mark McLennan Madeleine Bisits Paula Gardiner
3.18pm-3.34pm	Barwon South West Climate Alliance - 2022-23 Membership	Dora Novak
3.34pm-3.53pm	<p>Memorial Square Public Toilets – Summary of submissions and finalisation of Concept Plan</p> <p>Cr Hart left the room at 3.34pm; returned at 3.38pm.</p> <p>Cr Potter declared a conflict of interest and left the room at 3.36pm prior to any discussion taking place.</p> <p>Cr McCracken left the meeting at 3.52pm and did not return.</p>	Madeleine Bisits James Myatt Nicole Frampton Kristy Cochrane Jagdish Kancharla Paula Gardiner
3.53pm-4.06pm	<p>Western Reserve Oval Drainage Works</p> <p>Cr Potter returned to the meeting at 3.53pm. Cr Bell left the meeting at 4.01pm and did not return.</p>	Nicole Frampton Kristy Cochrane Madeleine Bisits Chris Leonard Paula Gardiner
4.06pm-4.18pm	New Council Environment Strategy and Climate Action Plan development update	Dora Novak
4.18pm-4.25pm	<p>General Business:</p> <ul style="list-style-type: none"> • Special Council Meeting in Apollo Bay • C111 Planning Amendment • Community Grants • Submissions 	
4.25pm	Meeting closed	



Informal Meeting of Councillors Record

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Meeting Details

Meeting name: City Deal Executive Steering committee meeting

Date: 12/04/2022 **Time:** 11:15am

Meeting Location: Colac Otway Shire Rae Street Executive Office and by videoconference

Matter/s Discussed:

- Status of COS City Deal Program Actions and issues.
- Port Of Apollo Bay Fishermen’s Co-Op design and private contribution.
- Discussion regarding Kennett River toilet and waste water treatment.
- Program funding.

In Attendance:

Councillors:
Cr Stephen Hart
Officers:
Anne Howard – Chief Executive Officer, Tony McGann – General Manger Environment and Infrastructure, Ian Seuren – General Manager Development and Community Services, Errol Lawrence – General Manager Corporate Services, Marlo Emmitt -Governance and Communications Manager, Frank Castles – Director City Deals

Conflict of Interest Disclosures for Councillors and Officers: (refer to over page for guidelines)

Name	Type of interest	Left meeting at	Returned to meeting at

Completed by: Frank Castles