



COUNCIL MEETING

AGENDA

Wednesday 15 December 2021

at 4:00 PM

COPACC

95 - 97 Gellibrand Street, Colac

Next Council Meeting: 23 February 2021



COLAC OTWAY SHIRE COUNCIL MEETING

Wednesday 15 December 2021

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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 15 December 2021 at 4:00 PM.

<u>AGENDA</u>

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 and Committee meetings will be live streamed and recorded 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 endeavor 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. 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.

PUBLIC ATTENDANCE

In response to current COVID-19 requirements as directed by the Chief Health Officer, all attendees aged 16 and over must be fully vaccinated and show their vaccination status as a condition of entry to COPACC. Patrons should enter via the main entrance (all abilities access from Gellibrand Street), where they will be required to register and show proof of vaccination. Facemasks are recommended in COPACC.

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. 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; if you do not ask a question you will be asked to sit down and the next person will be invited to 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).
- 2. 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

• Ordinary Council Meeting held on 24 November 2021.

Recommendation

That Council confirm the minutes of the Ordinary Council Meeting held on 24 November 2021.



Item: 10.1 Bruce Street Land Sale

OFFICER	Paula Gardiner		
GENERAL MANAGER	lan Seuren		
DIVISION	Development and Community Services		
ATTACHMENTS	Nil		
PURPOSE	To affirm the strategic outcomes for the project and confirm a preferred way forward (project approach) for the sale of land at 36-52 Bruce Street, Colac.		

1. EXECUTIVE SUMMARY

Council has indicated its desire to consider the sale of 36-52 Bruce Street, Colac for many years and resolved at its meeting on 24 March 2021 to sell the land and expressed an interest in facilitating the provision of affordable housing within any development of the site.

Sale of land by Council involves two processes:

- Fulfilling statutory processes as per the Local Government Act 1989 and 2020.
- Undertaking a sale of land process to determine the preferred purchaser and price.

The statutory process has been completed and Council resolved to sell the land at its meeting on 24 November 2021.

Following the 24 March 2021 Council Meeting resolution, a project approach was investigated and presented to undertake an Expression of Interest (EOI) process for the land sale that invites offers from developers and Community Housing Trusts that would result in 15% of land developed be assigned to facilitate social housing. The project approach was endorsed via resolution at the 26 May 2021 Council Meeting, and Council sought Expressions of Interest, with the submission period closing in August 2021.

Given the location of the site Council voluntarily undertook an environmental audit to establish the land use potential. From the audit, Council is required to ensure civil works are completed to mitigate risks associated with residential land adjoining a former landfill site (being 2-34 Bruce Street). The required works include the construction of a cut-off wall along the northern property boundary to provide an underground barrier to manage migration of gas between the two property titles. Council

undertook a Request for Tender to complete these works in August 2021. No contract has been awarded at this time.

Council faces a number of critical project decisions at this time. Council has reflected on the project aims and objectives during October and November to confirm if the current project approach would provide the best result to Council for the sale of 36-52 Bruce Street, Colac. The review identified that an alternative project approach may better achieve all the project objectives through a simplified process.

The recommended approach is that the sale proceed based on a conditional contract of sale that requires the land to be developed within an agreed time frame for residential housing, and for the developer to construct all infrastructure including the cut-off wall along the northern boundary. The contract would not require the provision of social housing in any new development of the site, but it would provide the option for Council to have first option to buy subdivided allotments to facilitate the provision of social housing should it choose to do so. This revised approach would result in a less complicated sale process that could attract a higher market interest and provide best financial value to the community. It also provides flexibility for social housing to be established on this site or other land in Colac using some of the proceeds of the sale, thus achieving the outcome being sought by Council when it first resolved to proceed with the EOI process.

2. RECOMMENDATION

That Council:

- 1. Notes that more information is now available than when Council last considered the sale process for 36-52 Bruce Street, Colac.
- 2. Acknowledges that a number of valid project approaches are available to achieve the project objectives.
- **3.** Endorses a changed project approach with a contract of sale for 36-52 Bruce Street, Colac that includes proposed conditions as follows:
 - a. That the purchaser be responsible for the construction of all infrastructure associated with the development including the cut-off wall.
 - b. The development timeframes are as follows, unless agreed otherwise in writing:
 - *i.* Planning application is lodged within six months of the settlement date.
 - *ii.* Construction commences within six months of the planning permit issued for subdivision.
 - *c.* Council has first right to purchase subdivided lots at market value to facilitate social housing outcomes.
 - d. If the purchaser fails to comply with conditions a), b) or c) Council has the right to repurchase the property at the original sale price.
 - 4. Notes it will consider and approve final conditions of sale and sale price at a future Council meeting, when it determines a preferred purchaser.
 - 5. Authorises the Chief Executive Officer to proceed with preparations to sell of 36-52 Bruce Street, Colac via a Public Sale Process consistent with Section 8.2, parts b), c), and d) of the Disposal and Acquisition of Property Policy with the sale as per the endorsed project approach.
 - 6. Notes that current tender and Expression of Interest process with be closed out without awarding any contracts.

7. Notes Officers will liaise directly with those who submitted an Expression of Interest to encourage them to stay engaged in the project.

3. KEY INFORMATION

The current project approach for the sale of the Council owned land at 36-52 Bruce Street, Colac includes three key project deliverables being:

- 1. Notice of Intention to Sell: Complete the statutory process set out by the *Local Government Act 1989* to enable Council to sell land.
- 2. Sale of Land: Undertake a procurement process to facilitate the sale of land to achieve the outcomes detailed via Council resolution.
- 3. Civil Works: Construct a cut-off wall along the northern property boundary adjoining the former landfill to provide an impervious barrier.

Notice of Intention to Sell

Council at the 24 November 2021 Council meeting considered submissions received to the formal Notice of Intention to Sell notice which had been advertised under the *Local Government Act 1989*, and resolved to sell the land. The conclusion of the statutory process closed out item 1 listed above. The following is Council's resolution:

"That Council:

- **1.** Acknowledges the written submissions received and thanks the submitters for their contribution to the land sale consideration process.
- 2. Acknowledges and notes the verbal comments made in support of written submissions at the Submissions Committee meeting held on 1 September 2021.
- 3. Resolves to sell the land known as 36-52 Bruce Street, Colac subject to conditions to the satisfaction of Council.
- 4. Will determine the details of sale, including purchase and conditions, at a future meeting of Council."

Having made a formal decision to sell the property, the conditions under which it is sold need to be confirmed through a further resolution, which is the aim of this report.

Sale of land – Expression of Interest Process

Council commenced the sale process in June 2021 with the engagement of a property agent to advertise an Expression of Interest process for the sale and development of the land. The Expressions of Interest sought proposals from developers to purchase the land and develop it for residential purposes. Proposals were required to demonstrate how the land would be developed and nominate a purchase price. Proposals were also asked to demonstrate how they could provide 15% of the developable land as social housing.

The Expression of Interest process closed on 27 August 2021 and a number of submissions were received, confirming development of the Bruce Street land would provide a highly desirable residential outcome.

Despite this response, it appears that greater market interest in the purchase of the land could be achieved through a less complicated sale proposition (see discussion below).

Construction of the Cut-off Wall

A Request for Tender for construction of the cut-off wall was advertised in July 2021. The intention had been that Council would run this process concurrently with the Notice of Intention to Sell and Expression of Interest processes, with decisions on these prior to a Council commitment to construct the wall. This would ensure that Council did not enter into a contract to construct the wall without Council decisions to proceed with the sale via these processes. Council did not receive a tender that adequately suits its needs, and no contract has been awarded.

Review of Project Approach

A review of the Project Approach for sale of the land was initiated to ensure that Council would be achieving best value from the sale process. The review confirmed the key project objectives to be as follows:

- 1. Bruce Street land is developed and ready for housing development (I.e., titles issued).
- 2. Social Housing outcome is facilitated in Colac through the project.
- 3. Council's risks are well-managed including financial, reputational, legal, etc.
- 4. A high confidence land will be developed in a timely manner.
- 5. Council achieves a profit at the completion of the project.

As a component of the review, officers sought feedback from the property marketing team which were engaged to generate industry awareness and interest in the Bruce Street property through the EOI process. The marketing team confirmed that interest from the industry was exceptionally high however this did not necessarily result in a high number of EOI submissions being lodged with Council. Whilst not reflecting on the quality of the EOI submissions themselves, this feedback indicated that the low number of submissions received compared to the level of market interest may have resulted from the EOI documentation not providing clear and distinct project outcome requirements, and from less market experience of partnering with social housing providers to develop such housing within new subdivision.

A further consideration in the review process was that construction of the cut-off wall by a developer of the site rather than Council would reduce Council's risk exposure relating to the administration and completion of the contract works and enable the development of the land for residential housing to be fast tracked as all civil works could be completed concurrently. Were Council to take this approach, sale of the site could proceed without the requirement for Council to undertake the works itself. Council is also delivering a large Captial Works program and City Deal projects that have been impacted by COVID-19 over recent months and are consuming a significant amount of Council's resources and attention. A simplified Bruce Street approach is better suited to Council's current capacity.

Considering the feedback from the marketing team and the possibility that the cut-off wall could more effectively be constructed by the purchaser and developer of the land, it was considered appropriate to not progress the current Expression of Interest or cut off wall tender processes, and to instead seek a Council direction about the most appropriate approach going forward.

Project Approach Options

As part of the project approach review, the following options have been considered and assessed against the Project Objectives identified above:

1. As planned - continue with the current project process including the progression of the EOI and awarding of the bentonite wall construction contract.

Not recommended: It is considered there is high risk exposure potential to Council, particularly associated with the timing and delivery of the construction contract of the Cut-off wall. Consideration includes the requirement for Council to 'cash flow' the costs associated with the cut-off wall as this work would need to be completed prior to the execution of the Contract of Sale for the land. This would also delay the commencement of development, as the potential landowner would not be able to undertake civil infrastructure works (i.e. roads, drainage etc.) until the Contract of Sale had been completed.

2. Stop project (in current form) - Review/recommence with proposal to sell land with no conditions on Contract of Sale.

Not recommended: As the Contract of Sale would not be conditioned, there is risk the land may not be subdivided and developed for residential housing immediately following the sale of land and the land may be 'banked.' This would not meet the key objective of using 36-52 Bruce Street for short-term residential development.

3. Stop project (in current form) - Review/recommence the proposal to sell land with changed conditions including the developer to build the cut-off wall and Council has first right to purchase lots for future social housing outcome. *Conditional Contract of Sale.*

Recommended: Project approach is straight forward which reduces Council risk exposure. Will enable the project to proceed through sale in the immediate to short term. Project approach is straight forward and better suited to Council's current capacity and risk appetite. This approach will increase the opportunity for market response due to the simplified model. This also provides flexibility to Council on how and where Social Housing outcomes can be achieved in Colac.

4. Stop project (in current form) - Review/recommence the proposal with Council retaining ownership and takes role of land developer with inclusion of Social Housing outcome.

Not recommended: While this option would provide an opportunity for high profit return, this would need to be balanced with the high-risk exposure for Council through the land development process. The risks including reputation, financial, resource, cash flow etc. would be high or very high. If this option were to be considered, significant upfront investigation and analysis would be recommended which would further delay the commencement of the project. As reported to Council previously, local government usually only undertakes development of land itself for housing when there is a market failure preventing that from occurring. This circumstance does not exist in Colac. This approach may require Council to carry significant holding costs for the development through a long period until the majority of the estate is sold further depleting Council's financial capacity in coming years.

5. Stop project (in current form) - Review/recommence the proposal with a partnership approach, with Council partnering with private parties to deliver project objectives.

Not recommended: The key identified risks associated with further consideration of this option relate to project time risk. This approach requires considerable time to investigate what private partnership options could be available, and then set about how to implement them particularly in line with governance requirements of local government. It is considered the risks associated with this option make it an undesirable project approach given there are more streamlined approaches available that would or could achieve the same outcomes.

6. Stop project (in current form) - Review/recommence the proposal to sell land with an approved development permit.

Not Recommended: While this approach may improve the attractiveness of the land to purchase, it requires upfront financial investment by Council to prepare a comprehensive planning application that is currently not budgeted. It also requires Council to create and operate in a framework where its different roles are explicit and clear, i.e. proponent and developer and its role as Responsible Authority and community representative. Any approved market response is difficult to quantify, and it will take longer than Option 3. The project may also suffer additional delays due to the developer requiring the permit provided with the sale to be amended to suit their development proposal.

7. Stop Project and not proceed, noting Council will need to pay Life to Date costs incurred.

Not recommended: Would result in no project objectives being met.

Recommended Approach

The outcome from this review is that the preferred project approach is Option 3, being to recommence the sale process with changed conditions including a requirement for the developer to build all infrastructure including the cut-off wall and that Council has first right to purchase lots for a future social housing outcome. Sale of the land in this way would have the following benefits:

- Conditional land sale would enable flexibility in meeting the social housing objective.
- Reduced risk exposure to Council.
- Provides an efficient and timely outcome for the development process to commence.
- Likely to generate increased market interest due to the clear requirements of Council in the Contract of Sale.

4. COMMUNITY CONSULTATION & ENGAGEMENT

Community updates will be provided to inform the community on the project objectives and approach and what the expected outcomes will be from the sale of 36-52 Bruce Street, Colac.

Any future planning permit application for subdivision would be subject to public notice, providing an opportunity for community members to make submissions on development related issues.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 1 - Strong and Resilient Community

Objective 1: Affordable and available housing will support our growing community and economy Objective 2: Attract, retain and grow business in our Shire

Objective 3: Key infrastructure investment supports our economy and liveability

Theme 3 – Healthy and Inclusive Community

Objective 1: All people have the opportunity to achieve and thrive in our shire Objective 3: We are a safe, equitable and inclusive community

The land sale strongly aligns to these objectives by achieving a financial return to Council at the same time as making land available for short-term residential development that responds to the current

lack of supply in Colac. The sale would thus support the future economic development of Colac through increased housing availability, reducing pressure on land prices. The achievement of social housing as a result of the sale would also address the identified need for social housing in the Shire of 344 households as described in Council's adopted Social Housing Plan. The Social Housing Plan has a key action that Council will make best use of its own land to benefit the community in this regard.

Council is also required to consider and align with the Disposal and Acquisition of Property Policy, which requires Council to publish a notice of its intention to sell or exchange property (on Council's internet site and in any other prescribed by the regulations) at least 4 weeks prior to doing so, which was recently completed via a report at the 24 November 2021 Council Meeting. The three key aspects to be considered and implemented by the Policy, and which have been completed as part of the process undertaken to date include:

- Council must undertake a community engagement process in accordance with its Community Engagement Policy and Operational Framework, at a minimum 'consult level,' before selling or exchanging property (Local Government Act 2020 section 114(2)(b));
- Submissions are considered by Council prior to resolving to sell or exchange land in accordance with its Community Engagement Policy;
- Council must obtain a valuation of land in accordance with section 114(2)(c) of the Act which is made not more than 6 months prior to sale or exchange.

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

Consideration will be made during the land development planning process to ensure environmental aspects are incorporated into the development. Council is seeking to maximise the social and economic benefits of sale of the land in respect of residential land availability that responds to the current demand for housing, and to achieve an increase in the social housing available to meet an identified community need. Regardless of which project approach is adopted by Council, construction of the cut-off wall along the northern boundary as recommended in the environmental audit will be required as a condition of development.

LEGAL & RISK

There are various project approaches that influence Council's risk exposure, including financial, legal, and reputational risks. The project approach that provides the lowest risk exposure to Council in regard would be to sell the land as is to a land developer.

There is a risk associated with Council undertaking the works associated with the construction of the cut-off wall that include the requirement to fund the construction prior to the completion of sale as this would pose a cash flow challenge given timing of the works in respect to receipt of sale proceeds.

FINANCIAL & BUDGETARY

Proceeds of the sale of the Bruce Street land will be used to offset the costs incurred by Council to enable the land sale to occur.

A preliminary review of project cost ranges indicates that Council has options available that would provide profit from the sale.

Any income from the sale of Bruce Street needs to be quarantined by Council until the project is complete.

7. IMPLEMENTATION STRATEGY

The implementation requirements for a direct sale of 36-52 Bruce Street, Colac is a relatively straight forward process which involves:

- The engagement of a real estate agent to facilitate the sale of the land.
- Preparation of a Section 32 statement.
- Preparation of a Contract of Sale with conditions required by Council.

COMMUNICATION

The communications and marketing associated with the sale of 36-52 Bruce Street, Colac would be managed by the appointed real estate agent through the sale process.

TIMELINE

The timeframe for implementing the key milestones is anticipated as follows:

- December / January 2022: Preparation for sale of land, including:
 - Preparation of Section 32
 - o Engagement of Real Estate Agent
 - Preparation of Contract of Sale
- January/February 2022: Market 36-52 Bruce Street, Colac
- March/April 2022 Council Meeting: Consider and enter into a Contract to sell the land.

8. OFFICER DIRECT OR INDIRECT INTEREST

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



Item: 10.2 Colac Otway Shire Community Awards

OFFICER	James Myatt		
GENERAL MANAGER	lan Seuren		
DIVISION	Development and Community Services		
ATTACHMENTS	Nil		
PURPOSE	To discuss options for Community Award Categories and ceremony dates.		

1. EXECUTIVE SUMMARY

At its October 2021 Council Meeting, Council resolved to consider options considering alternative dates and award categories for the Colac Otway Community Awards. This report presents options for Council's consideration.

2. RECOMMENDATION

That Council:

- 1. Resolves to hold the Colac Otway Community Awards Ceremony at the Colac Kana Festival from 2022 onwards.
- 2. Approves the following three categories for future Colac Otway Community Awards:
 - a. Citizen of the Year
 - b. Young Citizen of the Year
 - c. Community Service Award (Group/Individual).
- **3.** Confirms that Council employees are eligible to be nominated for a Colac Otway Community Award for achievements and work performed outside of their role as a Council employee.

3. KEY INFORMATION

At the 27 October 2021 Ordinary Council Meeting, Council resolved:

That Council:

- 1. Notes the community response to the Australia Day Event Survey;
- 2. Notes the requirement of the Australian Government for Councils to hold a Citizenship Ceremony on Australia Day;
- 3. Continues to hold a Citizenship Ceremony on 26 January as the only event funded;
- 4. Advocates to the Australian Government for Councils to have the option to hold Citizenship on 26 January or other dates of their choosing;
- 5. Discontinues community awards on 26 January and instead host annual community awards on an alternative date to be determined;
- 6. Considers the alternative date and revised award categories at a future meeting no later than 15 December 2021.

Potential Dates

During community consultation, there was no consensus on a date for future events to celebrate Community Awards. Council has the option to combine the Community Award ceremony with an existing community event, hold the Awards with an existing citizenship ceremony or hold a new standalone event. To combine with an existing community event, the event would need to be accessible for the whole community, free to access, include a stage and audio equipment and preferably have a large audience. After reviewing the annual events calendar, the Colac Kana Festival is the standout community event to host Community Awards.

Officers have initiated preliminary discussions with the Colac Kana Festival Committee to investigate if they are interested in hosting Community Awards during the Kana Festival. The committee unanimously voted to support the Community Awards ceremony being held in conjunction with their event, should Council wish to do so. The ceremony could be held sometime between 9:00am – 12:00pm on Saturday 19th March 2022.

Event/Date	Strength	Weakness
Colac Kana Festival 19 March 2022	 Existing event attracts a large attendance from the community adding prestige to the Awards. Kana has all infrastructure required to hold the ceremony. Kana attracts a diverse crowd from Colac Otway and celebrates different themes annually e.g. diversity. Reduce officer time required compared to other options. 	 If the event was to cease, Council would need to find an alternative date. Council has little control over time/date. Event is held in Colac only.
Rotate between	 Provide Community Awards ceremony in different locations around the shire annually. 	 Lack of consistency in time of year for Awards reducing the

Event/Date	Strength	Weakness
community events	 Event would have all infrastructure required to hold the ceremony. Potentially broadens the reach of the Awards ceremony to other members of the community. 	 community's ability to prepare nominations. Increased officer workload conducting a yearly Expression of Interest process for existing events to host the awards. Risk that in some years there wouldn't be suitable events to host the Awards.
Stand-alone event	 Council holds control over times/dates. Additional community event. Opportunity to hold event in different venue/township each year. 	 May require more than 3 award categories in order to create a substantial event. Unlikely to attract a sizeable crowd, with the risk of a small event taking away prestige of the Awards. Likely the most costly option for Council both financially and for officer time.
17 September (Citizenship Day)	 Opportunity to hold event in different venue each year. Opportunity for new citizens to meet inspirational community members. Time of year remains the same providing consistency for the community. 	 Likely need to hold event inside due to weather. There may be no new citizens for that ceremony date. Unlikely to attract a sizeable crowd, with the risk of a small event taking away prestige of the Awards.

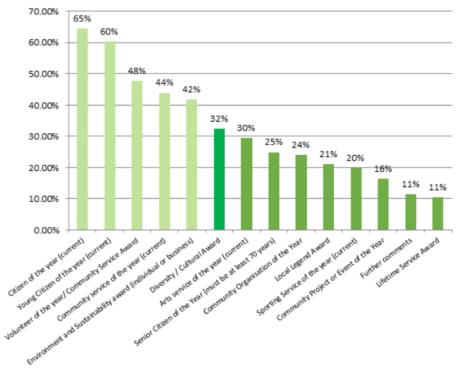
Considering the above options, officers recommend holding future Community Awards ceremonies at the Colac Kana Festival in order to maximise the audience, prestige and provide consistency in the award process.

Award Categories

In 2021 Council's Australia Day Award categories were:

- Citizen of the Year
- Young Citizen of the Year
- Community Service Award
- Sporting Service of the Year
- Arts Service of the Year

Through Council's Australia Day Event review, the community provided feedback on their preference on award categories with the results as per the below graph.



Question 10. Which of the following award categories would you like to see included in the Colac Otway Shire community awards? Please select a maximum of five award categories.

In previous years, Council has received limited nominations for award categories, with some individuals being nominated for multiple categories due to the overlap in their criteria. If the Community Awards Ceremony is combined with the Colac Kana Festival, it is recommended to consolidate to the following award categories:

- *Citizen of the Year* For outstanding individual achievement in areas including but not limited to business, science, education, environment, sport, diversity, community outcomes, arts etc.
- Young Citizen of the Year For outstanding individual youth achievement in areas including but not limited to business, science, education, environment, sport, diversity, community, arts etc.
- **Community Service Award (Group/Individual)** For outstanding contribution of an individual or group to the Colac Otway Shire community over an extended period of time in areas including but not limited to business, science, education, environment, sport, diversity, community outcomes, arts etc.

Council could consider an award for 'Volunteer of the Year' as per third ranked suggestion from the survey results however it is the view of officers that volunteers would be captured within the three recommended award categories. Additionally specific award categories including Sporting Achievement, Environmental Achievement or Diversity Award could be considered however individuals who have performed in these areas are eligible for nomination under the recommended three award categories.

Council Employees and Awards

In previous years, Council employees were not eligible to be nominated for Community Awards. Even so, a number of community members have tried to nominate Council employees for volunteering outside of their role at Council. In recognition of this, the following options exist relating to Council employees and community awards:

- Council employees are not eligible for nomination;
- Council employees are eligible to be nominated for achievements and work performed outside of their role with Council;
- Council employees are eligible to be nominated for work they do as part of Council, as well as other achievements.

Considering many Council employees are passionate about their community and participate in volunteering and community activities in addition to their work, it is recommended that employees should be eligible for Community Awards for achievements outside of their role with Council.

4. COMMUNITY CONSULTATION & ENGAGEMENT

Results from community engagement are included in the Australia Day Public Consultation Results report that was presented at the October 2021 Council Meeting.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 3 – Healthy and Inclusive Community

- 3.1 All people have the opportunity to achieve and thrive in our shire
- 3.2 People are active and socially connected through engaging quality spaces and places
- 3.3 We are a safe, equitable and inclusive community

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

Events play an important role in stimulating the local economy through event visitation and bringing the community together with increase opportunity for social and cultural interactions.

It is important to celebrate community achievements through the Colac Otway Shire Community Awards which acknowledges outstanding work that benefits our community and provides increased community pride.

LEGAL & RISK

Nil

FINANCIAL & BUDGETARY

Council has an annual budget allocation of \$16,000 to the "Australia Day" budget (not including officer time) which covers all event activities. This budget will cover future Community Award nominations process, ceremonies and all annual citizenship ceremonies.

7. IMPLEMENTATION STRATEGY

COMMUNICATION

If the officer recommendation is supported by Council, officers will enter discussions with the Colac Kana Committee to confirm arrangements to host the Colac Otway Community Awards Ceremony at the Colac Kana Festival in March 2022.

The Community Awards process will begin early in 2022 to ensure adequate time to consider nominations. The opportunity to nominate community members or groups for the Community Awards will be communicated through a variety of mediums including but not limited to newspapers and newssheets, radio, social media, and direct correspondence to progress associations, community groups, schools etc.

8. OFFICER DIRECT OR INDIRECT INTEREST

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



Item: 10.3 LRCI Phase 3 Funding Proposed Projects

OFFICER	Maddy Bisits		
GENERAL MANAGER	Tony McGann		
DIVISION	Environment & Infrastructure		
ATTACHMENTS	Nil		
PURPOSE	To present a draft list of projects for submission under the LRCI Program Phase 3.		

1. EXECUTIVE SUMMARY

The Federal Government has announced that a third round of funding will be available to Local Government organisations under the Local Roads and Community Infrastructure (LRCI) Program.

\$3,406,400 will be available to Colac Otway Shire from 1 January 2022, for the implementation of approved projects. Projects delivered under Phase 3 of the Program will need to be completed by end of June 2023.

A list of potential projects has been prepared for consideration by Council for endorsement prior to submission to the Federal Government in December.

The LRCI Program provides an opportunity for Council to address larger scale renewal works, upgrades or new community infrastructure that would not normally attract external funding.

2. RECOMMENDATION

That Council:

1. Submits the following projects to the Federal Government for inclusion in the Local Roads and Community Infrastructure grant program, Phase 3:

Project	Estimated Cost
Irrewillipe Road Wetlands	\$2,424,000
(Full funding of wetland development)	
Beeac Tennis Court Resurfacing	\$120,000
Beeac Playspace Renewal	\$220,000
Forest Street, Colac – Road Reconstruction (Colanda Street - Colac Forrest Road) (Part funding, remainder to be funded by Roads to Recovery grant funding)	\$642,400
Total	\$3,406,400

2. Delegates to the Chief Executive Officer the power to select any of the following as a reserve project or projects, should any of the above projects not be approved by the Federal Government:

Apollo Bay Childcare Centre Development	\$2,000,000
Forest Street, Colac – Road Reconstruction (Colanda Street - Colac	\$1,200,000
Forrest Road)	
(Full funding of project)	
Connector Road – Colac West Development	\$850,000
Forrest Common Masterplan Stage 2 – Park and Playspace	\$950,000
improvements	
Cororooke Masterplan Implementation – remaining works	\$260,000

3. KEY INFORMATION

On 22 May 2020 the Australian Government announced a new \$500 million Local Roads and Community Infrastructure Program (LRCI Program). The LRCI Program is a temporary, targeted stimulus measure responding to the economic impacts of the COVID-19 pandemic. The LRCI Program assists a community-led recovery from COVID-19 by supporting local jobs, firms, and procurement.

In July 2020 Council became eligible for \$1,703,200 under the first Phase of the program and on January 2021 a further \$1,703,200 was released for Phase 2 projects. A total of 20 projects are being delivered by Council under the first 2 phases. 10 are complete and the remainder will be completed by the end of June 2022.

Following the 2021-22 Federal Budget, a further \$1 billion was provided to Councils through Phase 3 of the LRCI Program. This brings the total Australian Government commitment to \$2.5 billion across all 3 phases of the program, with a total allocation of \$6,812,800 for Colac Otway Shire.

Under Phase 3 of the LRCI Program, Colac Otway Shire Council will receive an allocation of \$3,406,400. This funding will be available from 1 January 2022, with construction due to be completed by 30 June 2023.

Proposed projects must be submitted prior to 30 December 2021, with funding available from 1 January 2022. Under Phase 3, Councils are encouraged to take advantage of the increased contribution amount and longer delivery timeframe, to submit fewer, larger and potentially more complex projects.

As with the previous funding rounds, Council can select 'local road' or 'community infrastructure' projects that 'deliver benefits to the community, such as improved accessibility, visual amenity, and/or safety'. Works can involve the design and construction, maintenance and/or improvements to council-owned assets (including natural assets) that are generally accessible to the public, whether on Council land or other public land. Eligible Funding Recipients will use local businesses and workforces to deliver projects wherever possible to ensure stimulus funding flows into local communities.

The LRCI Program provides an opportunity for Council to address larger scale renewal works, upgrades or new community infrastructure that would not normally attract external funding. A list of potential 'funding ready' projects that meet the LRCI criteria and could be submitted for phase 3 are detailed below for Council consideration.

Project	Total Project Cost Estimate	LRCI Contribution	Other funding source	Description
Irrewillipe Road Wetlands and Open Space	\$4,212,000	\$2,424,000 To fully fund the wetland system	RDV \$3,000,000 maximum possible (to be confirmed) The RDV funding amount might reduce the funding required from LRCI.	Construction of a wetland system, stormwater re-use and adjacent open space.
Memorial Square Public Toilets	\$1,170,000	\$1,170,000 To fully fund the toilet and Changing Places.	\$110,000 (potential State or other external contribution, subject to confirmation.)	Construction of new public toilet and changing places facility and associated parking and pedestrian connection improvements.
Cororooke Masterplan Implementation – remaining works	\$260,000	\$260,000		Stage 3 works including construction of a picnic area and park furniture in conjunction with the Stage 2 path and playspace development currently underway.
Beeac Playspace Renewal	\$220,000	\$220,000		Playspace and park renewal including new play equipment, park furniture and picnic area/shelter.
Forest Street, Colac – Road Reconstruction (Colanda Street - Colac Forrest Road)	\$1,200,000	\$1,200,000		Detailed designs and full road reconstruction. Would otherwise be a possibility to be delivered in 22/23 using Road to Recovery grant funding

Project	Total Project Cost Estimate	LRCI Contribution	Other funding source	Description
Apollo Bay Childcare Centre Development	\$2,000,000	\$2,000,000		24 child capacity long day care extension to the Apollo Bay Early Years Hub, inclusive of external playspace.
Beeac Tennis Court Resurfacing	\$120,000	\$120,000		Resurfacing of 3 tennis courts with flexi-pave treatment.
Connector Road – Colac West Development	\$850,000	\$850,000		Contribution to the construction of a new connector road within the Colac West Development area to enable commencement of the first stage of development and access to the new open space reserve.
Forrest Common Masterplan Stage 2 – Park and Playspace improvements	\$950,000	\$950,000		Detailed design, consultation and construction of playspace, pathways, fencing, and picnic area in accordance with the Masterplan.

Recommended priority projects from the list above, that can be achieved within the available funding are:

Irrewillipe Road Wetland - full funding of the wetland development or part funding should the State Government grant application be successful.

Beeac Tennis Court Resurfacing

Beeac Playspace Renewal

Forest Street, Colac – Road Reconstruction (Colanda Street - Colac Forrest Road) - a contribution of \$642,400 towards the total \$1.2m project.

The remaining projects on the list are proposed substitutions, should any of the priority projects not be approved by the Federal Government.

4. COMMUNITY CONSULTATION & ENGAGEMENT

Each of the projects nominated by officers for consideration has undergone community consultation, via a separate process. No further, dedicated public consultation is proposed in the finalisation of the list of preferred LRCI Phase 3 projects.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021 - 2025:

Theme 1 – Strong and Resilient Economy

1.3 Key infrastructure investment supports our economy and liveability

Theme 2 – Valuing the Natural and Built Environment

- 2.2 We operate sustainably with a reduced carbon footprint
- 2.3 Protect and enhance the natural environment

Theme 3 – Healthy and Inclusive Community

- 3.1 All people have the opportunity to achieve and thrive in our shire
- 3.2 People are active and socially connected through engaging quality spaces and places
- 3.3 We are a safe, equitable and inclusive community

Nominated projects are identified and supported by the following strategic documents:

- Cororooke Open Space Masterplan 2019
- Forrest Common Masterplan 2019
- Memorial Square Masterplan 2018
- Colac Otway Shire Tennis Facilities Audit and Development Plan 2011
- Colac Otway Public Open Space Strategy 2011.

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL & ECONOMIC

Once implemented, the nominated projects will bring a number of economic and social benefits to the Colac Otway community. Preference is given to use of local materials and contractors through the procurement process to ensure maximum value is returned to the local economy. Playspace developments and road improvements will enhance safety and amenity and encourage social interaction and access to services and facilities.

LEGAL & RISK

If projects cannot be completed by the required deadline of 30 June 2023, project funds will be withdrawn, unless a suitable alternative can be identified for approval by the Federal Government.

FINANCIAL & BUDGETARY

Projects submitted under the LRCI Program do not require an upfront financial contribution from Council, however the construction of new assets and significant upgrades to existing assets will incur a financial obligation for Council in terms of renewal and maintenance.

7. IMPLEMENTATION STRATEGY

COMMUNICATION

The final, endorsed list of projects to be submitted for inclusion under the program will be communicated via Council's website and social media platforms and promoted in local printed media.

Key community stakeholder groups and individuals relevant to the selected projects will be directly notified of Council's decision.

TIMELINE

Action	Timeframe
Council Resolution - nomination of preferred	15 December 2021 Council Meeting
projects	
Submission of preferred projects to the Federal	By 31 December 2021
Government	
Confirmation of approved projects	By end January 2022
Completion of projects	By end June 2023

8. OFFICER DIRECT OR INDIRECT INTEREST

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



Item: 10.4

Irrewillipe Road Planning Scheme Amendment C120cola -Bakerland Development Plan

OFFICER	Simon Clarke	
GENERAL MANAGER	lan Seuren	
DIVISION	Development and Community Services	
ATTACHMENTS	 Draft Development Plan Overlay Schedule [10.4.1 - 4 pages] Planning Policy Framework Assessment [10.4.2 - 3 pages] 	
PURPOSE	To obtain a Council resolution to seek authorisation from the Minister for Planning to exhibit the Irrewillipe Road Planning Scheme Amendment C120cola.	

1. EXECUTIVE SUMMARY

Council is in receipt of an application for a planning scheme amendment over land in Elliminyt in the vicinity of Harris Road and Irrewillipe Road to rezone land for residential purposes. The amendment would rezone land currently in the Rural Living Zone to General Residential Zone and apply a Development Plan Overlay that requires a Development Plan to be endorsed prior to residential subdivision occurring. A Draft Development Plan has been produced that demonstrates appropriate transport linkages, open space provision and integration of development with surrounding areas, although this plan will continue to be refined, and approved after the amendment process.

Council is separately preparing a broader Outline Development Plan for the Deans Creek growth corridor and would preferably not rezone land until that work has been completed and a development contributions scheme required to support infrastructure in this growth area has been confirmed. Colac however is currently experiencing a significant shortage of available residential land to meet demand, and it is therefore considered appropriate to proceed with this rezoning application whilst the broader strategic work is undertaken. There is an opportunity to contribute a significant land supply to the market with this proposal (up to approximately 560 lots). Officers will work with the proponent to develop an agreed Shared Infrastructure Funding Plan early in 2022 that sets out reasonable development contributions to be paid for infrastructure in the growth area. Officers will also seek to negotiate an agreement from the proponent that social housing be provided by the developer of this land in accordance with Council's adopted Social Housing This agreement would need to be finalised before the amendment is adopted by Council.

Council must resolve to seek authorisation to prepare the amendment from the Planning Minister before the amendment may be progressed. It is to be recommended that authorisation be sought from the Minister, with exhibition to commence early in 2022.

2. RECOMMENDATION

That Council:

- **1.** Resolves to seek authorisation from the Minister for Planning to prepare and exhibit the Irrewillipe Road Planning Scheme Amendment C120cola Bakerland Development Plan 116.
- 2. Authorises Council officers, in consultation with the landowners and/or representatives, to make minor changes to the Amendment documentation prior to exhibition.
- 3. Notes that officers will prepare a Memorandum of Understanding with the proponent of the Amendment before exhibition to agree on the approach that is intended to be taken regarding development contributions, and that the area to be rezoned will be adjusted to exclude land where land owners are not supportive of the proposal.
- 4. Notes that officers will continue to progress negotiations with the proponent concerning the provision of social housing within the area to be rezoned, with the objective of reaching agreement on this issue before Council considers adoption of the Amendment.

3. KEY INFORMATION

The land subject to the planning scheme amendment is shown below in blue and is bounded by:

- Harris Road to the south
- Sinclair Street South to the east
- Irrewillipe Road to the north
- Hart Street and Spring Street to the east.



Figure 1: Subject site with zones

The following details apply to the land:

Street Address:	Land bounded by: • 278-530 Sinclair Street South • 48-127 Irrewillipe Road • 225 Hart Street • 2-28 Spring Street • 131-157 Harris Road	
Area:	50 hectares (approx.)	
Zone:	Rural Living Zone	
Overlays (partial):	Land Subject to Inundation Overlay Flood Overlay	
Key site features:	Multiple titles ranging in size Multiple individual dwellings Hobby farms Vegetation consisting mostly of good grass cover with a few scattered trees Topography generally slopes down to the north with upper slopes noted on the southern portion of the site and lower slopes towards the northern end.	

Figure 2 below presents a summary of the land's locational characteristics:

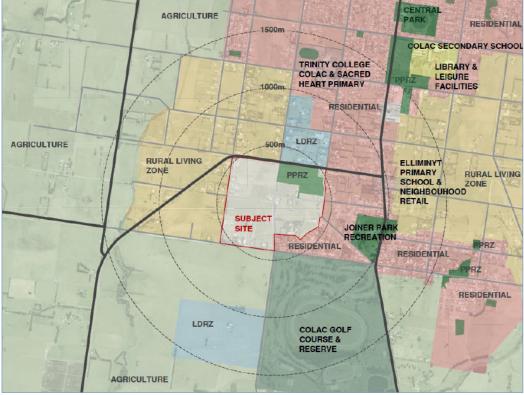


Figure 2: Site Context

The following table is a summary of the surrounding context:

North:	Zone – General Residential, Rural Living & Public Park and Recreation. Typically, very large lots supporting dwellings and hobby farms or large yards. The Irrewillipe Basin is located to the north east. Schools and town centre north of the site.
South:	Zone – Farming. Undeveloped, low-level cropping, grazing.
East:	Zone – General Residential, Public Park and Recreation. Suburban housing.
West:	Zone – Rural Living Zone. Large lots supporting dwellings and hobby farms and farm land.

Proposed Amendment

The amendment proposes to:

- Rezone the land from Rural Living Zone to General Residential Zone Schedule 1 in accordance with the Colac 2050 Growth Plan.
- Apply a Development Plan Overlay Schedule to ensure comprehensive and co-ordinated development.
- Apply an Environmental Audit Overlay to part of the land affected by diesel storage at 145 Harris Road.

The land has been largely assembled by a single developer, Bakerland. Were the entire area proposed by Bakerland rezoned, the amendment would result in approximately 560 lots. The extent of area to be rezoned will be clarified prior to exhibition to ensure it only includes land owners who are supportive of this occurring. A draft Development Plan has been prepared to support the amendment and is attached within the draft Development Plan Overlay schedule.

The planning scheme amendment application is also supported with the following documents:

- Planning Report prepared by St Quentin.
- Shared Infrastructure Funding/Development Contributions Preliminary Advice prepared by Urban Enterprise.
- Draft Schedule to accompany the proposed Development Plan Overlay which includes the Irrewillipe Road Framework Plan (see Attachment 1).
- A range of technical assessments to support the planning scheme amendment (see later in this report for more detail).

Assessment against Relevant Planning Provisions

Colac 2050 Growth Plan

The Colac 2050 Growth Plan (Colac 2050) establishes a Strategic Framework to guide future development and guides the consideration of proposed land rezonings. The Colac Framework Plan identifies the land subject to this rezoning application as being suitable for rezoning to Residential and identifies a potential open space corridor using creek and drainage lines running north to south through the land. The draft concept plan accompanying the planning scheme amendment shows this north to south open space link along the drainage corridor.

Colac 2050 places a priority in unlocking land in the Deans Creek corridor for land development. By prioritising this area for development, investment which is required for drainage infrastructure and stormwater treatment are more likely to be realised. The Colac Stormwater Development Strategy, 2018 demonstrates that it is technically feasible to develop the land in this part of Colac for residential purposes. The strategy provides guidance on how the corridor could be re-engineered to mitigate the flood hazards in sections along the corridor.

Colac 2050 advocates for preparation of an Outline Development Plan for the entire Deans Creek growth corridor. Council has allocated budget funding for the preparation of this plan and is in the process of seeking external funding for the technical assessments required. Whilst the preference would be for this work to be undertaken and finalised, including an agreed outline of development contributions required to deliver it, before consideration of rezonings, the current lack of residential land in Colac and urgent need for more zoned land has resulted in the need for rezonings to be considered concurrently with the strategic work. The Project is likely to take one to two years to complete.

The Planning Policy Framework

The amendment supports and implements the Planning Policy Framework. A full assessment is provided at Attachment 2.

Supporting Documents accompanying the Planning Scheme Amendment

The application is accompanied by the following supporting documents:

Stormwater Management Strategy (Engeny)

- The strategy consists of a constructed waterway which safely conveys the external upstream catchment area through the precinct and a retarding basin on the western side of the precinct which provides sufficient flood storage and removes the existing overland flows that overtop Irrewillipe Road and generally reduces the flood depths on downstream properties.
- An intended financial contribution to the construction of the Irrewillipe Road Water Sensitive Urban Design (WSUD) and SWH system within the existing retarding basin to achieve the development's Best Practice Environmental Management Guideline (BPEMG) targets specified in Clause 56 of the Victoria Planning Provisions.

Vegetation Management Assessment (Okologie Consulting)

- The Vegetation Management Assessment notes that the project area is highly modified and characterised by exotic dominant pasture interspersed with planted vegetation along windrows and around dwellings and associated infrastructure. Native vegetation is limited to a highly modified patch of Grassy Woodland (0.02ha) and one scattered tree.
- There are no listed threated fauna species or associated habitats that were recorded.

Traffic Impact Assessment (SALT)

- The Traffic Impact Assessment notes the proposed development will accommodate ultimately 560 lots. The proposed development will be well serviced by the internal and adjacent road network.
- Sinclair Street South, Hart Street and Armstrong Street will be classified as Access Streets. Existing road reserves exceed the required 16m width as per the IDM.
- SALT carried out a SIDRA assessment for the Irrewillipe Road/Hart Street intersection in the weekday morning peak-hour (critical intersection and volumes for the post development traffic generation). The SIDRA analysis indicated that the intersection would operate

satisfactorily under future conditions with no required special intersection treatments. The Department of Transport has indicated however that intersection upgrades would be required along the interface with Irrewillipe Road. This will need to be further investigated and resolved during the amendment process.

Preliminary Environmental Site Investigation (St Quentin)

The Preliminary Environmental Site Invitestigation concludes that there are no environmental reasons to prevent the development of the land for its intended purpose. However, since preparation of this report Council has become aware of diesel storage at 145 Harris Road. Under the July 2021 Planning Practice Note 30, fuel storage defaults to 'High Risk'. The Practice Note recommends the application of an Environmental Audit Overlay over this specific piece of land to ensure that contamination is adequately addressed in association with future subdivision permits for the land.

Bushfire Risk Assessment (St Quentin)

The Bushfire Risk Assessment states that the Otway Ranges National Park is too far away from the site to have an impact. At a localised level, the majority of the site is surrounded by vegetation and uses which are excluded as they present a low flammability risk and separated by a 20m wide constructed road reserve that forms a satisfactory firebreak.

Planning Issues

Proposed Zone

The use of the General Residential Zone Schedule 1 reflects the strategic direction for this site as standard residential development as shown on the Colac Framework Plan – Map 1 Land Use under the Colac 2050 Growth Plan.

Proposed Development Plan Overlay

The planning scheme amendment proposes to apply a Development Plan Overlay to the land. The Development Plan Overlay is an appropriate tool to enable more detailed planning, prior to the issue of planning permits to a site which has more than one ownership and a variety of issues which require coordinated and comprehensive assessment. The amendment will ensure detailed and co-ordinated planning through the application of the Development Plan Overlay and will result in residential development which properly considers the drainage of the area, open space, connections, and the needs of future residents, amongst other things.

Proposed Environmental Audit Overlay

The Environmental Audit Overlay is required to be implemented over land at 145 Harris Road. It is known that this land has been used for diesel storage and it is necessary to ensure the potential for contamination is appropriately addressed prior to any permits being issued for that part of the land.

Land Subject to Inundation Overlay (LSIO) & Flood Overlay (FO)

Parts of the land that are all proposed to be rezoned are affected by the Land Subject to Inundation Overlay (LSIO) and the Flood Overlay (FO). It is not proposed to amend either of these overlays as part of this planning scheme amendment. Council has initiated an independent planning scheme amendment that will introduce a Floodplain Development Plan into the planning scheme that will facilitate subdivision of the land in the future without the need to amend these overlays. The overlays will eventually be adjusted to reflect the redesigned waterway and drainage corridors once the land has been re-engineered. All land developed for residential lots will have finished site levels that place them above the 1 in 100 flood level. This will be achieved by a combination of earthworks for roads and other infrastructure and new detention systems that reduce floodwaters.

Early Release Rezoning / Shared Infrastructure Funding Plan

The land affected by the proposed planning scheme amendment is located within the Deans Creek Growth Corridor Outline Development Plan area. Early discussions were held with the proponent for the planning scheme amendment to examine the potential means to accommodate an early release rezoning of land within the Outline Development Plan area in advance of Council's overall project for the entire Deans Creek corridor.

Given the critical land supply shortage for housing in Colac, Council was of the view that it could proceed with an amendment process to rezone a discreet area on the basis that drainage issues are fully addressed while also ensuring that any future Development Contributions scheme to be established for the entire Deans Creek Outline Development Plan area would not be compromised by any earlier Shared Infrastructure Funding Plan to be established as part of this rezoning application.

Council obtained specialist advice from expert consultants in the field of Development Contributions and Shared Infrastructure Funding Plans to establish that an early release rezoning could occur without placing Council at financial risk. Further discussions between Council officers and the proponent have established that Council is able to request the Minister for Planning to authorise exhibition of the proposed Planning Scheme Amendment if a general and initial agreement was in place in respect of infrastructure contributions in the form of a Memorandum of Understanding (MOU). The MOU establishes that a section 173 agreement between the proponent and Council will be needed to formalise infrastructure contributions prior to the Amendment being finalised and adopted. It will be important that officers work with the proponent to identify appropriate development contribution amounts to be included in this S173 agreement early in 2022. A draft MOU has been prepared and will need to be signed prior to Council seeking authorisation.

As noted above, the proponent does not have direct control over all of the land intended to be rezoned. It will be critical prior to exhibition of the amendment that officers confirm which land owners are supportive of participating in the rezoning process, and to exclude those who are not.

Development Plan Overlay Schedule

The Development Plan Overlay Schedule contains the Irrewillipe Road Framework Plan. It is a requirement of the Development Plan Overlay schedule that the following must be provided:

- an Urban Design Master Plan.
- an Integrated Water Management Plan
- a Road Network and Traffic Management Plan
- an Open Space and Landscape Master Plan
- a Shared Infrastructure Funding Plan.

Land within the Development Plan area cannot be subdivided into residential lots until such time that the items listed above have been fully addressed.

4. COMMUNITY CONSULTATION & ENGAGEMENT

The amendment will be required to be exhibited publicly prior to approval and adoption. In the event that submissions are received, the amendment may need to be reviewed independently by a Planning Panel.

The draft planning scheme amendment was referred to the following government agencies:

- Regional Roads Victoria
- Department of Transport
- Department of Environment Land Water and Planning
- Corangamite Catchment Management Authority
- Barwon Water
- Country Fire Association.

The comments provided by the government agencies were generally high level. However, there were no specific or technical objections to the proposed amendment.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 1 – Strong and Resilient Economy

Objectives – Affordable and available housing will support our growing community and economy.

Four-Year Priorities

1.1.3 Facilitate the delivery of more diverse housing stock in Colac.

1.1.4 Increase residential land supply in Colac.

This amendment, as described earlier in the report, is critical to achieving greater residential land supply to meet the demand for housing in Colac and achieving these Council Plan outcomes.

Council's Social Housing Plan adopted in August 2021 states that officers should negotiate with developers when rezoning land to residential. Officers have commenced discussions on this issue, without a definitive outcome being reached. It is expected that this will be further progressed as the amendment is exhibited, so that an agreement can be reached before Council finalises the amendment.

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

The amendment will facilitate additional housing in Colac which will have a positive effect on the local economy. The amendment also anticipates contributions to infrastructure, both community and otherwise, which will have a positive effect on public infrastructure. Overall, it is anticipated that with appropriate management of the drainage and environmental values associated with the land, the amendment can offer a net community benefit by enabling increased housing stock, increased population, and enhanced infrastructure, to enhance the existing Colac residential and commercial communities.

LEGAL & RISK

Council has sought to minimise any legal risk in allowing this Planning Scheme Amendment to progress in advance of the Deans Creek Outline Development Plan by seeking advice from the appropriate professional consultants versed in the preparation of Development Contributions and Shared Infrastructure Funding Plans.

The planning scheme amendment process has a number of hold points in which the direction of the rezoning proposal can be reconsidered. The risk to Council is therefore considered to be low. It will be critical however that an agreement with the proponent be entered into concerning development contributions before Council finalises the amendment process. Officers will meet with land owners to ensure that the area being rezoned is limited to those areas where owners agree to participate and sign up to a development contributions scheme.

FINANCIAL & BUDGETARY

The costs associated with the amendment, including any panel hearing, are broadly the responsibility of the proponent. Other costs associated with the amendment including independent professional advice and staff costs are included within the ordinary operating budget of the strategic planning unit and will be partly offset by amendment fees payable by the proponent.

7. IMPLEMENTATION STRATEGY

PROCESS

The request for authorisation of the Amendment will be made to the Planning Minister following an MoU being entered into with land owners concerning development contributions. Officers will meet with land owners in the Development Plan area to confirm which owners are agreeable to have their land rezoned and enter into agreements regarding contributions, and this will influence the final boundary of land to be rezoned. The amendment will not seek to rezone land where the owners are not supportive of the rezoning and/or development contribution requirements.

Following authorisation, the planning scheme amendment is placed on exhibition for a period of 6 weeks. If submissions are received, an Independent Panel can be established to review submissions. Council then considers the amendment, submissions and any recommendations of the panel before referring the amendment back to the Minister for approval and final gazettal

COMMUNICATION

The amendment request will be formally exhibited for a period of 6 weeks, by way of a notice in the Colac Herald and letters to adjoining and nearby landowners.

TIMELINE

Exhibition of the amendment will commence early in 2022.

8. OFFICER DIRECT OR INDIRECT INTEREST

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

COLAC OTWAY PLANNING SCHEME

SCHEDULE [NUMBER] TO CLAUSE 43.04 DEVELOPMENT PLAN OVERLAY

Shown on the planning scheme map as **DPO[number]**.

IRREWILLIPE ROAD DEVELOPMENT PLAN AREA

1.0 Objectives

To ensure that development occurs in accordance with the broad development principles as shown in the Irrewillipe Road Framework Plan and to ensure delivery of essential community infrastructure.

2.0 Requirement before a permit is granted

A permit may be granted for the following before a development plan has been approved by the responsible authority:

- Construction of one dwelling on an existing lot, including outbuildings.
- An extension or alteration to an existing building.
- Any buildings and works associated with the use of land for Agriculture.
- Subdivisions creating a lot for an existing dwelling

Before granting a permit, the responsible authority must be satisfied that the permit will not prejudice the future use and development of the land in an integrated and orderly manner.

3.0 Conditions and requirements for permits

A permit must contain conditions which give effect to the approved Development Plan and the Shared Infrastructure Funding Plan.

4.0 Requirements for development plan

A permit must contain conditions or requirements which give effect to the provisions and requirements of the approved Development Plan, including the Irrewillipe Road Shared Infrastructure Funding Plan as appropriate.

A permit for the subdivision of the land must contain conditions which provide for development contributions towards:

- Roads, pedestrian, or bicycle infrastructure external to the site
- Public open space.
- Drainage infrastructure.

The Development Plan may consist of a plan and associated planning and technical reports and other documents.

The Development Plan may be prepared and approved in stages.

The Development Plan must be generally in accordance with the Irrewillipe Road Framework Plan as shown at Clause 4.0 and include the following:

An Urban Design Masterplan that includes:

- A general subdivision layout that includes the location and general distribution of lots showing a variety of lot sizes and densities to encourage a variety of housing types.
- The location of all roads, open spaces and drainage reserves.
- Contours of land at 0.5m intervals.

COLAC OTWAY PLANNING SCHEME

- A subdivision design which provides a positive identity and contributes to the amenity and safety of all surrounding roads, waterways, and the Irrewillpe Reserve.
- Within the development area, provide an interconnected and continuous network of safe and efficient conventional footpaths, shared paths, and cycle lanes.
- Appropriate interface and design measures on the Irrewillipe Reserve interface.
- The stages by which the development of the land is to proceed.

An Integrated Water Management Plan that takes an integrated approach to flooding, stormwater, and drainage management, is designed with reference to the whole of the catchment, and includes:

- Reference to:
 - WSUD Engineering Procedures: Stormwater, CSIRO Publishing, 2005.
 - · Clause 56.07 of the Colac Otway Planning Scheme.
 - The Infrastructure Design Manual and associated Design Notes.
 - Colac Stormwater Development Strategy Engeny March 2019
 - A Drainage Strategy that addresses:
 - · Drainage Feasibility.
 - Stormwater Quality Management.
 - · Peak Discharge Management; and
- Identification of all land to be set aside for drainage purposes, detailing the approximate size and location of all drainage reserves and system components, including retarding basins to meet peak discharge limits and Water Sensitive Urban Design Elements to meet Best Practice Environmental Management Guidelines.
- Easement creation and/or widening and realignment as necessary to ensure adequate provision for pipe-laying and maintenance, both within the development area, and to external affected properties.
- A stormwater management system that ensures peak discharge rates, pollutant loads of all stormwater leaving the site post development are no greater than pre-development and that ensures no adverse impacts to any surrounding area, upstream or downstream.
- Consideration of development staging.

A Road Network and Traffic Management Plan which:

- Provides for an internal road network with a high level of access for all vehicular and non-vehicular traffic and which responds to the topography.
- Considers safe sightlines to all property access and internal roads.
- Provides details of all necessary upgrades to the surrounding road network to urban standards including any required upgraded intersection treatments, including the need to dedicate land for this purpose.
- Considers Traffic Management Controls to the internal road networks.

An Open Space and Landscape Masterplan that includes:

- An open space contribution equal to 10% of the developable residential land or in-lieu cash payment or combination of both. Encumbered land shall not be credited as Public Open Space including land required for the future retarding basins.
- All public open space to be a useable size, configuration, and location.
- Local Parks with a minimum area of 1 hectare (unless adjoining a drainage reserve where a minimum area of 0.5 ha may be accepted) and bounded by development frontages and/or roads on at least 3 sides. The local park is to abut the waterway and avoid existing buildings.

COLAC OTWAY PLANNING SCHEME

- Provision of a clear east-west connection for residents in the western part of the development to provide access to the Irrewillipe Drainage Basin open space. Consideration will be given to a raised crossing or similar over the north-south linear corridor (drainage/waterway) to ensure this can occur.
- Plans for all open space areas showing the location of proposed improvements including playgrounds, pedestrian and cycle paths, earthworks, seats, bollards, fencing, landscaping, irrigation systems, drinking fountains, drainage lines and retention basins.

A Shared Infrastructure Funding Plan which includes:

- Identification of shared infrastructure consistent with Development Contributions Plan and Infrastructure Contributions Plan principles on equity, nexus, need and reasonableness.
- Costs and apportionment of the shared infrastructure.
- Detail of the implementation of the Shared Infrastructure via Section 173 agreement.

OVERLAYS - CLAUSE 43.04 - SCHEDULE [NUMBER]

COLAC OTWAY PLANNING SCHEME



4.0 Irrewillipe Road Framework Plan





OVERLAYS - CLAUSE 43.04 - SCHEDULE [NUMBER]

The Planning Policy Framework

The amendment supports and implements the following:

• **Clauses 02.03-1** and **02.04** which identify Colac as a growth node and identify the land in question as suitable for rezoning to residential supply. **Clause 02.03-1** explicitly seeks to provide zoned and serviced land for housing, recreation, open space, and related infrastructure without compromising high quality agricultural land.

• **Clause 11.01-15** which identifies Colac as a regional centre and encourages sustainable development within its boundaries. The Clause also identifies the G21 Regional Growth Plan (Geelong Region Alliance, 2013) as a policy document and this document also identifies Colac as a settlement to which growth is to be directed.

• **Clause 11.01-1R Settlement** - **Geelong G21** which supports the growth of Colac as a district town and growth node.

• **Clause 11.01-1L** which seeks to provide fully serviced residential land to meet the needs of the population and to support and manage the growth of Colac consistent with its role as the major urban centre of the Shire and a targeted growth node in the G21 region. Relevant strategies include facilitating a more compact urban form for Colac by directing development inside the settlement boundary identified on the Colac Framework Plan, accommodating housing where identified in the Colac Framework Plan, and facilitating coordinated development through the use of a Precinct Structure Plan or equivalent planning control.

• **Clause 11.02-1S Supply of Urban Land** which seeks to ensure a sufficient supply of land is available for residential uses.

• **Clause 11.02-25 Structure Planning** which requires effective planning and management of the land use and development of an area through the preparation of relevant plans.

• **Clauses 12.01-1S and 12.01-2S** which relates to the protection of biodiversity and native vegetation respectively. These issues which the amendment documentation has identified, and which are addressed in detail in the proposed planning controls, particularly the Development Plan Overlay.

• **Clause 12.03-1S River Corridors, Waterways, Lakes and Wetlands** is relevant given the potential for inundation and the consideration in Council strategies that part of the solution to this issue is the re-engineering of waterways in the area as development progresses.

• **Clause 13.01-S Bushfire Planning**. A Bushfire Risk Assessment has been undertaken and has determined an appropriate response to bushfire risk and advises the highest BAL rating necessary for future dwellings is BAL12.5 in accordance with Clause 13.02.

• **Clause 13.03-15 Floodplain Management** is relevant given the potential for inundation and the consideration in Council strategies that part of the solution to the issue is the development of land and the re-engineering the waterways in the area. The Development Plan Overlay Schedule incorporates requirements consistent with these themes.

• **Clause 13.04-1S Contaminated and Potentially Contaminated Land** seeks to ensure that potentially contaminated land is suitable for its intended future use and development, and that contaminated land is used safely. At the time of lodgement, whilst the bulk of the land has a low potential for contamination and is therefore suited to residential development, two areas have

medium potential for contamination. Investigation is ongoing into these areas and will inform the final form of the amendment with respect to Minister's Direction No.1. A further area is nominated as high risk (diesel storage). An Environmental Audit Overlay will be applied to this land to ensure planning safe guards are in place.

• **Clause 14.01-15 Protection of Agricultural Land** seeks to preserve productive farmland. While the land in question is considered to be high quality agricultural land, its current and historic zoning for low level residential purposes and associated ownership fragmentation, means it not productive and its loss in agricultural terms is considered insignificant.

• **Clause 14.02-2S Water Quality** has been addressed through the Development Plan Overlay Schedule which specifies standards to be met in accordance with requirements from the relevant authorities and studies.

• **Clause 14.02-2L Lake Colac Water Quality** essentially seeks to protect the quality of water entering Lake Colac, Deans Creek, Barongarook Creek and their tributaries and is achieved using the strategies of the Colac Stormwater Development Strategy.

• **Clause 15.01-1L Colac Built Environment** encourages urban design treatments in subdivision and development to reflect the regional character of Colac including space between buildings to allow for the establishment of a garden setting.

• *Clause 15.01-3S Subdivision Design* and *Clause 15.01-4S Healthy Neighbourhoods* seeks standards of design and infrastructure which are in incorporated into the Development Plan Overlay Schedule.

• **Clause 15.02-1S Energy and Resource Efficiency** which seeks to encourage land use and development that is energy and resource efficient, supports a cooler environment and minimises greenhouse gas emissions. Strategies to re-use stormwater, to ensure consolidation of urban development, to support low energy forms of transport such as walking and cycling, and to green urban areas, buildings, transport corridors and open spaces with vegetation are proposed via the Development Plan Overlay Schedule.

• **Clause 15.03-15 Heritage Conservation**. There are no heritage overlays currently listed on the Colac-Otway Shire Planning scheme and no historical sites are listed within the Victorian Heritage Register (VHR) or the Victorian Heritage Inventory that affect the land.

• **Clause 15.03-25** The site is partly mapped as an area of cultural sensitivity. While a mandatory CHMP is not required for the rezoning of the land, a CHMP and appropriate protection and conservation is expected through subsequent processes under the Aboriginal Heritage Act 2006.

• **Clauses 16.01-1S** *Housing supply* and *16.01-1L Colac Housing supply* seek to deliver welllocated, integrated and diverse housing that meets community needs, an objective which the amendment is consistent with.

• **Clause 19.02-6L Public Open Space** seeks to provide enhanced levels of unencumbered public open space in Colac to cater for passive and active recreation needs of the community. Relevant strategies include the provision for a minimum additional 8-hectare reserve in the Deans Creek corridor for active recreational purposes and to provide improved pedestrian and cyclist linkages as identified on the Colac Environment and Connectivity Framework Plan. It is not considered the subject site is within the Deans Creek Corridor or capable of delivering 8ha of open space, however

a new neighbourhood open space reserve (exceeding 1 hectare) would be established in the south-west of the development. The land will also abut the Irrewillipe Basin to the north-east (Public Purposes and Recreation Zone) and future residents will have use of that reserve which is to be developed further as a regional open space facility subject to receiving external grants. It is also noted that the proposed pedestrian and cyclist linkages are provided by the amendment.



Item: 10.5

Development Plan Overlay - Jennings Street Colac

OFFICER	Erin Sonego and Simon Clarke		
GENERAL MANAGER	lan Seuren		
DIVISION	Development and Community Services		
ATTACHMENTS	 Final Development Plan - Jennings Street, Colac [10.5.1 - 1 page] 		
PURPOSE	To approve a Development Plan for sites in Jennings Street Colac following notification to affected landowners.		

1. EXECUTIVE SUMMARY

Council has received a planning application for the subdivision of 120-126 Jennings Street into seven residential lots, in two stages. Stage 1 would be a two-lot subdivision, to excise the existing dwelling, and Stage 2 would subdivide the balance lot into six lots. The planning application is not being considered as part of this report, but is referenced for context. The land at 120-126 Jennings Street is covered by a Development Plan Overlay (DPO2 – Future Residential Areas) and Council should not grant a permit for the subdivision of any land within the DPO area until such time as a Development Plan has been approved for all of the land.

In this case, Council has prepared a Development Plan on behalf of the landowners concerned. The Development Plan would allow each landowner to develop their land individually, without being reliant on another landowner within the Development Plan area. This approach departs from the typical approach for land covered by a Development Plan Overlay, given that development plans seek to coordinate development outcomes across multiple sites. In this case the site constraints significantly impede the achievement of an integrated subdivision layout, justifying the proposed approach. This approach should positively contribute towards the provision of additional housing supply within Colac to meet the current demand.

The Development Plan was available for public comment for a two-week period from 16 November 2021 to 2 December 2021. Four (4) submissions were received. None of the submissions raises significant concerns that cannot be resolved. On this basis it is recommended that the plan be approved with minor changes that address issues raised by submitters, facilitating consideration of the current subdivision application.

2. RECOMMENDATION

That Council:

- 1. Notes that a development plan has been prepared pursuant to Clause 43.04 (Development Plan Overlay, Schedule 2) of the Colac Otway Planning Scheme.
- 2. Acknowledges that officers have provided landowners within the Development Plan area and adjoining neighbours an opportunity to view the draft Development Plan and make submissions.
- **3.** Writes to submitters to thank them for their feedback on the draft Development Plan and acknowledges the comments provided.
- 4. Adopts the Development Plan in accordance with Clause 43.04 of the Planning Scheme.

3. KEY INFORMATION

Development Plans - Background

The Development Plan Overlay (DPO2) was introduced over various sites in Colac and Elliminyt in 2009 through Planning Scheme Amendment C55. The purpose of a Development Plan Overlay (DPO) is to ensure that any future subdivision of land is well-planned and makes provision for well-connected road and pedestrian access, public open space, drainage and other community infrastructure.

A DPO is typically applied to undeveloped, greenfield areas in multiple ownership. Once applied to an area, the DPO is intended to streamline subdivision processes by limiting notice provisions and third-party review rights. A DPO includes a number of requirements that a future subdivision application must respond to such as road layouts, the provision of public open space and lot sizes/numbers.

A Development Plan is essentially a plan applied to land to provide a guide for the design of future subdivisions. Any future subdivision proposal must be prepared generally in accordance with the Development Plan to allow for orderly development of the land. It does not in any way force development to occur. Any decision to subdivide land remains the absolute choice of the property owner. Until that decision is made by the property owner, their property will remain in its current configuration.

It is Council's role to approve Development Plans and there are no appeal rights to VCAT against Council's decision. There is no formal public notice process required to adopt a plan. However, Council has undertaken engagement processes tailor-made to the scale of the relevant project in the preparation of previous Development Plans.

In circumstances where subdividers are required to contribute land or infrastructure to facilitate the coordinated development of the Development Plan area (such as for a stormwater retardation basin), they would be fairly compensated financially through a Shared Infrastructure Funding Plan (SIFP) that has been prepared for the Development Plan.

Planning Permit – 120-126 Jennings Street

Council has received a planning application for subdivision of 120-126 Jennings Street into seven residential lots, in two stages. As noted above, Stage 1 would be a two-lot subdivision, to excise the existing dwelling, and Stage 2 would be the subdivision of the vacant balance lot into six lots. The planning permit is not being considered as part of this report.

Due to the land at 120-126 Jennings Street being affected by the Development Plan Overlay, Council should not grant a permit for the subdivision until such time as a Development Plan is approved.

Jennings Street Development Plan Overlay (DPO2)

The site is located on the western side of Colac and on the southern side of Jennings Street, Colac ('the Development Plan Area'). The Development Plan Area consists of six contiguous lots as follows:

- 90-110 Jennings Street
- 116 Jennings Street
- 118 Jennings Street
- 120-126 Jennings Street
- 128-134 Jennings Street.

The total area of land across the 6 existing lots is approximately 5.42 hectares. Each lot is developed with a dwelling. Except in the case of No. 116 Jennings Street, the dwellings are constructed close to the street and demolition is not required to allow for further subdivision to occur. No. 116 Jennings Street is located in the middle of the Development Plan Area and has recently been developed with a substantially sized house and two large sheds. There is no prospect of these buildings being demolished to make way for an integrated road connection across the lots.



The substantial buildings at 116 Jennings Street, in conjunction with the house located at 118 Jennings Street (to the west of the dwelling at No. 116), effectively divides the Development Plan Area into an eastern and western portion. Officers have reviewed a variety of design options and entered into discussions with the landowner of 116 Jennings Street. However, a road connection through 116 Jennings Street would require the demolition of buildings on that site in which there has been considerable investment and therefore is unlikely to happen, even in the longer term.

It is considered that 90-110 Jennings Street (eastern portion) can be independently developed from the western portion of the DPO land at 120-126 and 128-134 Jennings Street.

Officers have also examined options to integrate 120-126 and 128-134 Jennings Street. However, the provision of a required 16m wide connecting road reserve would be problematic due to:

- The position of existing houses on the lots, and the width between these houses and side boundaries.
- The presence of Barwon Water infrastructure in the road reserve to the north-west of 128-134, making any prospect of road access extending into the land along the western boundary likely to be unfeasible.
- The extent of road reservation through 128-134 to connect to 120-136 Jennings Street would be likely to make the development of land at 128-134 financially unviable.

In addition, surrounding land comprises conventional residential development. The adjoining residential precinct to the north of Jennings Street is well-established, with most dwellings dating to between 1960-1990s. Lots range in size from around 600-1200 square metres. The land to the immediate south is more contemporary, with a planning permit for a staged subdivision having been granted in 2006. Lots in the subdivision are generally uniformly between 700-800 square metres. It is noted that there is no provision for interconnection made with land to the south as part of that permit, effectively meaning that the Development Plan Area does not need to take into account connections/integration with land to the south.

Land to the west is included within the Farming Zone and is part of the Deans Creek growth corridor identified for residential development under the Colac 2050 Growth Plan. However, there is a potential future opportunity to connect 128-134 Jennings Street to the land to the west in the future as part of the planning for the Deans Creek Growth corridor and this is noted on the draft Jennings Street Development Plan.

Relevant Planning Controls

All of the Development Plan Area is included within the General Residential Zone. Part of the purpose of the General Residential Zone is to encourage a diversity of housing types and housing growth, particularly in locations offering good access to services and transport.

The only overlay to affect the land is Development Plan Overlay, Schedule 2 (DPO2). DPO2 seeks to ensure a Development Plan is prepared for all of the land within the DPO prior to subdivision or any development (other than a single dwelling on an existing lot) occurring on the land. Schedule 2 to Clause 43.04 sets out the requirements for the development plan:

- Internal road network.
- Public open space.
- Connectivity to other residential land and public open space.
- Diversity of lot sizes and proposed lot density.
- Provision of community facilities
- Impact of development on flora, fauna and cultural heritage.

The Development Plan that has been developed for Jennings Street is attached to this report as Attachment 1 and is considered to meet these requirements as relevant.

Development Plan Details

The following is a summary of the key issues considered in preparation of the draft Plan:

Internal Road network

The development plan nominates independent access for the two lots to the west i.e., 120-126 Jennings Street and 128-134 Jennings Street. This is considered to be the most appropriate outcome given the relatively small size of the lots and the need to facilitate subdivision in the short term. Additionally, the presence of existing, recently constructed dwellings to the east prevents the continuation of an internal connecting road across the entire development plan area. Requiring an internal connecting street between 120-126 and 128-134 Jennings Street would not be a significant benefit, and benefits to access and connectivity would not outweigh the cost of construction or impact on lot yield.

Public Open Space

The development plan area is too small to require the provision of open space as land. A cash contribution would be sought as a condition on any planning permit issued pursuant to Clause 53.01 (Public Open Space Contribution and Subdivision). The schedule to this clause allows for Council to levy 5% open space contribution for 2 to 4 additional lots, and an additional 1% per additional lot in excess of 4 lots, up to a maximum of 10%.

Connectivity to other residential land and public open space

Connectivity within the development plan area would be difficult to achieve, due to the presence of existing dwellings at 116 and 118 Jennings Street in the central section of the DPO area. Therefore, the development plan proposes that each site be subdivided individually. The nearest public open space is Western Reserve, which houses formal recreation facilities including a cricket/football oval and netball courts. A more direct connection to that open space is not achievable due to the fact that surrounding land has already been developed.

Diversity of lot sizes and proposed lot density

The development plan notes that any proposed plan of subdivision would need to provide for a diversity of lot sizes.

Provision of community facilities

The development plan area is too small to support a community facility and it is considered that collection of a contribution towards such a facility would not be able to be justified. The development plan therefore does not nominate any such requirement.

Impact of development on flora, fauna and cultural heritage

The development plan area is not within an area of identified cultural heritage significance and therefore no Cultural Heritage Management Plan (CHMP) is required to be prepared. The lots are heavily modified and any native vegetation removal, where vegetation is found to be present, would require a planning permit unless benefiting from an exemption in the planning scheme. The quality of the vegetation and need for retention would be assessed at the planning permit application stage.

Strategic Justification

The Development Plan would allow each landowner to develop their land individually, without being reliant on another landowner within the Development Plan. As noted above, this approach departs from the typical approach for planning in areas covered by a DPO, given that development plans seek

to coordinate development outcomes across multiple sites. It is considered that the following strategic circumstances justify this alternative approach:

- Existing development of land at 116 and 118 Jennings Street makes an integrated layout across all six lots impractical to achieve without significant demolition of recently constructed buildings at 116 Jennings Street. Those buildings have been the result of substantial investment by the landowner.
- It is considered reasonable that 90-110 Jennings Street be subdivided independently from 120-126 Jennings Street and 128-134 Jennings Street, given the existing development in the centre of the DPO area.
- It is considered that 120-126 Jennings Street and 128-134 Jennings Street cannot be developed in a financially feasible manner with a 16m wide road reservation.
- The Jennings Street Development Plan Area is a small, isolated pocket of Development Plan Overlay Area in Colac and has no connections to surrounding land.
- Development of this isolated Development Plan Overlay Area, as shown on the draft Jennings Street Development Plan, would have no strategic implications on development elsewhere in Colac.
- There would be no Shared Infrastructure involved in the development of the Development Plan Area and therefore there is no need for any Shared Infrastructure Funding Agreements across the affected lots.

Development of the land as shown Development Plan would offer a pragmatic approach to planning in this part of Colac. Following approval of the Plan Council would be in a position to consider the proposed subdivision of 120-126 Jennings Street, subject to resolution of technical matters considered at planning application stage, and also to consider any future proposed subdivision of the other lots within the DPO area.

4. COMMUNITY CONSULTATION & ENGAGEMENT

All the affected landowners within the development plan area and adjoining property owners were notified of the proposed Development Plan and provided 14 days to make a submission between 16 November and 2 December 2021. Four (4) submissions were received. The issues raised are discussed below:

1) Property boundary issues, noise, fencing and driveway position

This submission was discussed with the submitter. Their primary concern relates to the position of the driveway and their property boundary which is unfenced. The submitter was advised that there would be a footpath verge along the property boundary to provide some separation to the future driveway. A notation has been made on the Development Plan to address this concern.

2) Interest in developing a religion-based school campus accommodation on part of the land

This submission is not an objection to the Development Plan and is merely expressing an interest in developing part of the land for an alternative form of development.

3) Concern about the new road being positioned opposite 95 Jennings Street

The proposed position of the road has been checked and it is not opposite 95 Jennings Street.

4) Concern about flexibility with lot sizes with a preference for larger lots.

This issuer was discussed with the submitter who has advised that they are satisfied that their concern has been addressed. A note will be placed on the Development Plan encouraging a diversity of lot sizes.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 1 – Strong and Resilient Economy

Four-year priorities: 1.1.4 Increase residential land supply in Colac (Number of residential lots approved by planning permits).

The approval of this Development Plan will facilitate residential subdivision that contributes to the supply of land in Colac and meets a critical need. Unlike processes to rezone land which can take significant time, facilitating housing via this Development Plan will make the best use of existing zoned land to contribute to the short term needs of the community.

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

Any environmental issues relating to residential development of the land would be managed through the planning permit application process. There are no social or cultural issues identified through the development plan. There is a significant positive benefit of the Development Plan, allowing development of the land at 120-126 Jennings Street which is the subject of a current planning permit application. Should the subdivision be approved, it will contribute much needed housing opportunities for Colac to meet the current high demand.

LEGAL & RISK

No legal or risk issues have been identified.

FINANCIAL & BUDGETARY

There are no financial impacts to Council from this report.

7. IMPLEMENTATION STRATEGY

Planning officers will complete processing of the permit application for subdivision at 120-126 Jennings Street.

COMMUNICATION

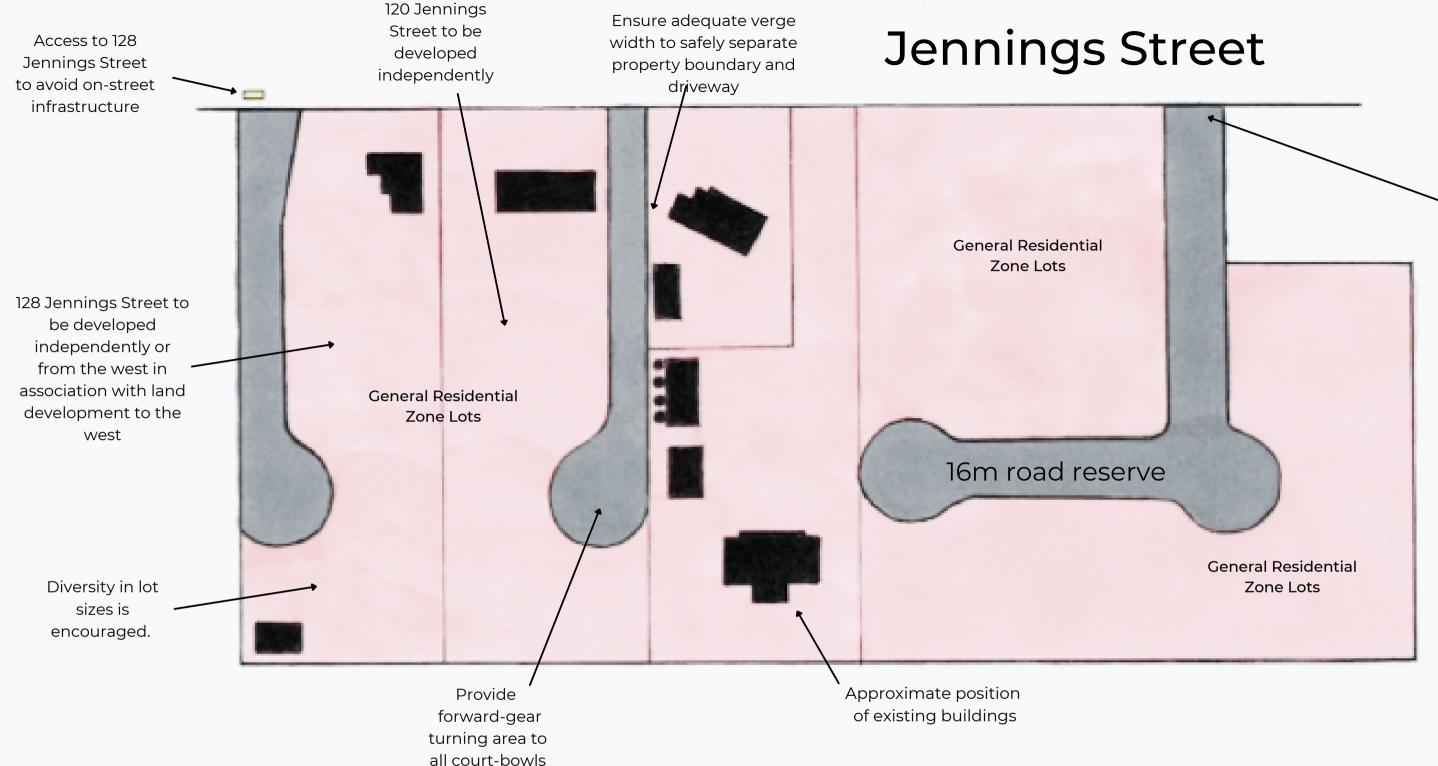
Affected landowners will be informed of Council's decision to approve the Development Plan.

TIMELINE

Landowners will be contacted following the Council resolution. Officers have already commenced discussions with the permit applicant for 120-126 Jennings Street to progress the current application for subdivision.

8. OFFICER DIRECT OR INDIRECT INTEREST

Ian Seuren, General Manager Development and Community Services, declared a general interest under the *Local Government Act 2020* due to a close association with the landowner of 120-126 Jennings Street, Colac. Mr Seuren has had no input into consideration of this issue or compiling of the report.



Development Plan - Jennings Street, Colac **Final Version - December 2021**

Road access from Jennings Street is indicative. Position to be determined to best suit infrastructure and servicing needs

Do not scale off this plan



Item: 10.6

Draft Birregurra Drainage and Flood Study and Planning Scheme Amendment C116cola - Consideration of Submissions

OFFICER	Simon Clarke			
GENERAL MANAGER	lan Seuren			
DIVISION	Development & Community Services			
ATTACHMENTS	 FAQ Sheet [10.6.1 - 3 pages] Land Subject to Inundation & Flood Overlay Map [10.6.2 - 1 page] Special Building Overlay Map [10.6.3 - 1 page] Draft Birregurra Flood Study Report [10.6.4 - 203 pages] 			
PURPOSE	To consider submissions received in response to the Birregurra Drainage and Flood Study and Planning Scheme Amendment C116cola with the view to referring any unresolved submissions to a Planning Panel.			

1. EXECUTIVE SUMMARY

The draft Birregurra Flood and Drainage Strategy was placed on public exhibition in September 2021 alongside Planning Scheme Amendment C116cola which seeks to amend the mapping of flood-based overlays in the Planning Scheme to ensure they align with the new mapping of floodprone land identified in the Strategy. Three submissions were received from landowners. Two late submissions were also received, including a submission from the Corangamite Catchment Management Authority (CCMA) that supports the Amendment and a submission from a local landowner requesting a minor amendment to the mapping to remove the Land Subject to Inundation Overlay from their property.

Under the provisions of the *Planning and Environment Act 1987*, Council must consider the submissions received and then resolve to either abandon the amendment, change the amendment or refer the amendment to a Panel appointed by the Minister for Planning. Council officers have visited the submission sites and held discussions with the submitters. Whilst not considered appropriate for the most part to amend the flood overlays in response to these submissions, a minor change to one property to adjust the boundary is recommended. No submissions have been withdrawn in response to these discussions. It is recommended that Council forward the unresolved submissions to an Independent Panel for consideration.

2. RECOMMENDATION

That Council:

- 1. Pursuant to section 22(1) of the Planning and Environment Act 1987, consider all submissions received during the Amendment c116cola exhibition period.
- 2. Pursuant to section 22(2) of the Planning and Environment Act 1987, consider all late submissions received.
- **3.** Pursuant to section 23(1)(a) of the Planning and Environment Act 1987, make the following change to Amendment C116cola:

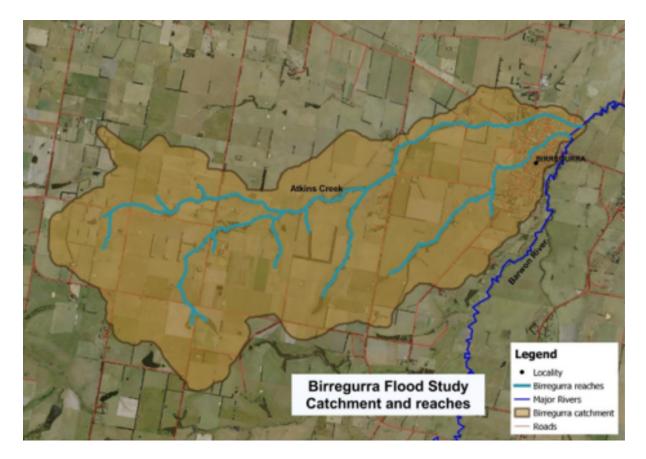
a) Amend the exhibited flood mapping to exclude a small area of Land Subject to Inundation Overlay from the front of 11 Scouller Street, Birregurra.

- 4. Pursuant to section 23(1)(b) of the Planning and Environment Act 1987, resolve to refer the unresolved submissions received to an Independent Planning Panel appointed by the Minister for Planning.
- 5. Authorises officers/suitable persons to represent Council at the Planning Panel hearing generally in accordance with the response to the issues outlined in this report.
- 6. Thanks submitters for the written submissions received on the Amendment c116cola and acknowledges and notes the verbal comments made at the Submissions Committee meeting held on 8 December 2021.

3. KEY INFORMATION

The Colac Otway Shire, in partnership with the CCMA, VicSES and the Department of Environment Land Water and Planning (DELWP) has overseen preparation of the draft Birregurra Flood and Drainage Strategy (the 'Study') by consultant Engeny Water Management. The Study involved a detailed flood analysis to determine more accurate flood levels and extents for a range of flood events for Birregurra in the flood study catchment.

The Study is focussed on the flooding behaviour of the Atkins Creek and unnamed tributary which flows through the town. It is not a flood study of the Barwon River catchment which is very large and covers three local government areas and has been separately investigated by the CCMA. However, the Study does consider how the flooding of the creeks interact with the Barwon River when it is also in flood.



Detailed background information on the Study was included in the officer's report to Council on 28 April 2021. Revised mapping of floodprone land recommended by the study is being implemented through changes to flood-based overlays in the Planning Scheme, to ensure that such land is appropriately included in an overlay where land is projected to be impacted by a 1 in 100 year flood event. The three overlays relevant to the amendment include a Flood Overlay (applied to deepest and fastest flowing flood waters); the Land Subject to Inundation Overlay (applied to shallower flooding areas) and a Special Building Overlay (applied to flooding caused by inadequate urban stormwater drainage).

This report will focus on the Amendment process and the submissions received.

Amendment Exhibition

At the Council Meeting of 28 April 2021, Council resolved to seek authorisation from the Minister for Planning and to exhibit the amendment. Amendment C116cola was exhibited for a period of six weeks from 9 September to 22 October 2021. Formal letters and a Frequently Asked Questions sheet were sent to all impacted owners and occupiers. These letters invited any landowners and residents to contact Council directly to discuss their concerns, and to seek clarification and advice. The letters also invited landowners and occupiers to lodge a submission in support or opposing the amendment or parts of the amendment. Covid-19 restrictions prevented community meetings during this period.

During the exhibition period, three formal submissions were received by Council from Birregurra landowners, raising the following concerns:

- Noted that the Amendment would restrict development of their land.
- Queried whether Council rates would be reduced on their land.

- Queried the potential for flooding on their land.
- Noted that the amendment is not equitable.
- Seek deferment and further independent review.
- Seek a transitional period to develop their land.

Each submission is examined in detail below:

Submission 1

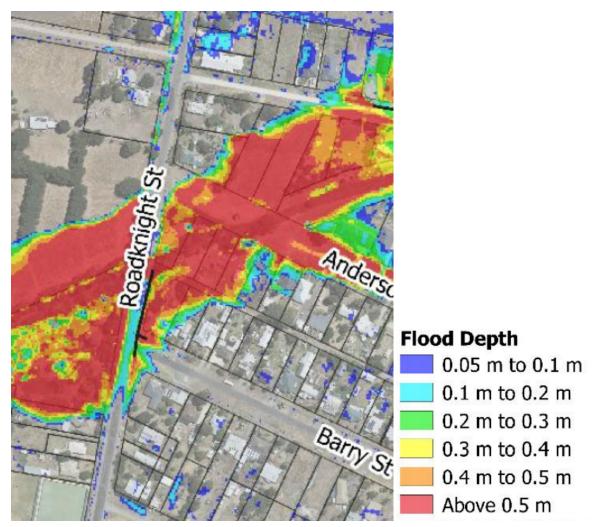
Submission 1 was from the owner and occupier of land on Roadknight Street in Birregurra. The site comprises six parcels of land and a Council laneway, bounded by Barry Street, Roadknight Street and Anderson Street. A single dwelling occupies one of the land parcels on the corner of Barry and Roadknight Streets. Atkin Creek runs through part of the site, and a Land Subject to Inundation Overlay currently covers part of the site.

The submitter has owned and lived on the Roadknight Street property since 1985 and purchased the Anderson Street property in 1997. The submitter was planning to construct a new dwelling at the corner of Roadknight and Anderson streets, and notes that the current house has never been inundated whilst they have resided at the property. The submitter states that the new overlay controls will prevent the site from being developed, and this is inequitable. The submitter seeks a deferral of consideration of this matter and an independent peer review of the flood modelling, noting that there is no certainty about the accuracy of the flood mapping. As an equitable option, the submitter proposes a transition period which would give them a two-year period to construct a dwelling under the current controls.

Response

A copy of the submission was provided to Engeny (the Study authors) for comment. Engeny noted that the findings of the flood study concurred with the submitters anecdotal evidence of flooding along Atkin Creek. The flood study modelled the 2016 flood in Birregurra, noting that this was a 10-20% AEP flood event (i.e. flooding occurring once per 5-10 years), and would not have impacted upon the existing dwelling located on the site. Engeny notes that the Study and its modelling is robust and meets applicable guidelines and industry standards. It is also noted that the Study was peer reviewed by an independent drainage consultant who concurred with the flood modelling and the findings of the Study.

In regard to the owner's wish to construct a dwelling at the north-east corner of Roadknight and Anderson Streets, it is noted that the land is currently within the Land Subject to Inundation Overlay (LSIO). The flood study indicates that the bulk of Submitter 1's site could flood to a depth of over 0.3m deep and has thus been included within the proposed Flood Overlay (FO). An extract of the 1% AEP for the site and surrounds (one in one-hundred-year flood event) mapping is included below.



Extract of flood mapping in locality

Whilst the submitter has requested a transitional arrangement in implementing the amendment to allow for a dwelling to be constructed on the land, Council has an obligation to use the latest information when considering any planning permit application. The site is already included in the LSIO and a planning permit is currently required to construct a dwelling, with a mandatory referral of any application to the CCMA. Regardless of the status of Amendment C116cola, the CCMA will base their development advice on this most recent and accurate flood study, which notes that the land is subject to significant and dangerous flooding associated with Atkin Creek.

The flood study also includes potential mitigation options to relieve flood impacts. One option includes widening Atkin Creek as seen below. This option would reduce the impact of flooding on the submitters land, but would still leave it prone to flooding. Such works would be expensive and face significant regulatory constraints including environmental and cultural heritage impacts.



Potential mitigation measures

Council Planning and Infrastructure officers and the CCMA met on site to listen to the submitter's concerns and further explained the flood study, flood impact on the land and the planning process.

In considering the submission, it is recommended that no changes are made to Amendment C116cola.

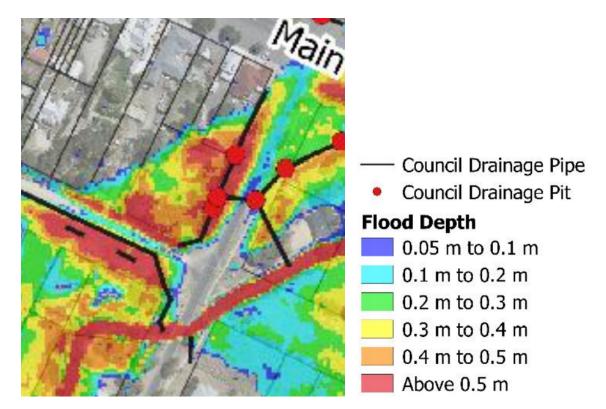
Submission 2

Submission 2 is from the owners of land on the corner of Jenner and Strachan Streets in Birregurra. This site is 2047m² in area and is vacant. The site is currently not covered by any existing flood overlay in the Colac Otway Planning Scheme. Amendment C116cola proposes to place the FO and LSIO on the majority of the site and the road reserves to the front of the site.

Submitter 2 purchased the site in 1982 and over the years has used clean fill to raise the ground level of the site. The submitters have noted many wet winters but the site has never flooded to their knowledge. The submitter states that 'proper' management of the nearby waterway would reduce flooding of the site.

Response

The land is proposed to be included in the FO and the LSIO. As can be noted in the image below, the site is significantly impacted by flooding at a 1% AEP event. While the submitter considered that maintenance of the waterway would significantly reduce flooding potential on their land, it is noted that the flood modelling used to prepare the mapping assumes no such obstructions on a waterway. Thus, increased management of the waterway will not reduce flooding on the submitter's land or its surrounds.



Extract of flood mapping

In considering the submission received, it is recommended that no changes are made to Amendment C116cola.

Submission 3

Submission 3 acknowledges the impact of flooding on the land and its subsequent impact upon property values. As such the submitters asks whether rates will be reduced to reflect the implementation of the flood controls.

Response

Council's Finance Department notes that the site is included in the "Residential – Balance of Shire" rating category which notes the highest and best use of the property is expected to be a residential use and in a locality outside the Colac/Elliminyt urban area. If Council considers that the value of a property would be affected by the Amendment, it would refer the property to a valuer to have the valuation reviewed. This will most likely have a beneficial impact on the rates payable by the submitter.

Late submissions

Submissions 4 and 5 were received after the exhibition period closed. Section 22(2) of the *Planning and Environment Act 1987* provides Council discretion on accepting late submissions. It is recommended that Council accept the late submissions received.

Submission 4

Submission 4 was received from the Corangamite Catchment Management Authority after the close of the exhibition period. Their submission supports the amendment. The submission notes that the Study was prepared using best practice processes and peer reviewed by an independent flood professional. It notes that as the catchment manager, it is vital to ensure that the most up to date and accurate mapping is available when considering future development in Birregurra.

Response

The submission of the Corangamite Catchment Management Authority is noted.

Submission 5

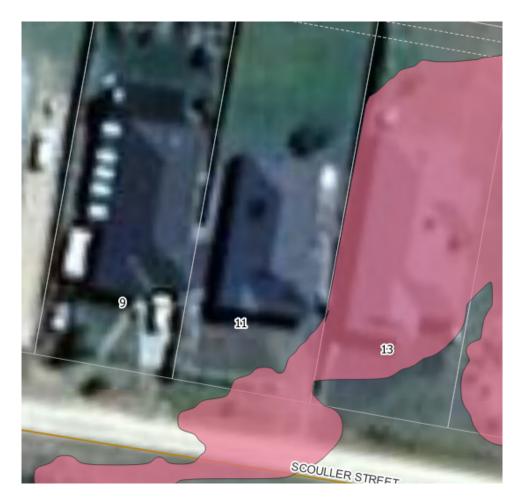
A late submission was received from the owner of 11 Scouller Street, Birregurra. The submitter raised concerns that a small section of LSIO on their land would impact part of their property. The submitter notes that the application of this overlay could potentially impact the value and saleability of their land and seeks that the proposed LSIO be removed from the site.

Response

11 Scouller Street is occupied by a recently constructed dwelling. The proposed LSIO is located at the south-east front corner of the site, clear of the existing dwelling. It is noted that the front setback of the site cannot be further developed with built form. It is also noted that the site has access onto a flood free section of roadway.

In preparing the mapping prior to public exhibition, there were numerous examples where small areas of land parcels were impacted by the LSIO and the FO. Previous meetings with the CCMA when preparing the Colac flood mapping established a framework where such 'slivers' could be removed without impacting on public safety or flood management. These included where the LSIO encroached less than 20m² into a property and was located on the periphery of the property and, if it was located on a front boundary, did not require access into a roadway that was covered by or abutting a Flood Overlay (to ensure safe escape routes and emergency response access). The entire Birregurra LSIO and FO mapping was examined in detail using these parameters and adjusted accordingly prior to exhibition.

The proposed LSIO mapping at 11 Scouller Street as exhibited is noted below.



The removal of the LSIO from the property at 11 Scouller Street, Birregurra is supported given the minimal size of the LSIO area concerned, its location to the front of the site and the ability to safely access the public road and escape routes onto Scouller Street during a flood emergency from the site.

4. COMMUNITY CONSULTATION & ENGAGEMENT

The development of the Study involved two stages of consultation with the Birregurra community plus formal exhibition of the planning scheme amendment.

All local landowners and occupiers were directly notified of the Amendment, as well as the mandatory government authorities. The Amendment was also advertised in the Government Gazette, Colac Herald and twice in the Birregurra Mail, and placed on the Council website. Council officers also met with, or directly contacted all submitters to further discuss their concerns.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 1 – Strong and Resilient Economy Four-year priorities

1.1.1 Deliver a strategic growth plan for the shire and settlement strategy for all small towns and rural living areas (Relevant Planning Scheme Amendments adopted)

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

It is important that any further infrastructure works outlined in the draft Flood Study include cultural heritage and ecological assessments to inform any decisions about their location. The construction of a new wetland to treat stormwater runoff may significantly reduce environmental issues and impacts by treating runoff and reducing uncontrolled stormwater, which will benefit the Birregurra community as well as the downstream Barwon River catchment. The potential to reduce flooding may have positive economic and social benefits.

LEGAL & RISK

Council has an obligation to the community to ensure that its planning controls accurately reflect risk. If Council does not pursue the mapping update, it could result in risks for Council and the community. For instance:

- People could buy a property that they later learn has limited development potential;
- People could sell land, believing that the development potential is limited, when it later becomes apparent that the development potential was far greater than they had known at the time of the sale;
- People could unknowingly develop their land which is subject to flooding.

There are properties in Birregurra that have flooded in recent years which are currently not covered by the overlays. Legal and risk implications associated with localised flooding caused by inadequate planning controls are expected to reduce upon completion of the planning scheme amendment. This includes updated flood mapping in the Planning Scheme, improved emergency management in relation to flood events, and identification of future capital works projects to upgrade drainage infrastructure if required. Council would experience increased liability if it chose not to progress this amendment given the known flood risks involved.

FINANCIAL & BUDGETARY

A grant of \$168,000 was obtained from the Natural Disaster Resilience Grant Scheme managed by Emergency Management Victoria (EMV). Council contributed \$70,000 in its 2019/20 budget for the project. A \$30,000 grant has also been received from DELWP to assist in funding the planning scheme amendment phase. No further Council funds are therefore allocated in the 2021/22 budget on this basis.

7. IMPLEMENTATION STRATEGY

Subject to Council resolution, officers will refer the submissions to Planning Panels Victoria, which will confirm proposed dates for a Panel hearing so that submitters have an opportunity to make representations concerning their submission. Tentative dates for a Directions Hearing and full panel hearing have been scheduled for February and March 2022 respectively.

The panel appointed to this amendment would then write a report to Council with an assessment of submissions for Council to consider when adopting the amendment.

COMMUNICATION

Submitters will be advised of the Council resolution. Planning Panels Victoria would then communicate directly with submitters in respect of proposed hearing details.

TIMELINE

The following is a proposed timeline for the Birregurra Flood and Drainage Study project and planning scheme amendment to implement the strategy's key findings.

Milestone	Timing
Exhibition	September – October 2021
Independent Planning panel review process	Early 2022
Report back to Council with panel Report and	Early – mid 2022
adoption of Strategy	
Finalisation of Amendment C116cola	Mid 2022

8. OFFICER DIRECT OR INDIRECT INTEREST

Timothy Brain declared a material conflict of interest pursuant to section 128 of the *Local Government Act 2020*. He removed himself from the process by not presenting his property's submission at the Council meeting and will not comment when the submission is raised.





FACT SHEET BIRREGURRA FLOOD AND DRAINAGE STRATEGY 2021

The *Birregurra Flood and Drainage Strategy 2021* (the study) is a joint project between the Colac Otway Shire, Corangamite Catchment Management Authority (CCMA) and the Department of Environment, Land, Water and Planning (DELWP).

The flood study has used the latest information, technology, methods and local knowledge to model the extent and impact of flooding in Birregura and investigates what can be done to reduce flood impacts on existing and future development. The study provides guidance on how flooding in Birregura can be addressed through drainage infrastructure improvements and applying planning controls to direct appropriate development to where the flood risk is considered to be acceptable. The study has been developed with extensive input from the local community and also responds to the recent flood event in September 2016.

It is noted that there are already flood based planning controls in Birregurra, but the modelling used to prepare these controls is partially inaccurate. This study recommends that these existing controls are updated to reflect the newly mapped flood risk. A planning scheme amendment is required to update existing or insert new flood overlays in the Colac Otway Planning Scheme. This will ensure that the most up-to-date flood mapping is available when property owners, Council and the CCMA make decisions on land use and development in Birregurra. The amendment can also allow for a greater number of planning permit exemptions for new works that do not increase the flood risk, when compared with the current provisions already in place.

What is an overlay?

An overlay in the Planning Scheme is a planning control that is applied to land to identify a specific issue that needs to be considered when developing land e.g. heritage, flooding, bushfire or landscape protection. An overlay may control new buildings and works and the subdivision of land. It may result in a planning permit being required for specific buildings and works.

What are the Floodway Overlay (FO), Land Subject to Inundation Overlay (LSIO) and Special Building Overlay (SBO)?

These three overlays are the controls which the State Government requires Councils to apply to land which is assessed as being prone to potential flooding. Each one has a different emphasis. Application of these overlays is determined by the degree of hazard identified in different parts of the floodplain, and the type of flooding. The overlays are applied to different areas having regard to factors such as flood depth, velocity, natural storage, flood duration and warning time based on a 1% AEP flood extent (i.e. a 1-in-100 year flood). This is a standard used across the industry for flood planning and management. The 1% AEP has been determined through the *Birregurra Flood and Drainage Strategy 2021*.

The *Floodway Overlay (FO)* applies to land in a flood-prone area that provides for movement and storage of <u>significant</u> volumes of floodwater greater than 300mmin depth. This land should remain free from obstruction by buildings and structures. Most development would be discouraged from occurring on land subject to the Floodway Overlay due to the high hazard of future flooding, whilst low intensity/low impact uses can still be considered such as some building extensions, replacement buildings, fences and the like subject to conditions.



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The *Land Subject to Inundation Overlay* (LSIO) is generally applied to the fringe of a floodplain where flooding is shallower and slower moving than in the Floodway Overlay and the level of hazard is relatively lower. Development is permitted when it does not expose people and property to an unacceptable risk, or would make flooding worse elsewhere, subject to conditions. This might include, for example, constructing the floor of a building above the established flood level and allowing the free passage of floodwater underneath the building.

The **Special Building Overlay** (SBO) is generally applied to land in urban areas liable to inundation by overland flows from the existing urban drainage system. Development is generally permitted subject to conditions when it does not expose people and property to an unacceptable risk, or would make flooding worse elsewhere. This might include, for example, constructing the floor of a building above the established flood level and also where the development will not cause any significant rise in flood level or flow velocity.

What was the process of developing the mapping to revise the extent of the Floodway Overlay, Land Subject to Inundation Overlay and Special Building Overlay?

A qualified flood consultant generated a map of flood-prone areas using complex computer modelling. The model predicted how water from a 1% AEP storm event would affect the local creek systems. Current mapping of overlays in the planning scheme is based on outdated information and may not accurately reflect this potential flood risk. This was evident when flooding occurred in 2016 and houses outside of the overlay were impacted by rising flood waters. The Special Building Overlay was mapped following modelling of the capacity and design of the existing urban drainage system within the town.

My place hasn't flooded in years, why will it in the future?

It cannot be assumed that flooding will not occur simply because there are no recollections of previous flooding at that property. The overlays are based upon modelling of the 1% AEP and reflect the most accurate data (and modelling based on this data) that we have. This model was previously referred to as a 1 in a 100 year flood. It is noted that the 2016 flood event in Birregurra impacted, in part, land outside of the current flood mapping in the town and was a 1 in 20 year flood event.

If I am in a flood overlay will my insurance premiums increase?

Insurance premiums are based on the most up to date available flood studies, such as this study, rather than the planning scheme controls. The insurance industry has its own National Flood Database where this information is kept. In many cases insurance premiums may go down due to the availability of more reliable and accurate information, but of course in some cases where deep flooding is identified, premiums may go up. Reliable flood information can help ensure properties are not underinsured. The insurance companies will use the flood model data to set premiums regardless of whether the land is within a planning overlay or not. For further information go to the Insurance Council of Australia website at www.ica.com.au

What if my property is included in the Floodway Overlay (FO)?

If your property is included in the Flood Overlay, your land has been identified as being within a waterway, major flood path, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding. Development opportunities are limited in the Flood Overlay. You can discuss the implications of flooding and the overlay on your land with Council officers.

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If included in a flood-based overlay, will I need a planning permit for everything I do?

There are many exemptions for development in the Land Subject to Inundation Overlay and Special Building Overlay. These include certain types of fences, some building extensions and in many cases new dwellings built above the flood levels subject to conditions. Generally, if your proposed development is constructed 300mm above the flood level and does not impede the flow of water across your land, a planning permit may not be required.

Are the overlays required if Council improves drainage within the town?

Future drainage improvements in and around Birregurra may reduce the need for overlays on some properties. Council is continually seeking ways to improve flooding across the Shire and future works will be included in the capital works program. However, it could be some years before such improvements occur, as they are generally high cost and subject to further feasibility investigations and funding. In the interim, the flood controls will help protect future development from the impact of flooding. When infrastructure is upgraded, a future planning scheme amendment can remove land from flood overlays to reflect drainage improvements and lower flood risks.

Proposed flood overlay changes in Birregurra.

Many properties in Birregurra are already included in the current flood mapping of the Colac Otway Planning Scheme. If the planning scheme amendment proceeds and is approved, some properties may be removed from the flood mapping. Other properties will have no change. The flood extent (or mapping) on some properties may be increased or decreased as a result of the study whilst other properties may be included in the Flood Overlay, reflecting the increased existing flood hazard on the land.

Regardless of the flood controls in place, it is important to note that the flood risk to land in Birregurra currently exists, and the placement of planning controls on the land does not alter this risk.

When will the drainage improvements identified be undertaken?

Drainage improvements in Birregurra will be subject to Council's capital works budget and availability of external funding.

Will land owners be compensated for any new planning controls being applied?

Victorian planning regulations do not allow for compensation to be paid when new planning controls such as flood controls are placed on land.

Community consultation to date

Council has engaged with the Birregurra community during the preparation of the study since 2019. This included in person consultation sessions and phone interviews. Draft mapping of flood prone areas has also been circulated to affected parties. This engagement has been critical to informing the study, with photos of past flooding confirming in most cases the predicted modelling of flood behaviour.

What next?

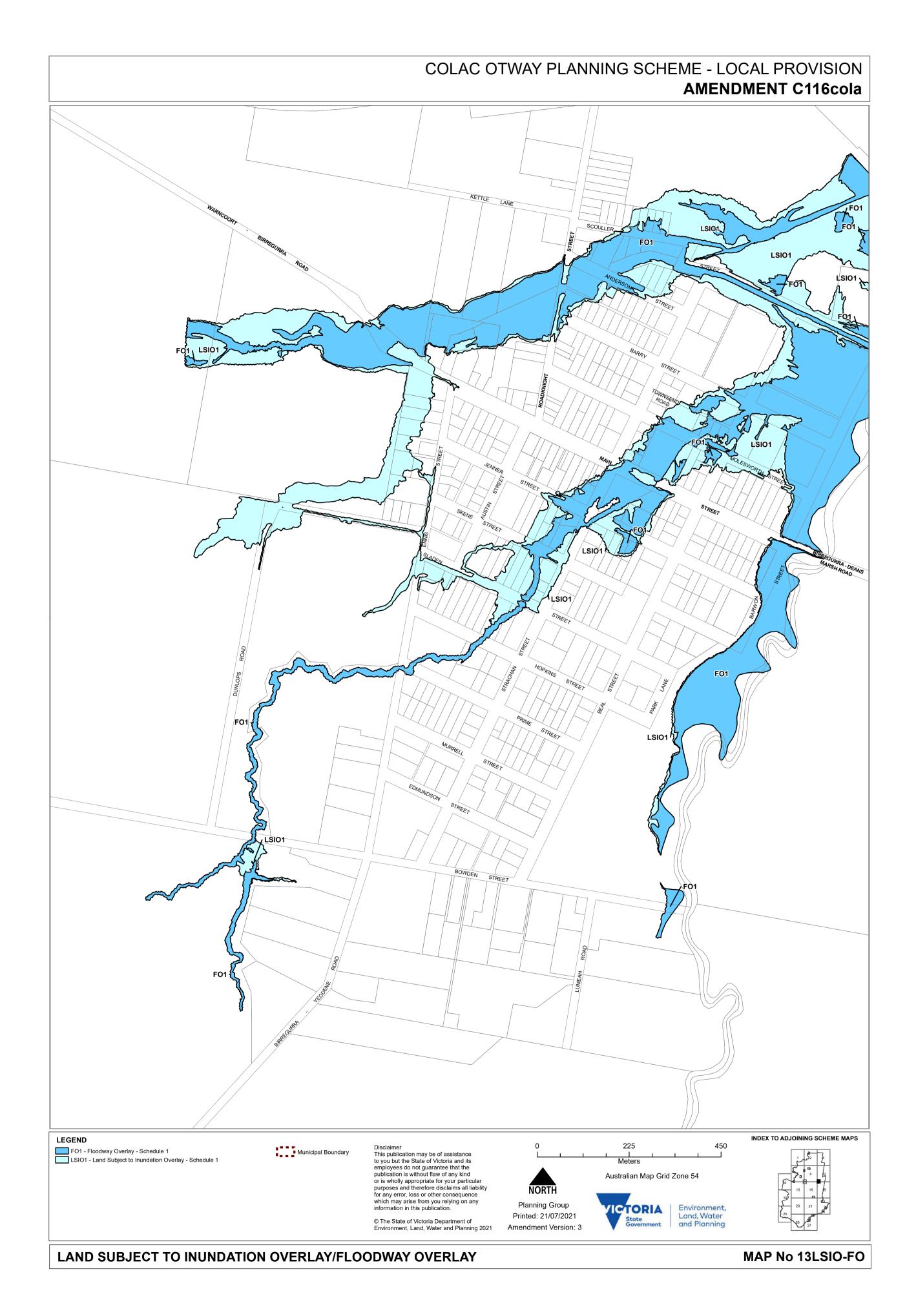
Council will consider the Officers report at the 28 April Council meeting. If Council resolves to publicly exhibit the draft Strategy and a planning scheme amendment, officers will prepare the amendment documentation and write to all land owners and occupiers advising them of how they can view the information and make a submission. It is likely that there would be drop-in information sessions attended by Council planning and engineering officers, officers from the Corangamite Catchment Management Authority (CCMA) and the consultant engineers who prepared the study. You will be notified of this opportunity when the exhibition process commences.

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Colac Otway Shire

Birregurra Flood & Drainage Strategy

Detailed Report – Exhibition Version

25 March 2021 V2013_007-REP-001-4



Job no. and Project Name: V2013_007 Doc Path File: \\online.com\files\ManagementMelbourne\Projects\V2013 Colac Otway Shire\V2013_007 Birregurra Flood Study\07 Deliv\Docs\Report\Revs\Detailed Report\V2013_007-REP-001-5-Birregurra Flood Study-Detailed Report.docx

Rev	Date	Description	Author	Reviewer	Project Mgr.	Approver
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1	11/11/2020	Draft Issue	Maria Matamala	Scott Dunn	Maria Matamala	Scott Dunn
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4	15/01/2021	Exhibition Version	Maria Matamala	Scott Dunn	Maria Matamala	Scott Dunn
5	25/03/2021	Exhibition Version	Maria Matamala	Scott Dunn	Maria Matamala	Scott Dunn
Signatu	ires		Manial	<i>a</i> 1	Manial	al

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The Colac Otway Shire and Engeny Water Management proudly acknowledges the Gulidjan and Gadubanud peoples of the Eastern Maar Nation as the traditional custodians of the Colac Otway Region.

We pay our respects to their Ancestors and Elders, past, present and emerging. We recognise and respect their unique cultural heritage, beliefs and relationship to their traditional lands, which continue to be important to them today and into the future.

DISCLAIMER

This Report has been prepared on behalf of and for the exclusive use of Colac Otway Shire and is subject to and issued in accordance with Colac Otway Shire instruction to Engeny Water Management (Engeny). The content of this Report was based on previous information and studies supplied by Colac Otway Shire.

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ABBREVIATIONS AND TERMS

The following abbreviations and terms are used and referenced in the Strategy.

Abbreviation / Term	Explanation
Annual Exceedance Probability (AEP)	Refers to the probability or risk of a rainfall event of a given magnitude (intensity and duration) occurring or being exceeded in any given year. A 90 % AEP event has a high probability of occurring or being exceeded; it would occur quite often and would be a relatively minor rainfall event. A 1 % AEP event has a low probability of occurrence or being exceeded; but is likely to cause extensive damage. A 1 % AEP event has the same probability as a 1 in 100-year ARI.
Australian Height Datum (AHD)	A common national surface level datum approximately corresponding to mean sea level. Introduced in 1971 to eventually supersede all earlier datums.
Average Recurrence Interval (ARI)	Refers to the average time interval between a given flood magnitude occurring or being exceeded. For instance, a 100-year ARI flood is expected to be exceeded on average once every 100 years. The AEP is the ARI expressed as a percentage.
Best Practice Environmental Management Guidelines (BPEMG)	Guidelines developed by the Victorian Stormwater Committee and published by the CSIRO in 1999. Guidelines include the required stormwater pollutant removal load and flow attenuation targets.
Birregurra Flood and Drainage Strategy (BFDS)	Detailed within the separate full technical detailed document and summarised within this document.
Development Contribution Disp	A DCP is a levy for developments that are proposing to increase the number of dwellings on a site.
Development Contribution Plan (DCP)	The contributions collected are used to fund infrastructure required for development and can include shared drainage infrastructure.
Freeboard	A factor of safety above design flood levels typically used in relation to the setting of floor levels or crest heights of flood levees. It is usually expressed as a height above the level of the design flood event.
Hydraulics	The term given to the study of water flow in a river, channel or pipe, in particular, the evaluation of flow parameters such as depth and velocity.
Flooding 'Hot Spot'	An area which has a history of repeat flooding highlighted through flood modelling, anecdotal information and / or customer complaints.
Hydrograph	A graph that shows how the discharge changes with time at any particular location.
Hydrology	The term given to the study of the rainfall and runoff process as it relates to the derivation of hydrographs.
Intensity Frequency Duration (IFD)	Statistical analysis of rainfall, describing the rainfall intensity (mm/hr), frequency (probability measured by the AEP), duration (hrs). This analysis is used to generate design rainfall estimates.
Light Detection and Ranging (LiDAR)	Airborne surveying technology that provides a regularly spaced grid (one metre horizontal interval in this case) of ground levels. The data allows for the representation of elevations along waterways and other key topographical features across the study area.
Representative Concentration Pathway (RCP)	Greenhouse gas concentration trajectories adopted by the Intergovernmental Panel on Climate Change. These projections consist of four different climate futures relative to temperature and sea level rises possible depending on the volume of greenhouse gases emitted in the years to come.
RORB	Hydrological modelling software used in this study to calculate the runoff generated for rainfall events.
TUFLOW	Hydraulic modelling software used in this study to simulate the flow of flood water through the study area. The model uses numerical equations to describe the water movement.

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EXECUTIVE SUMMARY

The Birregurra Flood and Drainage Strategy has involved a series of investigations including:

- 1. Data collation and review.
- 2. Hydrologic and hydraulic modelling.
- 3. Flood damages assessment.
- 4. Structural mitigation works assessment.
- 5. Stormwater quality assets assessment.
- 6. Development of planning overlays and schedules.
- 7. Flood intelligence, warning and planning assessment.
- 8. Development of Flood Spatial Data Specifications (SDS) outputs.

These have been undertaken to gain a better understanding of the flood behaviour affecting the Birregurra township and the associated structural and non-structural mitigation measures which could be implemented to reduce impacts on existing developments and future proposed developments. The study was delivered by Engeny Water Management in collaboration with planning specialists, Rod Bright & Associates and floodplain risk management specialists, HARC. The project was commissioned by Colac Otway Shire in partnership with the Project Steering Committee (PSC) which consisted of the Corangamite Catchment Management Authority (CCMA), Victorian State Emergency Service (VICSES), Department of Environment, Land, Water and Planning (DELWP), Eastern Maar Aboriginal Corporation and residents of the Birregurra township / community representatives. This report provides the details of each of the investigations undertaken noting that the updated Municipal Flood Emergency Plan (MFEP) has been delivered as a separate document.

Birregurra has a known history of flooding predominantly associated with the flows from Atkin Creek and an Unnamed Tributary which enter the township at Warncoort-Birregurra Road and Ennis Street respectively and discharge into the Barwon River. During the data collation and review phase several flood photos and anecdotal recounts were made available. Additional community knowledge was also sought throughout the project through a formal engagement session at the commencement of the project and direct one-on-one communications with residents and community representatives outside of the formal engagement session. Based on the data available, the September 2016 flood event was considered the only event where sufficient information was available to enable a comprehensive hydrologic analysis and the calibration of modelled flood levels to surveyed flood marks. The magnitude of this event was estimated to relate to a storm event in the range of 10 % to 20 % Annual Exceedance Probability (AEP).

In addition to adopting an approach consistent with the latest Australian Rainfall and Runoff guidelines (ARR2019), the ability of the developed September 2016 calibration model to produce flood levels which replicate 8 of the 9 captured surveyed flood marks provides confidence in the accuracy of the flood mapping outputs. This model was also used to simulate the full suite of AEP design events (39.25 %, 20 %, 10 %, 5 %, 2 %, 1 % AEP and Probable Maximum Flood (PMF)).

Flood mapping outputs for the 20 % to 1 % AEP storm event were utilised to estimate the Average Annual Damage (AAD) for existing conditions. This assessment considered the properties and dwellings which intersect the produced flooding overlays based on the 1 % AEP flood mapping results. Table 1 provides a summary of the number of properties affected and dwellings affected by above floor level flooding in addition to the associated total flood damages. Based on these results, the flood related damages in Birregura can be considered high.

AEP	Number of Dwellings	Number of Properties	Total Damages (S)
20 %	5	14	\$1,316,613
10 %	7	27	\$2,543,329

Table 1: Summary of Flood Damages

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Colac Otway Shire Birregurra Flood & Drainage Strategy



AEP	Number of Dwellings	Number of Properties	Total Damages (S)
5 %	9	34	\$3,662,597
2 %	23	44	\$5,664,210
1 %	26	47	\$6,576,244
		AAD	\$746,741 / year

To reduce both flood risk and flood damages, structural and non-structural mitigation works were investigated. Structural mitigation works typically consist of engineered solutions which are constructed to improve the conveyance of overland flows or provide flood storage (e.g. pipe upgrades / diversions, new retarding basin, etc.). Non-structural mitigation works relate to planning overlays and controls as well as flood emergency management plans.

Following discussions with Council and the wider PSC, five (5) structural mitigation works were assessed within the hydraulic TUFLOW model for the 20 % to 1 % AEP storm events. Where relevant, the flood mitigation benefits were assessed with the calculation of the AADs and the resultant reduction in damages when compared to existing conditions. Other factors such as the capital costs were also estimated in addition to considerations of the social impacts / benefits, environmental impacts / benefits and construction / feasibility risks. The five (5) mitigation works assessed included:

- 1. Atkin Creek waterway widening downstream of Roadknight Street.
- 2. Drainage upgrades along Sladen Street.
- 3. Unnamed Tributary retarding basin upstream of Ennis Street.
- 4. Hopkins Street Pipe Diversion.
- 5. Drainage upgrades between Prime and Sladen Street.

The high-level multi-criteria assessment highlighted the significant benefits in widening Atkin Creek downstream and the Hopkins Street Pipe Diversion. However, further investigations which considers areas of cultural and heritage significance and outcomes of a flora and fauna impact assessment would be required to gain a better understanding of the feasibility of the works.

Non-structural mitigation measures in the form of planning overlays and controls formed a key study deliverable. The 1 % AEP flood depth, water surface elevation, velocity and hazard outputs were used to develop the proposed planning overlays which consisted of a Special Building Overlay (SBO), Land Subject to Inundation Overlay (LSIO) and a Floodway Overlay (FO). Using the latest technical guidelines and best available data, these overlays have highlighted that the existing overlays and flood planning controls in the Colac Otway planning Scheme for Birregurra do not sufficiently identify flood prone land. As such the updated overlays are intended to replace the existing overlays within the township. Updates to the existing planning schemes and controls were also prepared and a draft has been provided for Council's review and implementation. Planning controls are one of the most cost-effective non-structural mitigation means of reducing the community's flood risk by:

- Encouraging people to, where possible, avoid development on flood-prone land.
- Minimising the potential impacts on existing flood-prone developments by raising floor levels of proposed habitable buildings
 and ensuring the development does not increase the risk of flooding on other properties.

Improved emergency flood warning management also provides a non-structural means for reducing the flood risk to the Birregurra community. A flood warning or alerting system does not currently exist for Birregurra. Essential building blocks (elements) of a Total Flood Warning System (TFWS) have, however, been delivered as part of this study via a series of flood modelling outputs. This has included the delivery of flood inundation mapping, an updated Municipal Flood Emergency Plan (MFEP), an indicative flood guidance tool and other outputs also suitable for inclusion in a local flood guide such a property inundation tables and associated flood intelligence information.

The existing effective flood warning time has been estimated to be around 3 to 5 hours for Atkin Creek and the Unnamed Tributary under severe flood conditions. With the use of the developed indicative flood guidance tool and flood intelligence and mapping outputs, delivered with this study, it is estimated that this effective flood warning time could be extended by at least 3 hours. It is likely that even with this effective warning time, the emergency services driven flood response actions within Birregurra

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Colac Otway Shire Birregurra Flood & Drainage Strategy



in the lead up to flooding would be limited. Local residents however, armed with the indicative flood tool and with access to rain data from the gauge at Ricketts Marsh and an overall improved awareness of the flood risk offer substantial opportunity for improved preparedness. A feasibility assessment was undertaken into how this effective flood warning time could be further extended through improved alerting and warning systems. The identified options range from no / low cost options such as making better use of existing rainfall monitoring resources through enabling near real-time public access to rain data at Ricketts Marsh gauge to options which would require a greater level of investment. These more costly options would involve improved rain and / or river monitoring and automated messaging immediately upstream of the Birregurra township for Atkin Creek and the Unnamed Tributary.

In addition to the management of flood risks within Birregurra, consideration of the opportunities available to manage stormwater quality were also assessed. This was particularly relevant given the township's expected future growth informed by the Birregurra Structure Plan and the additional pollutant loads generated through increased impervious areas from new developments. Current policy requires new developments to achieve the Best Practice Environmental Management Guidelines (BPEMG) pollutant removal targets. A range of Water Sensitive Urban Design (WSUD) options were thus investigated and sized in order to achieve these BPEMG targets for the predicted increase in impervious area. These included a centralised wetland option and a street-scale bioretention assets option in addition to reporting on the additional benefits rainwater tanks can provide on a lot basis.

Following the completion of these investigations, the following recommendations are provided:

- 1. Colac Otway Shire Council:
 - a) Seek internal endorsement of the flood study and undertake public exhibition to ensure the Birregurra community has the opportunity to comment and provide feedback.
 - b) Update the planning scheme to incorporate the findings of this study.
 - c) Consider the outcomes of the high level multicriteria assessment and findings of additional investigations and consider options which may progress to further feasibility assessments, subject to funding requirements.
 - d) Commission cultural heritage, flora and fauna, and geotechnical investigations to help inform the location of any flood mitigation assets.
 - e) Reference the provided flood modelling outputs, in particular the flood level information, to provide advice on recommended minimum floor levels for new developments for which Council is the responsible authority.
 - f) Review the Municipal Flood Emergency Plan with input from VICSES and adopt revised document.
- 2. Corangamite CMA:
 - a) Seek internal endorsement of the flood study and use mapping outputs to manage floodplain risk and inform development advice to ensure risks are minimised.
 - b) Reference the provided flood modelling outputs, in particular the flood level information, to provide advice on recommended minimum floor levels for new developments for which CCMA is the responsible authority.
 - c) Add the produced Flood Spatial Data Specification (SDS) outputs and other relevant mapping outputs to FloodZoom.
- 3. Victorian State Emergency Services:
 - a) Continue to engage with the community to increase their awareness of flood related risks.
 - b) Review and discuss the updated MFEP.



1 INTRODUCTION

1.1 OVERVIEW

Engeny Water Management (Engeny) in collaboration with specialists in planning schemes and emergency flood warning plans have developed the Birregurra Flood and Drainage Strategy. The study was commissioned by Colac Otway Shire (Council) in partnership with the Project Steering Committee (PSC) which consists of the following stakeholders:

- Corangamite Catchment Management Authority (CCMA);
- Victorian State Emergency Service (VICSES);
- Department of Environment, Land, Water and Planning (DELWP);
- Eastern Maar Aboriginal Corporation; and
- Residents of the Birregurra township.

Several investigations and tasks were undertaken to develop the Birregurra Flood and Drainage Strategy including:

- 1. Data collation and review.
- 2. Hydrologic and hydraulic modelling.
- 3. Peer Review of hydrologic and hydraulic modelling.
- 4. Flood damages assessment.
- 5. Structural mitigation works assessment.
- 6. Stormwater quality assets assessment.
- 7. Development of planning overlays and schedules.
- 8. Flood intelligence, warning and planning assessment.
- 9. Development of Flood Spatial Data Specifications (SDS) outputs.

This report provides all the details from each of these project phases and a summarised version of this document will be prepared for public exhibition.

1.2 CATCHMENT DESCRIPTION

The township of Birregurra is located approximately 130 kilometres south-west of Melbourne. Atkin Creek and an Unnamed Tributary of the Barwon River flow through the town. The Unnamed Tributary is referred by some locals as Kettles Creek however is referred to herein as Unnamed Tributary. These waterways have a contributing catchment area of approximately 23 km² and 5.5 km² respectively prior to discharging into the Barwon River which forms the town's eastern boundary.

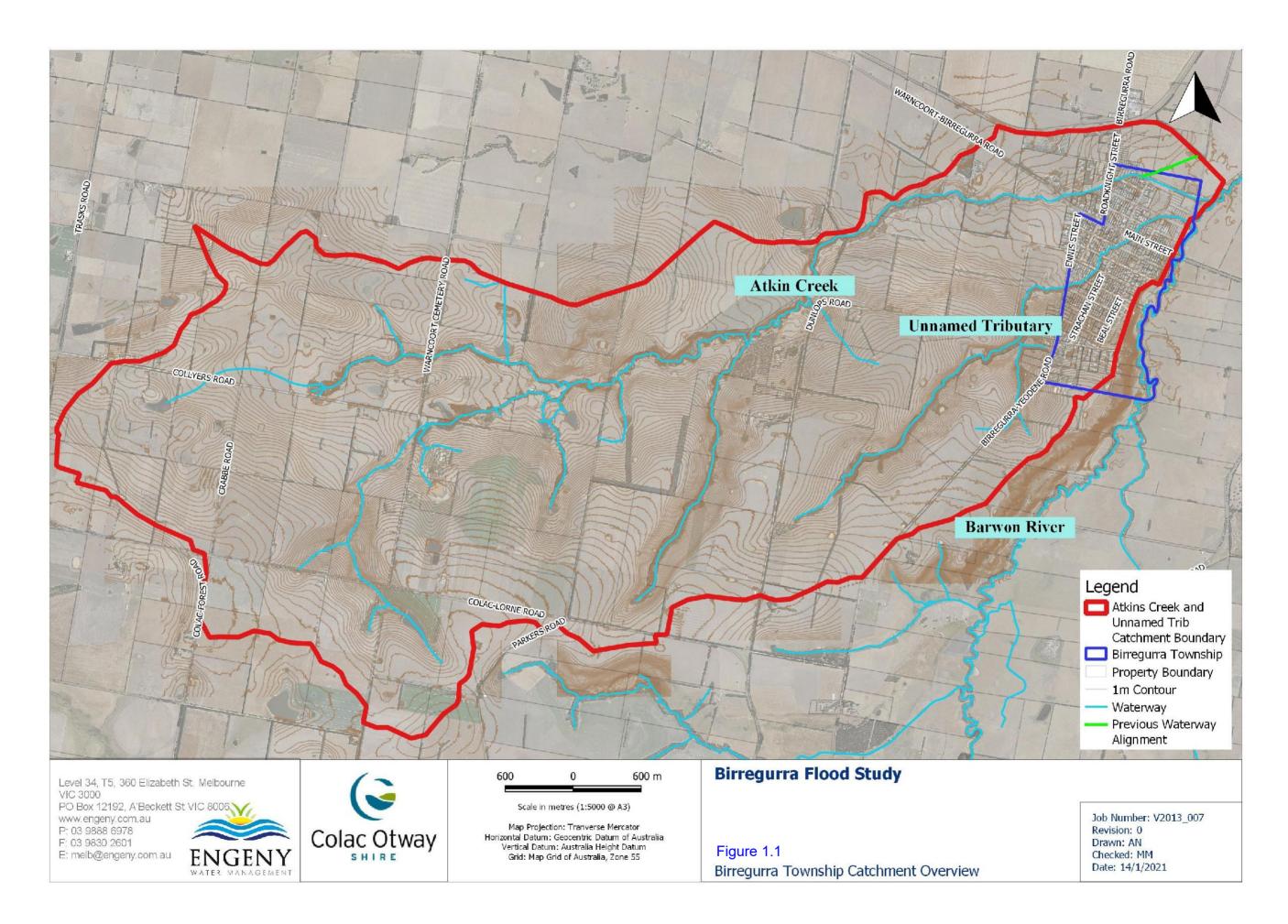
The catchment generally consists of well-defined flow paths and ridges rising from a level of approximately 198 m AHD at the top of the Atkin Creek catchment to 106 m Australian Height Datum (AHD) at the confluence to the Barwon River over a distance of 10.5 kilometres.

Birregurra has experienced growth and infill development in recent times with a high number of properties reported to be flood affected from the local waterways flowing through the town. During the September 2016 storm event, properties within the new developments along Scouller Street and Anderson Street were affected by significant flooding in addition to other established residential areas within the township.

The limited capacity provided by Atkin Creek downstream of Anderson Street contributes to flooding impacts in the new development areas along Scouller Street. This section of the creek (running along the southern side of Scouller Street) represents the diversion channel constructed several years ago. It is understood that under natural catchment conditions, Atkin Creek originally continued in a north easterly direction towards the Barwon River. However, with new developments and the establishment of the now abandoned regional rail link embankment, the creek was channelised towards the east along the southern side of Scouller Street, towards the Barwon River.

Figure 1.1 provides an overview of the Birregurra township including the upstream Atkin Creek and Unnamed Tributary catchment areas.

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Attachment 10.6.4 Draft Birregurra Flood Study Report



1.3 **OBJECTIVES**

The following provides a list of the project objectives:

- 1. To improve the understanding of flooding within Birregurra for a range of flood events (minor and major).
- 2. To assist with the protection of property and life.
- 3. Inform Planning Scheme Amendments which enable the update of existing flood overlays.
- 4. To improve decision making about development proposals in flood prone areas.
- 5. Inform development advice to ensure new developments consider and do not worsen existing flooding behaviours and risks.
- 6. Inform Council's future growth strategy such as the Birregurra Structure Plan to understand which areas are appropriate for growth.
- 7. Identify structural mitigation measures¹ which could be implemented to reduce existing flood risks.
- 8. Understand Water Sensitive Urban Design (WSUD) measures which could be implemented to ensure future development meets stormwater quality requirements for new development areas.
- 9. Update Council's Flood Emergency Plan and develop flood intelligence outputs to inform emergency response planning.

Whilst the Strategy has a focus on flood management related objectives, it is important to note the importance of waterways in relation to broader ecological, cultural, and aesthetic values. Waterways serve wider ecological functions as habitat and places of biodiversity including for the growling grass frog (*Litoria raniformis*) listed as vulnerable by the *Environment Protection and Biodiversity Conservation Act 1999*. There are areas of cultural sensitivity and significance for Aboriginal people, in addition to places of aesthetic and recreational value. It is important that these values continue to be upheld and enhanced whilst balancing the flood mitigation objectives and outcomes of this strategy.

1.4 STAKEHOLDERS

The following stakeholders own / manage drainage and waterway assets within Birregurra:

- 1. Colac Otway Shire Council (Council).
- 2. Corangamite Catchment Management Authority (CCMA).
- 3. VicRoads.
- 4. VicTrack.

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- 5. Eastern Maar Aboriginal Corporation (EMAC).
- 6. Department of Environment, Land, Water and Planning (DELWP).
- 7. Victorian State Emergency Service (VicSES).

The roles and responsibilities of each of these stakeholders is summarised in the following sub-sections.

1.4.1 Colac Otway Shire Council

Councils are not floodplain management authorities under the Water Act. Councils are local government authorities under the Local Government Act and are Planning Authorities under the Planning and Environment Act. These Acts include roles to provide local drainage services and to provide planning advice.

Councils provide roads and drainage systems to collect and convey stormwater to creeks and rivers; they also maintain the stormwater mains owned by Council on private property. Across Birregurra, Council is the drainage authority and the responsible authority for managing stormwater drainage assets and any overland flooding resulting from the stormwater drainage network. This includes provision of advice for development in areas at risk of flooding from the stormwater drainage network. Prior to the development of this strategy knowledge of areas at risk of stormwater flooding were not well understood or documented and the

¹ Structural mitigation measures refer to engineered works which are constructed to reduce flooding impacts this could include the upgrade of existing drainage assets, new diversion pipes, formalised above or underground flood storage areas or levee works.



outputs generated from the development of this strategy, including the attached flood maps, will assist Council in their drainage authority role particularly in areas assigned with a Special Building Overlay (SBO).

In 2005 the Victorian State Government recognised that the functions of Melbourne based Councils and Melbourne Water in managing drainage and flooding should be reviewed. A study was commissioned by the Victorian Auditor General's Office (VAGO). VAGO recommended that both Melbourne Water and Councils should manage flood risks associated with their systems and that this should be done on a risk-based approach under two headings:

- Structural Measures.
- Non-Structural Measures.

Whilst acknowledging the recommendation refers to Melbourne based Councils and Melbourne Water, it was considered a useful approach to managing flood risks and has been adopted for this strategy.

Structural Measures include physical works to reduce flooding such as retarding basins, floodways and larger drains. Nonstructural measures include flood mapping, planning and building controls, public education and operational tasks.

Flood mapping of Council's drainage system, undertaken as part of the development of this strategy, is a non-structural measure which has been used to inform the introduction of Special Building Overlay (SBO) controls that will be used to set conditions on development, including the floor levels of habitable buildings.

1.4.2 Corangamite Catchment Management Authority

In Victoria the floodplain management authorities are the various Catchment Management Authorities. In Birregurra the Corangamite Catchment Management Authority (CCMA) is the floodplain management authority as defined in the Water Act.

Under Part 10 of the Water Act 1989, CMAs are designated with responsibility for a waterway management district and have the lead role in developing and delivering regional programs for waterway management. The Water Act outlines their functions and powers in relation to waterway management, floodplain management and regional drainage. Within Birregurra and surrounds key functions of the CCMA include:

- Declaration of flood levels and flood fringe areas to find out how far floodwaters are likely to extend and how high they are likely to rise.
- Declaration of building lines.
- Controlling developments that have occurred or that may be proposed for land adjoining waterways.
- Taking any action necessary to minimise flooding and flood damage.
- Provision of advice about flooding and controls on development to local councils, the Secretary for Planning and Environment, and the community.

In its statutory role the CCMA co-ordinates the process for permitting works on designated waterways and designated land within the Corangamite region. This applies to Atkin Creek, the Unnamed Tributary (referred to by some locals as Kettles Creek) and Barwon River. The CCMA are a recommending referral authority in the planning system (under Section 55 of the Planning and Environment Act 1989), providing advice and recommendations to Council for proposed developments within the floodplain.

1.4.3 Regional Roads Victoria

VicRoads is responsible for the overall management (including construction, maintenance, inspection and repair) of a network of freeways and arterial roads (the major connecting roads) throughout Victoria. VicRoads is responsible for the management of the following roads within Birregurra and surrounds (note these road names are as defined by VicRoads and may be referred to differently by the Birregurra community):

- Birregurra Road.
- Warncoort-Birregurra Road.
- Birregurra-Forrest Road.

The responsibilities of VicRoads within Birregurra and surrounds extends to the drainage assets, including culverts and bridges, which have been constructed as part of roads managed by VicRoads.

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1.4.4 VicTrack

VicTrack is responsible for Victoria's transport land, assets, and infrastructure. This includes the drainage infrastructure that cross railways and the associated maintenance. Within the Birregurra township there are no VicTrack owned assets except for the drainage identified crossing the now abandoned rail embankment north of Scouller Street.

1.4.5 Property Owners

Under the Water Act 1989 (Section 16), residents and property owners:

- Are liable for the unreasonable flow of water from their land onto any other land if that water causes injury, damage or economic loss.
- Have a duty of care not to interfere with the flow of water.
- Must not participate in negligent conduct that will interfere with the flow of water onto any land.

Property owners are required by law to maintain the stormwater pipes, gutters, downpipes, stormwater pits and any other components of their approved stormwater drainage system in good condition and in compliance with any Council requirements. Property owners are also required to accept natural overland flow from adjoining properties or public land and must not divert or redirect the flow from its natural path onto neighbouring properties.

Under the Road Management Act 2004, the responsibility for the maintenance of vehicle and culvert crossings that service private property rests with the owner of the property to which they serve. It is incumbent on the property owner to ensure that water flow through their culvert crossing is not impeded in any way.

A few examples of behaviours that may have a detrimental impact on the performance of the overall drainage system:

- Poor maintenance of private drains may result in premature blockage, reduced pipe capacity and/or prevention of stormwater runoff entering the system. This may result in localised flooding and/or increased overland flows.
- Increasing the proportion of impervious surfaces within a property (such as driveways and paths) will result in increased
 overland flows onto adjacent properties and / or public roads, as the existing private drain may no longer have adequate
 capacity. When constructing hardstand (hard surfaced) areas e.g. driveways, concrete and paved areas, landscaping and
 any other impervious surfaces or drains owners must control the stormwater in order to prevent concentrated flows onto the
 adjacent property.
- The erection of a physical barrier, such as a fence, across an overland flow path or within a floodplain may divert stormwater runoff from its flow path and possibly put other properties at risk.
- Easements in private backyards are generally located to minimise impact on surrounding buildings. Sheds, paths, driveway edging and other landscaping are common improvements that are sometimes placed over easements.
- The planting of trees that develop large invasive root systems may lead to burst or blocked pipes.

While each property may only have a minor influence on the performance of the overall drainage network and floodplain, the cumulative effects of poor maintenance and other activities may become significant.

1.4.6 VICSES

The Victoria State Emergency Services is a volunteer-based organization which provides emergency assistance to minimize the impact of emergencies and strengthen the community's capacity to:

- Plan / mitigate by assisting Council in the development of emergency management plans and increasing individual capacity and capability by providing communities with information and undertaking community education and engagement work.
- Respond by providing continuous protection of life, property and the environment.
- Recover by undertaking assessments, restoration, clearing and rehabilitation of public buildings and assets where VICSES
 is the manager of that building or asset in addition to also supporting and providing assistance and advice to individuals,
 families and communities affected by floods or other natural disasters.

In the context of this flood and drainage strategy, VICSES has provided feedback on the emergency flood warning assessment undertaken and the separate Municipal Flood Emergency Plan (MFEP) document. VICSES will utilize the study's outputs to distribute and engage with the Birregurra community to improve their capacity to plan and respond to future flood events.

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1.4.7 Eastern Maar Aboriginal Corporation (EMAC)

The EMAC is an organization which represents the Eastern Maar People of South West Victoria. As traditional owners of the region, the group manages the native title rights and interests of Birregura and as such were consulted during the development of the strategy. Alongside this engagement, the study also highlights the need to undertake investigations to understand the cultural heritage values which exist in specific locations through further archaeological and anthropological investigations.

1.4.8 DELWP

DELWP is a state government department that encompasses several agencies and brings together Victoria's climate change, energy, environment, water, forest, planning and emergency management functions. The department aims to care for and protect the environment whilst maximising the connections between the community, industry, and economy.

In line with DELWP's role to protect natural environments, the water associated with the Barwon River floodplain / crown land is managed by DELWP. Proposed works within this area would require DELWP's approval.

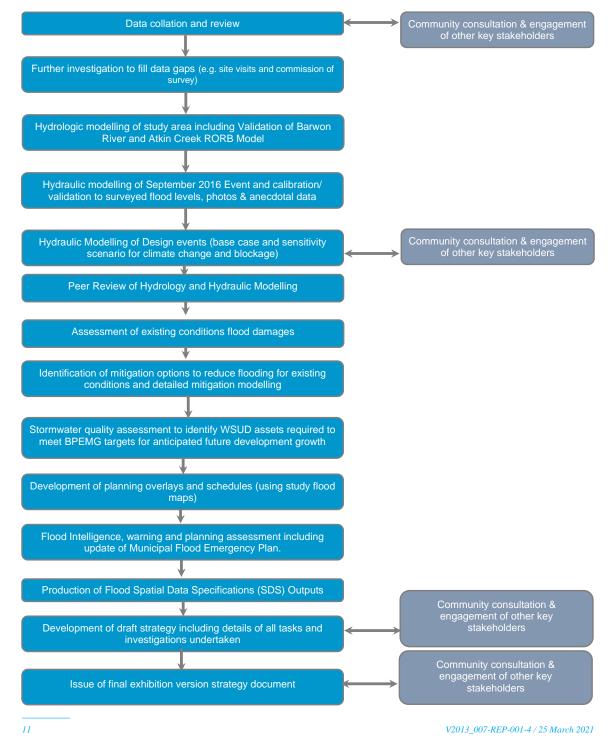
10



1.5 STUDY METHODOLOGY

Figure 1.2 illustrates the key steps undertaken to achieve the objectives of this study.







2 DATA COLLATION AND REVIEW

2.1 DATA SUMMARY

A series of data sets were collated and reviewed to inform the Birregurra township Flood and Drainage Strategy. This information was sourced from the following agencies and individuals:

- Colac Otway Shire Council.
- Corangamite Catchment Management Authority (CCMA).
- Department of Environment, Land, Water and Planning (DELWP).
- Bureau of Meteorology (BoM).
- Birregurra Historical Society.
- South West Survey Group (SWSG).
- Residents of the Birregurra township.

The data consisted of GIS layers and reports in addition to other technical data such as rainfall data, streamflow recordings, historical flood photos, etc. The following sections provide further details.

2.2 DRAINAGE

Council provided Engeny with GIS layers of drainage pipes and pits within the township. This data contained pipe diameter attributes which were used as an input to the hydraulic model. A thorough review of this data identified gaps where missing assets were identified on site and verified with development plans where available. In critical locations where development plans were not available and a site inspection was not possible, surveyors were engaged to verify the pipe diameters and drainage connectivity.

Key hydraulic structures such as culvert crossings and bridge structures along Atkin Creek and the Unnamed Tributary as well as evident private driveway crossings were also measured on site where access was possible. On site measurements included obtaining the following details:

- Culvert widths and heights.
- Bridge deck thickness and approximate height of flow area beneath deck.
- Railing heights and an indication of opening flow area.
- Number of bridge piers or culverts.

Where measurements on site could not be undertaken, private property access was arranged by Council and surveyors were engaged to obtain details on the existing inlet / outlet structures in addition to the associated pipe diameter. The surveyor details were also verified with data measured during the site visits.

2.3 AERIAL PHOTOGRAPHY

Aerial photography of the study area captured on the 28th of January 2019 was supplied by Council. This photography was compared to the latest www.nearmap.com aerial photography which resembled the same level of development across the study area. The date of the latest aerial photography on Nearmap is unknown, whilst it is listed as being captured on the 1st of January 2005 it is clearly more recent as recent developments north of Scouller Street are displayed. Although, based on discussions with Council and observations made on site, these aerials have not captured the most recent lots which have since been subdivided and developed north of Scouller Street.

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2.4 **TOPOGRAPHY**

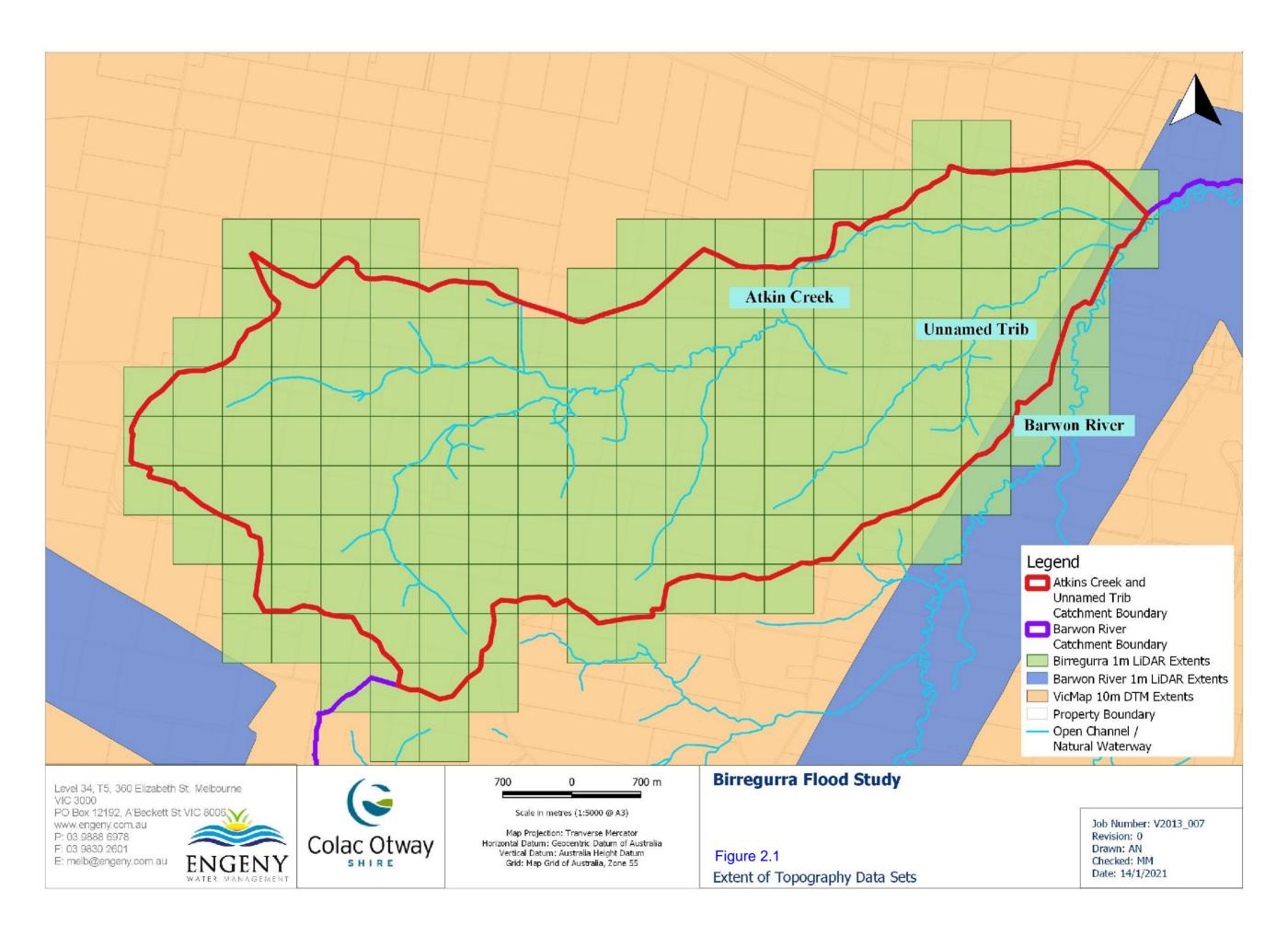
2.4.1 Summary

A series of data sets were collated and reviewed to define the topography of the study area and contributing catchments. Table 2.1 provides a summary of these data sets including details on the resolution, accuracy and source. Figure 2.1 depicts the extent of the topographical data sets utilised in this study.

Data Set	Resolution	Quoted Accuracy	Source	Purpose
Birregurra LiDAR data (11th September 2019)	1 metre	Vertical 0.1 m Horizontal 0.3 m	Council	Utilised to define hydrological sub- catchment delineation for Atkin Creek and Unnamed Tributary hydrology model.
				Utilised to represent the 2D domain in hydraulic flood model.
Barwon River LiDAR data	1 metre	Vertical 0.2 m	DELWP	Utilised to fill gaps and define Barwon River flood
(Corangamite 15th May 2010)		Horizontal 0.3 m		plain terrain in hydraulic flood model.
VicMap 2008 DTM	10 metre	Vertical 5.0 m	DELWP	Utilised to define hydrological sub-
		Horizontal 12.5 m		catchment delineation of wider Barwon River hydrology model.
Survey Data	Cross sections at the upstream and downstream end of key culvert structures and at approx. 100 m intervals along Atkin Creek downstream of Anderson Street.	-	South West Survey Group	Used to better define ground elevations at critical locations along Atkin Creek and at culvert crossing structures.
Permanent Survey Marks	-	Vertical typically < 40 mm Horizontal typically < 30 mm	DELWP (Survey Marks Enquiry Service online portal)	Used to verify accuracy of Birregurra LiDAR data to known survey marks.

Table 2.1: Summary of Topography Data Sets

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Attachment 10.6.4 Draft Birregurra Flood Study Report



2.4.2 Birregurra township LiDAR

Council provided LiDAR (Light Detection and Ranging) data tiles covering the Birregurra township and the upstream catchment areas of Atkin Creek and the Unnamed Tributary. This data was captured on the 11th September 2019 and is an airborne surveying technology that provides a regularly spaced grid (one metre horizontal interval in this case) of ground levels. This data was used to produce a Digital Terrain Model (DTM), which allows for the waterways and other key topographical features across the study area to be defined in a flood model.

The LiDAR data was commissioned specifically for this study where the output data report shows that after processing and comparison to field survey, the following level of accuracy was achieved:

- Vertical accuracy +/- 100 mm.
- Horizontal accuracy less than 300 mm.

2.4.3 Barwon River LiDAR

As part of DELWP's data sharing agreement, LiDAR data captured as part of the 2009-10 Victorian State Wide Rivers LIDAR Project for the Corangamite CMA was utilised to define the topography along the Barwon River floodplain. This data was captured on the 15th May 2010 with a grid resolution of one metre and the following levels of accuracy:

- Vertical accuracy +/- 200 mm.
- Horizontal accuracy less than 300 mm.

2.4.4 VicMap DTM

The VicMap database includes a state-wide DTM generated utilising contours at 10 metre intervals. Due to the extent of the DTM and the various input resolutions, accuracies and ages used to generate the grid the following level of accuracy applies:

- Vertical accuracy +/- 200 mm.
- Horizontal accuracy less than 300 mm.

This data was utilised to delineate the wider Barwon River catchment and associated sub-catchments (or subareas) as inputs to the hydrology model.

2.4.5 Feature and Level Survey Data

South West Survey Group (SWSG) were engaged to provide drainage data in addition to ground elevation data at key culvert structures and along Atkin Creek downstream of Anderson Street. Typical cross-sections of the creek at intervals of 100 metres were requested along Atkin Creek in addition to cross-sections at the upstream and downstream end of key drainage structures.

This data was requested due to the uncertainties identified with the LiDAR data and its ability to capture waterway invert levels without interpolation issues² particularly within highly vegetated areas.

2.4.6 Permanent Survey Marks

The Survey Marks Enquiry Service (SMES) online portal was accessed to extract the existing permanent survey marks across the Birregurra study area. These elevations were utilised to verify the accuracy of the Birregurra LiDAR data adopted for the overall hydraulic TUFLOW model.

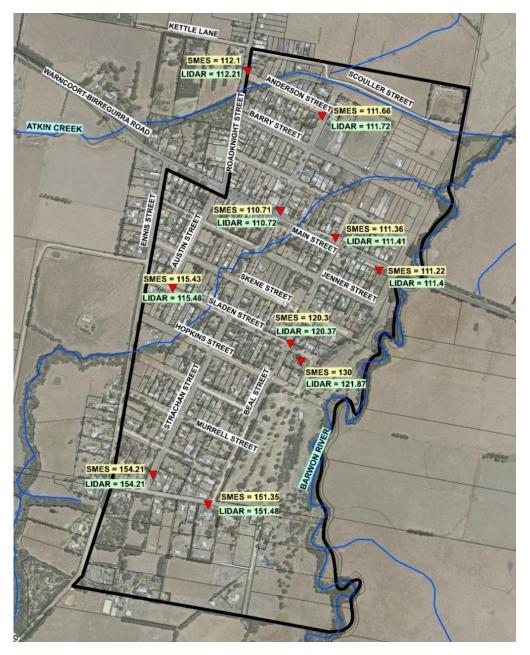
Figure 2.2 displays the comparison of elevations indicating that in general the difference is within 100 mm at key locations. It was however noted that the survey mark near the intersection of Sladen Street and Beal Street differs by approximately 8 metres. This is because the marker is located on the top of the church spire and would be filtered out of the LiDAR data set.

² Linear Interpolation is used to fill gaps in irregularly space LiDAR elevation data sets. This can cause a loss of information and introduce possible errors in producing the Digital Elevation Model (DEM) especially in areas with various ground cover types because vegetation may limit ground elevation detection.



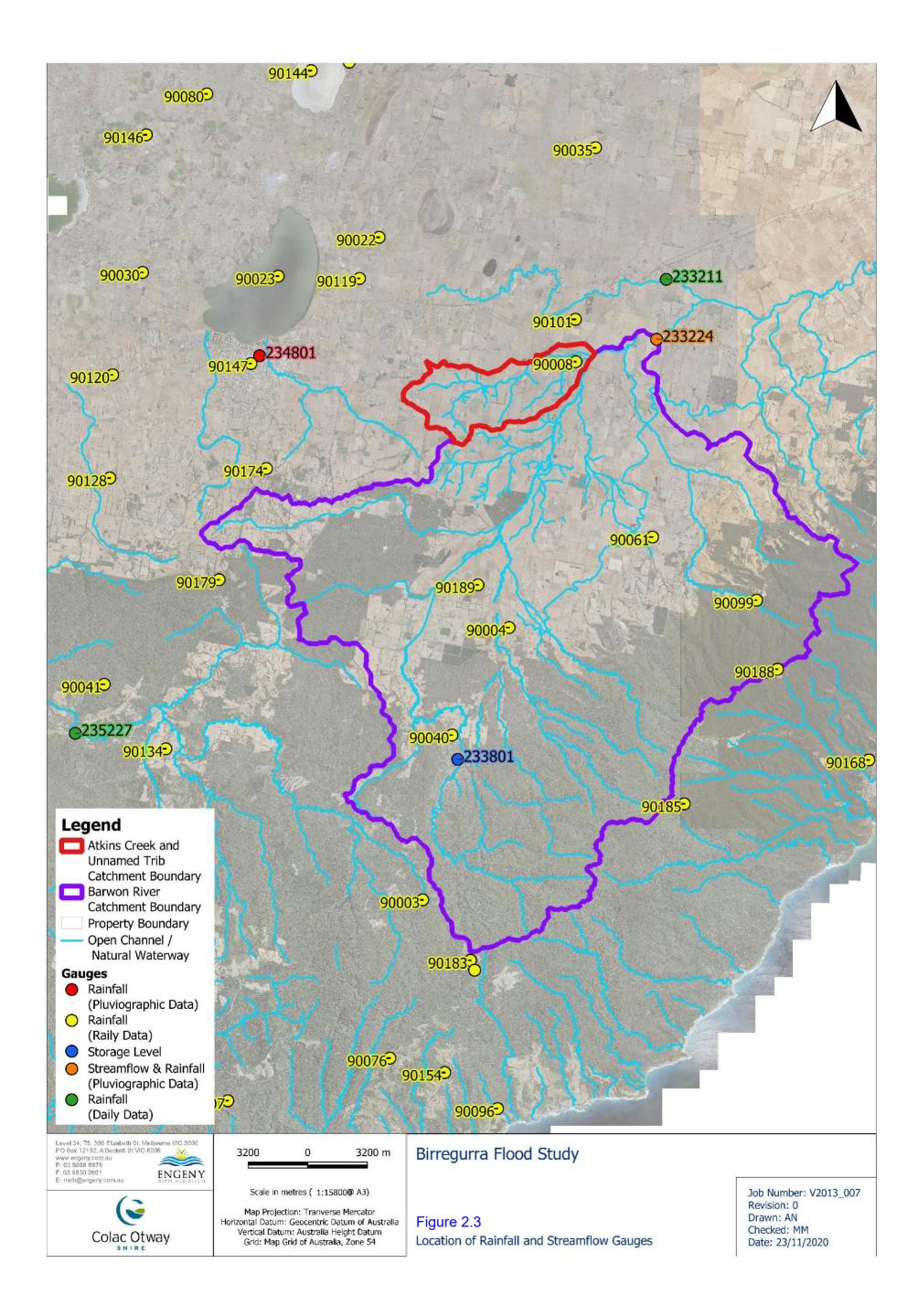
Overall, the findings indicate the LiDAR data forming the basis behind the flood modelling is accurate and can be compared to other survey marks such as the flood levels provided by the CCMA.

Figure 2.2: LiDAR Verification to Known Survey Marks



2.5 GAUGES

A series of rainfall and stream flow gauge data sets were identified within and surrounding the Birregurra study area. The locations of these stations are displayed within Figure 2.3 and are described in the following sections. This data was sourced from both the Bureau of Meteorology and DELWP's rivers and streams online portal.



Colac Otway Shire Birregurra Flood & Drainage Strategy



2.5.1 Rainfall Data

Both daily and where available pluviographic rainfall data sets were reviewed as part of the hydrological modelling undertaken and discussed in Section 3. Table 2.2 provides a summary of the rainfall stations where pluviographic data was extracted and analysed.

Daily rainfall averages were also assessed for the remaining stations displayed in Figure 2.3 to understand the spatial variability across the study area and surrounding catchments for historic storm events. The comparison of total daily rainfall depths at the Birregurra (Post Office) station (90008) to the Barwon River at Ricketts Marsh station confirmed that the pluviographic data was of poor quality for the September 2016 event as noted below.

Table 2.2: Rainfall Data

Gauge Location	Station Number	Start Date	End Date
Lake Colac @ Colac	234801	23/01/2016	22/04/2020
Barwon River @ Ricketts Marsh	233224	21/05/1993	22/04/2020
			Poor Quality Data for September 2016 event

2.5.2 Streamflow Data

Table 2.3 provides a summary of the streamflow gauge data collated and assessed as part of the hydrological calibration component. It is important to note that the local Atkin Creek and Unnamed Tributary catchments are ungauged.

Gauge Location	Station Number	Catchment Area (km2)	Start Date	End Date
Birregurra Creek @ Ricketts Marsh	233211	87	07/05/1953	13/11/2013
Barwon River @ Ricketts Marsh	233224	593	27/07/1971	22/04/2020
Gellibrand River @ Bunkers Hill	235227	311	20/03/1970	20/02/2018

2.5.3 Reservoir Data

Given the West Barwon Reservoir is located within the Barwon River catchment upstream of the gauge at Ricketts Marsh, storage level data was obtained from DELWP's online portal.

Table 2.4: Reservoir Data

Gauge Location	Station Number	Start Date	End Date
West Barwon Reservoir	233244	28/05/2002	Ongoing

2.5.4 Birregurra Structure Plan

The Birregurra Structure Plan (2013) displayed in Figure 2.4 forms the framework for future growth within the township. Following a review of the structure plan report, the following references to flooding were identified:

- The northern half of the town is relatively flat and has several areas of poorly drained land that is prone to flooding.
- Given the constraints posed by the Barwon River and its floodplains to the east of town, and topography / escarpment to the south, options for future urban expansion are limited to the north and west.

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Colac Otway Shire Birregurra Flood & Drainage Strategy



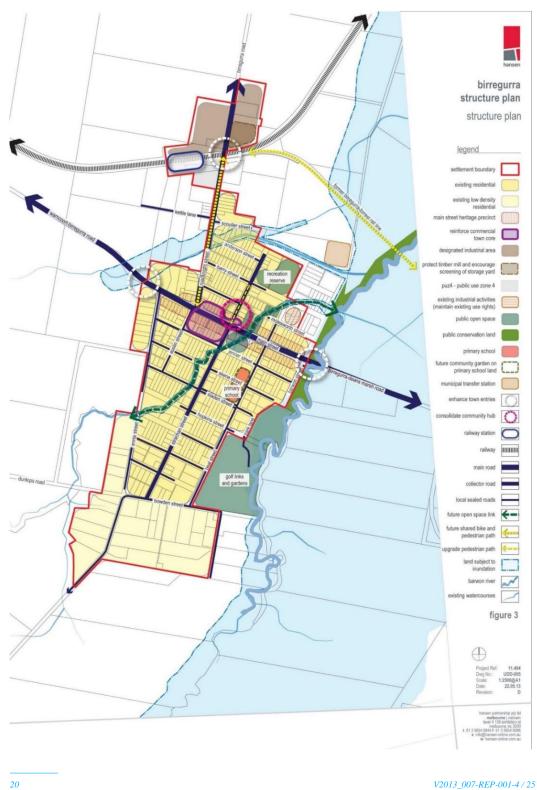
- Direct future growth of the township away from designated floodplains ³.
- If or when a need is identified for urban expansion, the following principles should be applied in identifying and assessing potential areas of future rezoning.
- The land is not constrained by slope or flooding / drainage issues.

As these flooding considerations are informed by existing flood overlays (discussed within Section 2.5.5), it is anticipated that the findings from this study will inform future updates to the current structure plan.

³ "Designated floodplains" wording has been referenced directly from the Birregurra Structure Plan. "Designated" here does not take on the same meaning as in the Water Act



Figure 2.4: Birregurra Structure Plan / Framework Plan





2.5.5 **Existing Flood Overlays**

Figure 2.5: Existing Flood Overlays

Land Subject to Inundation Overlays (LSIO) currently cover the Atkin Creek and Unnamed Tributary waterways traversing the township in addition to the Barwon River floodplain as depicted in Figure 2.5 below. These are included within Council's Planning Scheme, however particularly after recent flood events the LSIO extents have been shown to not adequately represent existing flooding conditions. This is because these LSIO extents represented the best available knowledge of the time based on the available data inputs and different overall modelling practices and technologies which are now considered outdated.





2.6 SITE VISIT

Engeny conducted a site visit of the study area on the 26th February 2020 with members of the Project Steering Committee (PSC). The site visit focused on key areas of the catchment in order to:

- Gain an understanding of site conditions including flow paths and low-lying areas. •
- Verify the existence of drainage assets.
- Obtain measurements of drainage culvert and bridge structures.
- Understand the general feasibility and key constraints which could influence the selection of structural mitigation works.

Appendix A includes photos taken during the site visits.

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2.7 HISTORIC INFORMATION

A series of historic flood information data was collated during the progression of the study from various sources. This data typically consisted of flooding photos and videos, anecdotal recounts and surveyed flood marks provided by Council, stakeholder agencies and the local Birregurra community.

Daily and hourly rainfall data sets sourced from the Bureau of Meteorology and DELWP's online portal were also referenced to understand the related storm event magnitudes. The following sections provide a summary of the data collated and reviewed. This phase formed a critical component in the September 2016 event calibration and verification of flood modelling outputs discussed within Section 3.

2.7.1 Flood History

Based on the anecdotal descriptions and flood photos / videos collated from stakeholder agencies and community members noteworthy floods that have impacted the township include:

- November 1995.
- September 2016.
- September 2017.

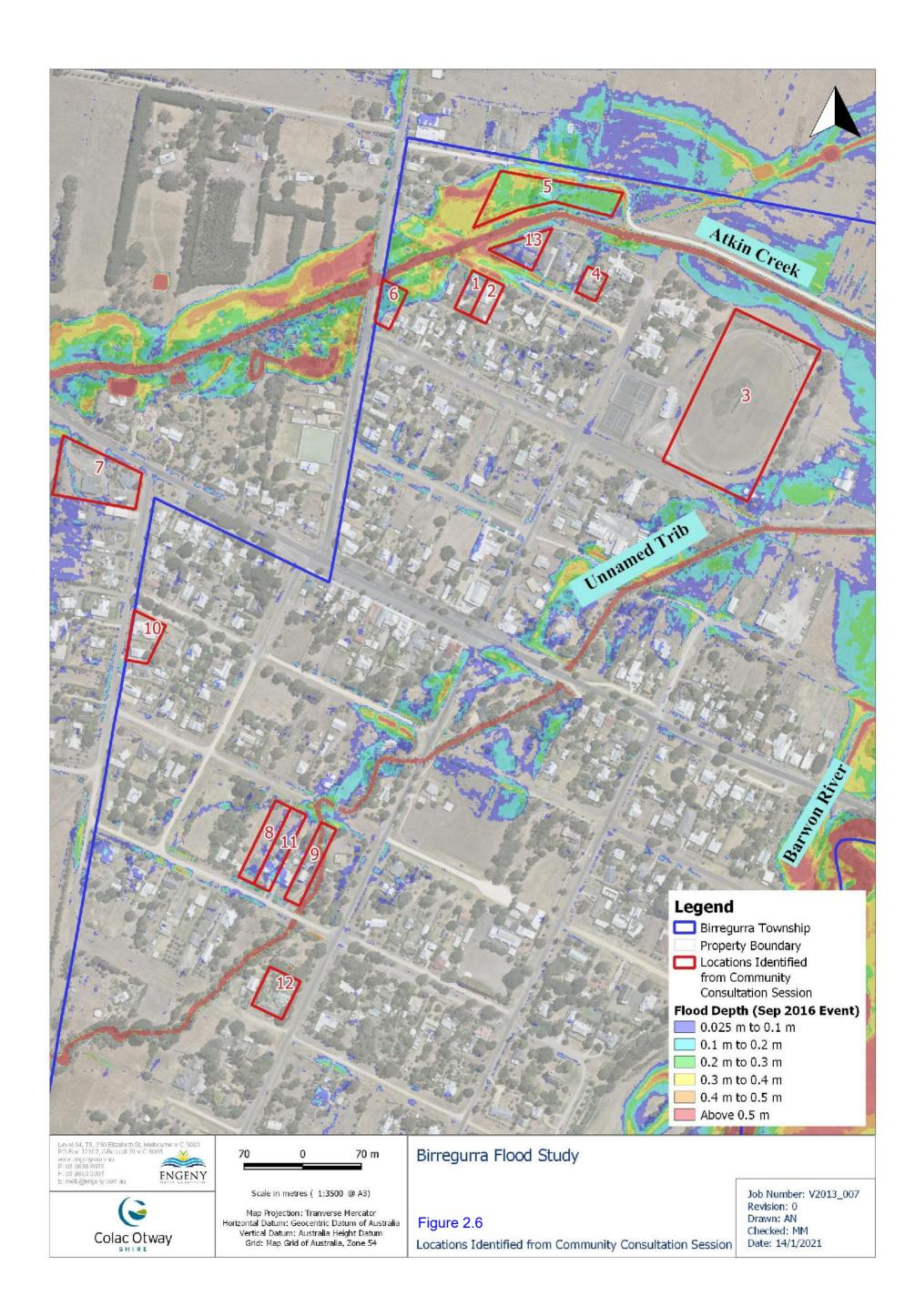
It is important to note that due to the lack of data detailed calibration and verification of flood modelling results was only possible for the September 2016 event.

2.7.2 Community Engagement

To gain a better understanding of the flooding behaviour within Birregurra, several community engagement sessions were held at different stages of the study.

Appendix B provides a summary of the information captured from residents during consultation session held on December 7th and 8th 2019 led by Council and the CCMA. This data was referenced during the calibration and verification of flood modelling results discussed in Section 4.4. The corresponding address / location of each resident comment has been referenced within Figure 2.6 with the underlying September 2016 event modelling results for comparison purposes.

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2.7.3 Surveyed September 2016 Flood Marks

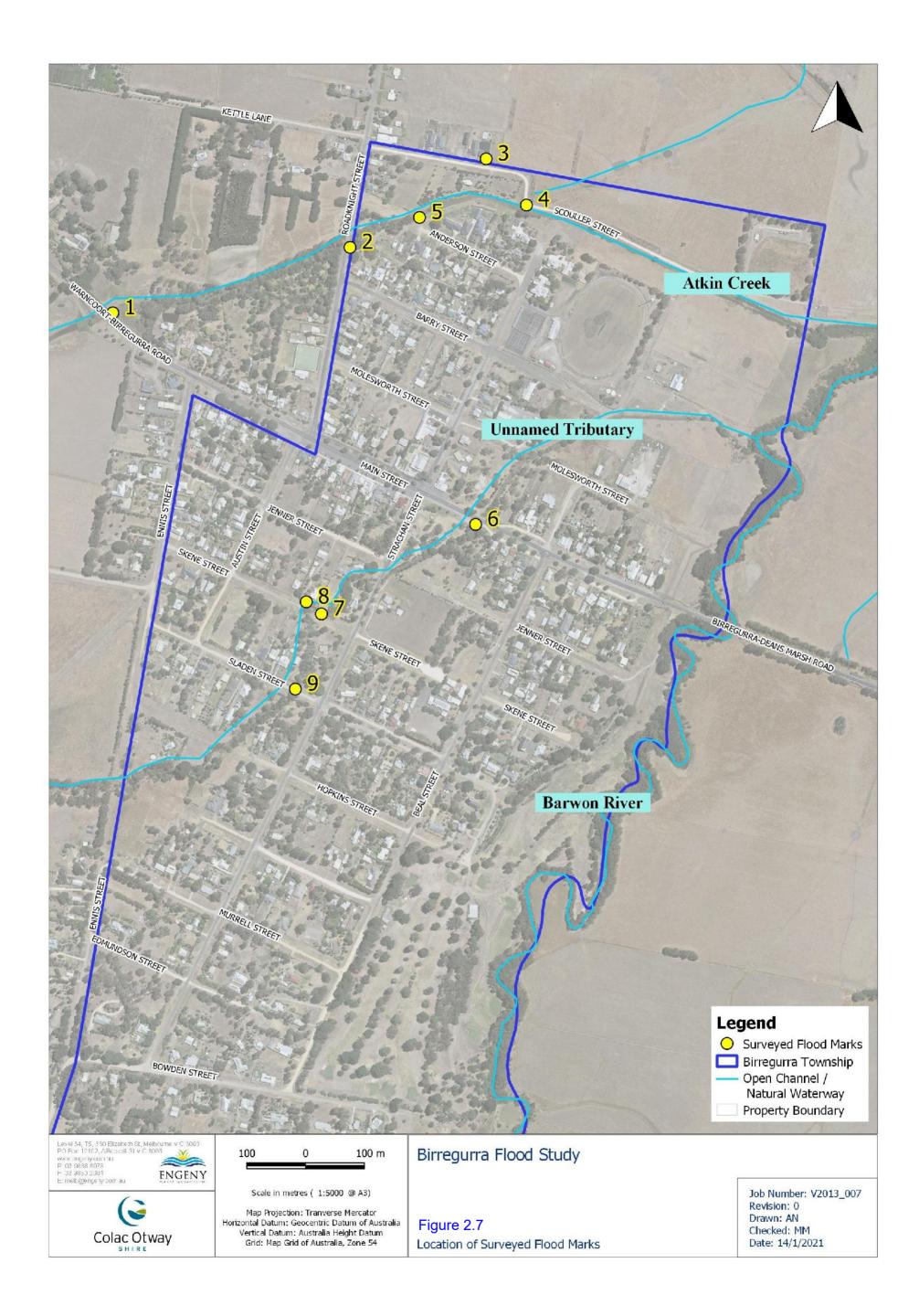
Surveyed flood marks from the September 2016 event were captured along the Atkin Creek and Unnamed Tributary flow paths and provided by the CCMA. Figure 2.7 displays the location of these across the township and Table 2.5 references the location's description and the surveyed level.

These flood levels were critical during the calibration and verification of the September 2016 modelled results. A comparison of the modelled versus surveyed flood levels is provided in Section 4.4.

Location	Description	Flood Level m AHD
1	Warncoort-Birregurra Rd (Fence line)	113.44
2	Roadknight Street	111.61
3	Scouller St (Side of Shed)	Unable to access property
4	Scouller St (Sewer pit)	110.49
5	Anderson St (Fence post)	111.3
6	Main Street (US left bank bride abutment)	109.89
7	Skene St (Top of crossing)	112.4
8	Skene St (Base of letter box)	112.63
9	Bridge abutment (DS Right bank)	114.3

Table 2.5: Surveyed Flood Marks for September 2016 Event

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3 HYDROLOGICAL MODELLING

3.1 PURPOSE

The purpose of the hydrologic modelling was to generate runoff hydrographs⁴ for input to the hydraulic model. This included the generation of:

- Rainfall excess hydrographs for the sub-catchments covering the local Birregurra township.
- Routed hydrographs to represent the inflows from Atkin Creek, the Unnamed Tributary and Barwon River.

Table 3.1 provides a summary of the model scenarios.

Table 3.1: Hydrological Modelled Scenarios

Storm Event	Existing Conditions	Climate Change Conditions
39.35 % AEP or 2-year ARI ⁵	Х	
18.13 (20) % AEP or 5-year ARI	х	
10 % AEP or 10-year ARI	х	х
5 % AEP or 20-year ARI	х	
2 % AEP or 50-year ARI	х	
1 % AEP or 100-year ARI	x	x
0.5 % AEP or 200-year ARI	x	
0.2 % AEP or 500-year ARI	x	
Probable Maximum Flood (PMF)	x	
September 2016 validation event	x	

3.2 METHODOLOGY

RORB was utilised as the rainfall runoff software where numerous inputs were generated in accordance with the Australian Rainfall and Runoff Guidelines (ARR 2019). A combination of both the Monte Carlo and ensemble simulation approach was adopted to the hydrologic modelling undertaken. The following provides the basis for adopting each of the simulation approaches:

- Monte Carlo Approach was adopted to define the design flows along the Atkin Creek, Unnamed Tributary and Barwon River watercourses. These flows correspond to longer critical durations with larger contributing catchments. The approach was adopted to more accurately account for the catchment's inherent variability and probabilistic nature of key variables such as initial loss, rainfall depths and temporal patterns.
- Ensemble Approach was adopted to define the design flows for the local Birregurra township catchments. These flows correspond to shorter critical durations associated with smaller contributing catchments. The approach was adopted to

⁴ A runoff hydrograph is a graph that shows how the discharge changes with time at any particularly location.

⁵ Annual Exceedance Probability (AEP) or Average Recurrence Interval (ARI)



consider the variability from different temporal patterns and the more accurate application of losses for the different surface types within the township.

Two (2) hydrological RORB models were developed to represent the combined Atkin Creek and Unnamed Tributary catchments in one RORB model and the larger Barwon River catchment in the other.

The Atkin Creek and Unnamed Tributary are ungauged catchments and as such the calibration of the Barwon River RORB model to the gauge was used to define the input parameters for the Atkin Creek and Unnamed Tributary RORB model.

The following provides a summary of the hydrologic methodology adopted:

- 1. Undertake a Flood Frequency Analysis (FFA) for the Barwon River at Ricketts Marsh Gauge.
- 2. Develop the Barwon River RORB model to the gauging station at Ricketts Marsh.
- 3. Calibrate the design Barwon River RORB model to the Flood Frequency Analysis (FFA) using the Monte Carlo simulation approach.
- 4. Verify the Design Barwon River RORB model flows and parameters to literature findings and the Rural Flood Frequency Estimate (RFFE).
- 5. Generate a series of design hydrographs for the various AEP storm events and scenarios (base and climate change conditions) for input to the hydraulic TUFLOW model.
- 6. Develop the Atkin Creek and Unnamed Tributary RORB model to the Barwon River confluence.
- 7. Utilise the k_c / distance average (d_{av}) ratio to determine the k_c value for the Atkin Creek and Unnamed Tributary RORB model and adopt the defined FFA design calibration loss parameters.
- Simulate the local township catchment design flows using the ensemble approach for durations between the 10 minute to 2 hour storm durations (where relevant) accounting for the indirectly and directly connected impervious proportions as recommended within the ARR 2019 guidelines.
- 9. Simulate the routed waterway inflows (Atkin Creek, Unnamed Tributary and Barwon River) using the Monte Carlo approach for the given critical durations.
- 10. Collate the relevant ensemble rainfall excess hydrographs and routed inflows for the 10 minute to 2 hour storm durations (where relevant) in addition to the Monte Carlo rainfall excess hydrographs and routed inflows for the given Atkin Creek and Unnamed Tributary critical durations for input to the hydraulic TUFLOW model discussed in Section 4.
- 11. Utilise the design Barwon River RORB model to simulate the September 2016 storm event and calibrate to the gauged hydrograph by varying the input loss parameters. Utilise these parameters to generate the relevant Barwon River inflow hydrograph for application to the hydraulic September 2016 TUFLOW model scenario discussed in Section 4.4.
- 12. Utilise the design Atkin Creek and Unnamed Tributary RORB model to simulate the September 2016 event in order to generate the rainfall excess and routed inflow hydrographs for application to the hydraulic TUFLOW model. Iterative hydrologic and hydraulic modelling was undertaken varying the loss parameters and hydraulic model parameters to calibrate the modelled flood levels to the surveyed flood levels discussed in Section 4.4.

The following sub-sections provide details on the various inputs, assumptions and calibration / verification processes undertaken.

3.3 FFA FOR BARWON RIVER AT RICKETTS MARSH GAUGE

A Flood Frequency Analysis (FFA) was undertaken using FLIKE. The available recorded streamflow data between 1971 to 2020 was used for the Barwon River at Ricketts Marsh gauge (Station 233224). This 50-year data set was analysed to determine the maximum recorded flow for each year. The censoring of data was considered, however due to the relatively limited data set of 50 years, was not adopted as it would require the exclusion of several records resulting in significantly wider confidence limit ranges.

The Log Pearson III distribution output is displayed in Figure 3.1 and Table 3.2. This distribution was preferred in contrast to the Generalised Extreme Value distribution (GEV) as the upper and lower confidence limits were within a closer range to the mean values. These outputs formed the basis of the Barwon River calibration discussed within Section 3.4.8.

The analysis also confirms that the following three storm events, considered notable within the Birregurra township based on anecdotal information, contributed to the given annual peak flow recorded at the Ricketts Marsh gauge:

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- November 1995 recorded 446.6 m³/s with estimated magnitude of 1 in 30.75 years.
- September 2016 recorded 99.5 m³/s with estimated magnitude of 1 in 3.62 years.
- September 2017 recorded 34.5 m³/s with estimated magnitude of 1 in 1.56 years.



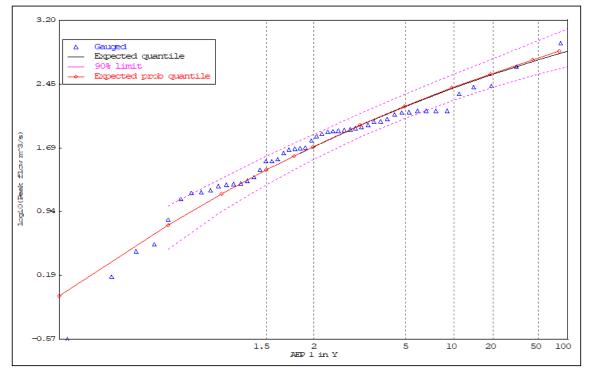


Table 3.2: Barwon River at Ricketts Marsh FFA	Table Output
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AEP (%)	Expected Quantiles (m ³ /s)	5 % Confidence Limit (m³/s)	95 % Confidence Limit (m³/s)
50	50.9	36.0	71.5
20	151.7	110.7	214.2
10	250.1	180.5	363.8
5	364.7	257.9	560.3
2	537.8	366.4	911.3
1	682.4	449.9	1251.6
0.5	836.7	533.2	1699.3
0.2	1053.0	636.8	2393.7

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3.4 BARWON RIVER MODEL DEVELOPMENT

3.4.1 Catchment Boundary

The Barwon River catchment boundary was defined utilising the VicMap 2008 DTM and the corresponding 10 metre contours. Figure 3.2 provides the overall catchment boundary of approximately 572 km² and structure of the RORB model including the location of the Barwon River at Ricketts Marsh gauging station (Station ID 233224) at the annotated Node ID of 'Y4'.

3.4.2 Sub-catchment Boundaries

A watershed analysis was run for the Barwon River catchment based on the VicMap DTM from which sub-catchment boundaries were generated. These were reviewed and modified where possible to ensure sub-catchments were generally consistent in size and land use.

3.4.3 Fraction Impervious

A weighted fraction impervious value was calculated for each sub-catchment based on typical values assigned to each land use type. Table 3.3 provides a summary of the typical values adopted. Fraction impervious is a vital component of the hydrological model as it is a key parameter in the process of converting rainfall into runoff. The values adopted were within the industry standard ranges where the resultant weighted values were cross-checked against the aerial photography.

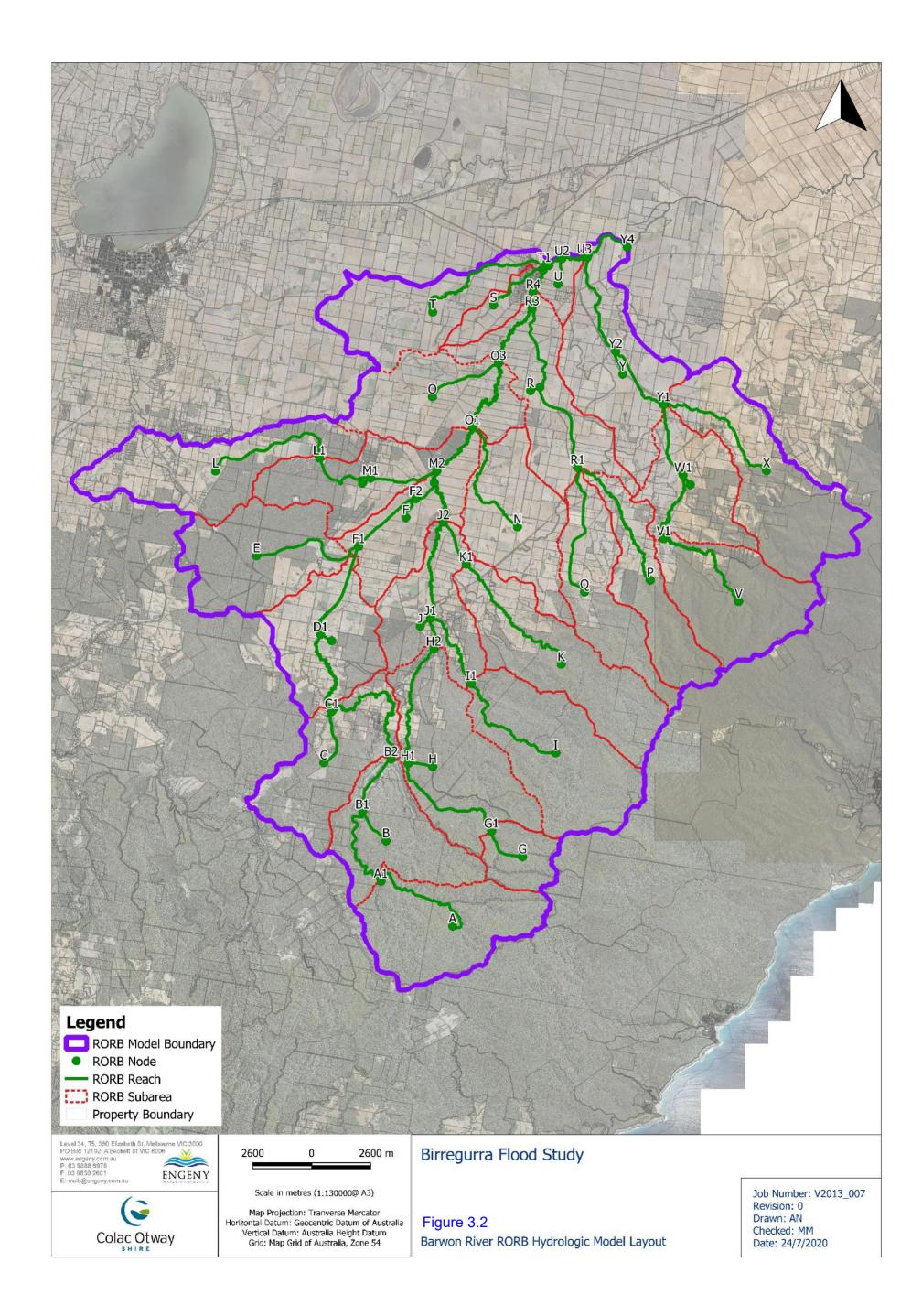
Table 3.3: Typical Fraction Impervious Values for Land Uses

Land-use Type	Fraction Impervious
General Residential / township / Low Density Residential Zone	20 - 75 % (informed by lot sizes and aerial photography)
Farming Zone	0 - 5 %
Commercial / Industrial Zone	80 - 90 %
Public Park and Recreation Zone	10 %
Local roads & car parks	40 - 60 %

3.4.4 Other Modelling Input Considerations

Appendix C provides details of other modelling considerations which informed the inputs during the development of the Barwon River RORB model including:

- Intensity-Frequency-Duration (IFD) Data adopted for base conditions, climate change and PMF scenarios.
- Application of spatial rainfall patterns.
- Application of pre-burst rainfall depths.
- Temporal patterns adopted.
- Areal Reduction Factors (ARFs) calculations and resultant factors.





3.4.5 West Barwon Reservoir

The West Barwon Reservoir is located within the Barwon River catchment upstream of the gauging station at Ricketts Marsh. The reservoir is located at the junction of the West Barwon River and Munday Creek and has a catchment area of approximately 51 km². It serves as a source of drinking water for the greater Geelong region and has a total capacity of approximately 21,500 ML (when full) with a release capacity of up to 300 ML/day (3,500 L/s) via the outlet tower and valve house (*Barwon Water, West Barwon Reservoir Factsheet, 2020*). These controlled outflows are directed into the West Barwon River where some flows are diverted into the Wurdee Boluc Reservoir for storage prior to treatment at the Wurdee Boluc Water Treatment Plant. In addition to these controlled water supply outflows, a minimum of 4ML/day (45 L/s) is released to meet environmental flow requirements.

During rare flood events when the water level within the reservoir exceeds 192.8 m AHD, the reservoir spills via a large concrete weir into the downstream West Barwon River. (*Barwon Water, West Barwon Reservoir Factsheet, 2020*).

During the development of the RORB model, considerations were made to represent the reservoir as a storage within the RORB model. The following information was collated and reviewed to inform the approach and whether inclusion of the storage provided by the reservoir was required:

- Contributing catchment area into West Barwon Reservoir = 51km² (consists of less than 10 % of the catchment area which reaches the gauge at Ricketts Marsh).
- The controlled outflows from the reservoir are minor and focused on water supply or environmental flow requirements with diversion channels in place that are not considered flood conveyance assets.
- The available peak storage levels recorded within West Barwon Reservoir did not correlate to peak flows recorded at the
 downstream Ricketts Marsh gauging station. Table 3.4 summarises the peak flows recorded at the Ricketts Marsh gauge
 and the corresponding peak water level recorded at the reservoir. The data has been sorted from highest recorded flow to
 lowest highlighting no correlation to the recorded storage levels nor engagement of the large concrete weir spillway.

Date	Peak Flow recorded at Barwon River @ Ricketts Marsh Gauge (m ³ /s)	Peak Water level recorded at West Barwon Reservoir (m AHD)
4/11/2007	136.0	185.73
5/06/2012	134.7	191.057
14/09/2016	99.5	188.632
12/08/2010	81.6	184.492
22/07/2011	72.2	190.337
15/08/2004	67.1	190.316
25/08/2003	50.3	184.773
4/02/2005	49.2	188.124
16/09/2017	34.5	188.175
28/08/2010	27.1	188.621
18/07/2006	18.5	181.277
30/08/2009	18.0	182.519
24/07/2016	17.7	183.881
30/06/2002	14.5	192.711

Table 3.4: Analysis of West Barwon Reservoir Storage Levels

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Date	Peak Flow recorded at Barwon River @ Ricketts Marsh Gauge (m ³ /s)	Peak Water level recorded at West Barwon Reservoir (m AHD)
15/08/2010	12.4	185.331
8/11/2007	7.1	186.576
12/02/2012	3.0	185.239
19/05/2013	0.3	189.816

Based on the above findings it was concluded that the reservoir did not significantly contribute to the flows recorded at the gauging station and as such was not included within the developed Barwon River RORB model.

3.4.6 Initial and Continuing Loss Model

The RORB model utilises an initial loss (IL) /continuing loss (CL) model approach, in accordance with the recommendations of ARR 2019. Losses in RORB were assigned based on three surface types:

- Effective Impervious Area (EIA) comprising areas which are effectively impervious and are connected to the drainage system.
- Indirectly Connected Area (ICA) comprising impervious areas which are not directed to the drainage system (e.g. a paved patio or footpath) and pervious areas that interact with impervious areas which are not directly connected (e.g. nature strips and garden areas).
- Rural Area comprising pervious areas which do not interact with impervious areas (e.g. parklands and bushlands)'.

Table 3.5 presents the approach adopted for the EIA / ICA / Rural proportioning of subareas within the catchment based on different land use types and Total Impervious Area (TIA) percentages. These TIA values were obtained from the weighted FI for each subarea calculated and discussed in Section 3.4.3.

Land Use Type	Total Impervious Area (TIA)	EIA proportion	ICA proportion	Rural proportion
Rural / Pervious Urban	0-15 %	Not utilised as rural subareas are assumed to have no direct connections to drainage	Total impervious area	Total pervious area (area – impervious area)
Low Density Residential	15 – 30 %	60 % of total impervious area (ARR 2016, Book 5. Ch. 3 - Section 3.4.2.2.2 quotes 50-70 %)	40 % of total impervious area	Total pervious area (area - impervious area)

Table 3.5: Subarea Land Use Proportioning in Barwon River RORB Model

Based on the proportion summary provided above and the Barwon River catchment characteristics, the majority of the subareas were assigned a rural land use with the exception of the two subareas covering the Birregurra township which were assigned a land use of low density residential.

3.4.7 **Run Parameters**

The Barwon River RORB model including the associated inputs described above were utilised to simulate the design flows for a series of storm events. As previously noted, the model was run using the Monte Carlo approach. The parameters summarised below were used as the starting point prior to the calibration and adoption of final loss values, discussed within Section 3.4.8:

- m = 0.8.
- $k_c = 39.7$ (derived utilising the Pearse et al. (2002) equation).
- Loss values were initially informed by rural losses extracted from the ARR Data Hub and the relevant recommendations provided within ARR 2019 guidelines. Table 3.17 displays the values adopted for each surface type prior to the loss changes undertaken as part of the design calibration discussed in Section 3.4.8.

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Table 3.6: Initial ARR Datahub Barwon River Loss Values

Surface Type	Initial Loss	Continuing Loss
Rural	23 mm	3.4 mm/hr
	(sourced from ARR Data Hub)	(sourced from ARR Data Hub)
EIA	1 mm (ARR 2019 recommendation)	0 mm/hr (ARR 2019 recommendation)
ICA	16.1 mm (70 % of Rural IL – ARR 2019 recommendation)	2.38 mm/hr (ARR 2019 recommends a CL of 2.5 mm/h for South-East Australia, typically ranging between 1-3 mm/h. 70 % of Rural CL was adopted)

3.4.8 Design Calibration to FFA

Several simulation iterations varying the initial loss, continuing loss and k_c values listed above were undertaken to match the modelled peak flows to those presented within the FFA curve for each AEP event.

The Monte Carlo approach was adopted for the calibration of the Barwon River RORB model flows at Ricketts Marsh to the FFA Curve in order to account for the catchment's inherent variability with regards to losses, rainfall depths and temporal patterns.

Table 3.7 provides a summary of the final design calibration parameters utilised to calibrate the Barwon River RORB model to the FFA output. The losses presented were utilised as the mean inputs to the Monte Carlo simulation.

Figure 3.3 displays a comparison between the FFA curves and the resultant design peak flows highlighting the similarities between flows.

Table 3.7: Barwon River Design FFA Calibration Parameters

Parameter	Value
Rural Initial Loss	14.95 mm
Rural Continuing Loss	2.21 mm/hr
ICA Initial Loss	10.47 mm (70 % of Rural IL – ARR 2019 recommendation)
ICA Continuing Loss	1.55 mm/hr (70 % of Rural CL was adopted)
EIA Initial Loss	1 mm (ARR 2019 recommendation)
EIA Continuing Loss	0 mm/hr (ARR 2019 recommendation)
κ _c	35
	0.8

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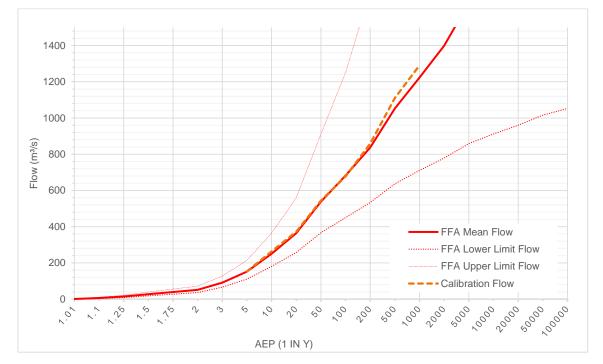


Figure 3.3: Comparison of Barwon River Design Flows to FFA Curve

3.4.9 Validation of Design Parameters

Following the selection of calibration parameters for the Barwon River RORB model, a comparison to industry standard equations, study findings and Regional Flood Frequency Outputs was undertaken. The following subsections provide further details.

Regional kc Equations

The adopted k_c value of 35 was compared to other values which could be derived utilising a series of regional equations. Table 3.8 provides a summary of this comparison and highlights the adopted k_c value lies within acceptable ranges providing confidence that the parameter is adequate.

Table 3.8: Barwon River RORB Model kc Comparison to Regional Equation Values

Source	Formula	kc value
RORB Default (Eqn. 2.5 RORB Manual	$k_c = 2.2 \text{ x } A^{0.5}$	52.6
Victoria (Mean Annual Rainfall<800 mm) – Equation 3.21 from AR&R Book V	$k_c = 0.49 \text{ x } A^{0.65}$	30.4
Victoria (Mean Annual Rainfall>800 mm) – Equation 3.21 from AR&R Book V	$k_c = 2.57 \text{ x } A^{0.45}$	44.8
Victoria Data (Pearse et al, 2002)	$k_c = 1.25 \text{ x } d_{av}$	39.7
Australia Wide Dyer (1994) data (Pearse et al, 2002)	$k_c = 1.14 \text{ x } d_{av}$	36.2
Australia Wide Yu (1989) data (Pearse et al, 2002)	$k_c = 0.96 \text{ x } d_{av}$	30.5
Adopted kc Value		35

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Previous Studies of k_c / d_{av} Relationship

Analysis of the relationship between k_c and the average flow distance (d_{av}) was also undertaken to further validate the adopted k_c value. The calculated Barwon River k_c / d_{av} ratio of 1.1 was compared to previous studies (Pearse et al, 2002; Yu, 1989 and CRCCH) which have determined the expected, low and high confidence limits k_c / d_{av} relationships for RORB hydrological models.

Table 3.9 provides a summary of these previous study values which highlight the calculated k_c / d_{av} ratio for the Barwon River RORB model is within the expected ranges.

Confidence Limits	Victorian (Pearse, 2002)	Yu, 1989	CRCCH
Expected	1.25	0.96	1.14
Low	0.75	0.47	0.61
High	2.07	1.94	2.13

Table 3.9: Summary of k_c / d_{av} Relationships from Previous Studies

Regional Flood Frequency Estimation (RFFE)

Flood frequency curves were generated using the RFFE method available online. The catchment's area, centroid and model outlet coordinates were used as inputs. This analysis was undertaken to validate the peak flows produced with the adopted input parameters. Table 3.10 presents the resultant flood quantiles for a range of AEP events.

AEP (%)	Expected Quantiles (m ³ /s)	5 % Confidence Limit (m³/s)	95 % Confidence Limit (m³/s)
50	144	54.3	380
20	270	108	680
10	378	149	969
5	503	193	1330
2	695	252	1920
1	865	301	2500

Table 3.10: RFFE Flow Estimates for Barwon River at Ricketts Marsh Gauge

By undertaking this analysis, the online RFFE portal also highlighted the correlation between the catchment's area, intensity, shape and recorded flows to a neighbouring catchment recorded by the Gellibrand River at Bunkers Hill Gauge (Station - 235227). This catchment has an area of 311 km² with Table 3.11 presenting the associated flood frequency curves.

Table 3.11:	RFFE Flow	Estimates for	Gellibrand River a	t Bunkers Hill Gauge

AEP (%)	Expected Quantiles (m ³ /s)	5 % Confidence Limit (m³/s)	95 % Confidence Limit (m ³ /s)
50	51	41	64
20	101	78	133
10	147	109	212
5	202	143	325

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AEP (%)	Expected Quantiles (m³/s)	5 % Confidence Limit (m ³ /s)	95 % Confidence Limit (m³/s)
2	294	189	557
1	380	224	817

Utilising a simplified factoring approach based on the Barwon River catchment area (572 km²) and the neighbouring Gellibrand River catchment area (311 km²), factored flows were obtained for each AEP event as shown within Table 3.12 below. As displayed, the marginal differences between these flows provide additional certainty that the adopted parameters produce peak flows within acceptable ranges even when compared to neighbouring catchments with similar characteristics.

AEP (%)	Calibrated Barwon River Flows (m³/s)	Barwon River @ Ricketts Marsh FFA Expected Quantile (m³/s)	Barwon River RFFE flows (m³/s)	Factored Neighboring Catchment RFFE flows (m ³ /s)
20	153	151.7	270	186
10	263	250.1	378	270
5	373	364.7	503	372
2	544	537.8	695	541
1	677	682.4	865	700

Table 3.12: Calibrated Barwon River Flows Comparison to RFFE Estimates

3.4.10 September 2016 Event Calibration

Calibration of the RORB model was undertaken for the September 2016 event using the data available. The Barwon River catchment did not have a pluviographic station that contained data suitable for the exact representation of the September 2016 event. A rainfall station at the Barwon River at Ricketts Marsh gauge station (233224) was identified however following a review was considered erroneous when compared to the daily rainfall totals and was not utilised.

As such some assumptions were made in relation to the storm's spatial distribution and temporal pattern. The following provides details on these assumptions and the associated basis:

'The Weather Chaser' website was accessed to gain an understanding of the storm's duration, spatial variation and intensity
across the Barwon River catchment. The website provides radar images where Figure 3.4 displays a still image taken during
the September 2016 event. The image confirms the relatively uniform distribution and intensity of rainfall across the study
catchment. Based on this, it was considered appropriate to assume a uniform rainfall depth for each modelled subarea. This
was further justified by the review of available daily rainfall totals recorded at gauges within the Barwon River catchment.

Table 3.13 provides the available recorded depths for the gauges within the catchment sourced from the BoM.

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Figure 3.4: 'The Weather Chaser' website Radar Images

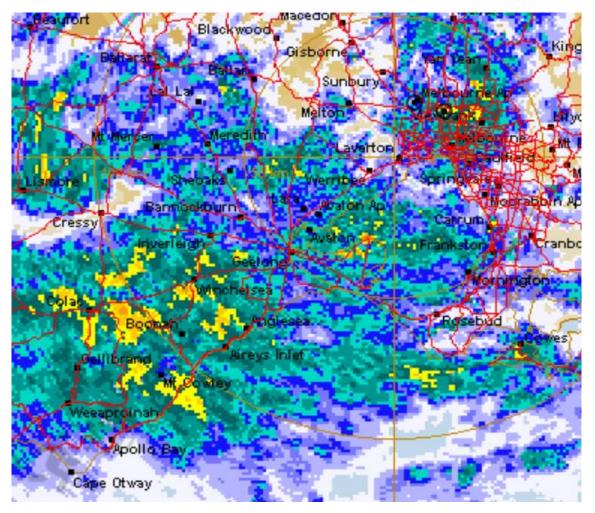


Table 3.13: September 2016 Event Daily Rainfall Depths within Barwon River Catchment

Rainfall Station Gauge Name	Rainfall Station Gauge ID	Recorded Rainfall Depth on 14th September 2016
Birregurra (Post Office)	90008	43 mm
Pennyroyal Creek	90061	31.4 mm
Barwon Downs (Gerangamete)	90189	42.2 mm
Forrest State Forest	90040	37.2 mm
Benwerrin	90188	53.4 mm
Lorne (Mount Cowley)	90185	65.4 mm
West Barwon River @ West Barwon Dam	233801	41.2 mm
Lake Colac	234801	47.8 mm

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- Due to the observed relative uniform rainfall which fell across the catchment and wider area including the Colac township, the rainfall data recorded at the Lake Colac station in Colac station (234801) was utilised. A total rainfall depth of 47.8 mm which fell between the 13th September to the 14th September 2016 was applied to the catchment. The Lake Colac pluviographic data was considered suitable as it more closely related to the total daily rainfall depth recorded within the township at the Birregurra Post Office Station (90008) of 43 mm. This contrasts to the pluviographic data at the Barwon River at Ricketts Marsh station which recorded a total rainfall depth of 170 mm which was considered erroneous and not utilised.
- The temporal pattern of the September 2016 event was defined by the rainfall data extracted from the Lake Colac station in Colac (234801). Figure 3.6 displays the rainfall distribution from the 8th of September to the 15th September 2016 noting that the September 2016 calibration event focused on the temporal pattern between the 13th September to the 15th September 2016.

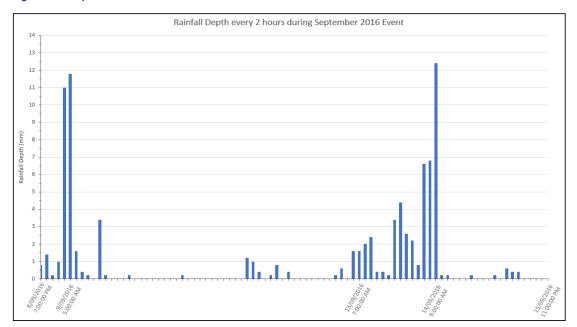


Figure 3.5: September 2016 Event Rainfall Distribution

Following the application of these assumptions into the RORB model, the parameters presented within Table 3.14 were determined. These parameters achieve the required calibration between the modelled and gauged peak September 2016 flow. As shown the initial loss was not modified from the FFA calibration value as an analysis of the September 2016 temporal pattern indicated it did not have a bearing on the peak flow due to the pattern's rear loaded distribution. In contrast the lowering of the continuing loss had a greater influence.

Table 3.14: September 2016 Barwon River Calibration Parameters

Parameter	Value
Rural Initial Loss	14.95 mm
Rural Continuing Loss	1.76 mm/hr
ICA Initial Loss	10.47 mm (70 % of Rural IL – ARR 2019 recommendation)
ICA Continuing Loss	1.23 mm/hr (70 % of Rural CL was adopted)
EIA Initial Loss	1 mm (ARR 2019 recommendation)

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Parameter	Value
EIA Continuing Loss	0 mm/hr (ARR 2019 recommendation)
k _c	35
m	0.8

Figure 3.6 displays the comparison between the modelled and gauged September 2016 hydrograph. As shown, the parameters adopted have resulted in a match of peak flows and peak durations however differences between the hydrograph volume were noted.

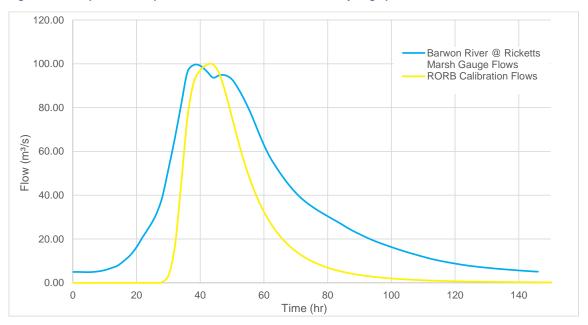


Figure 3.6: Comparison of September 2016 Recorded and Modelled Hydrograph

As the Barwon River is not a focus of this study, this difference was considered acceptable particularly when taking into account the following factors:

- Baseflow as prescribed within ARR 2019, baseflow was not extracted from the recorded gauge hydrograph as its contribution was estimated to be less than 5 %. However, this flow would still contribute to the additional volume recorded at the gauge and reduce the difference of volumes between the rising and falling limbs of the gauged September 2016 hydrograph.
- Limited rainfall data although efforts have been made to utilise appropriate rainfall inputs with the information available, pluviographic data was not available for the September 2016 event within the Atkin Creek and Unnamed Tributary catchments nor was there pluviographic data within the Barwon River catchment that could be reliably used for this study (pluviographic data at the Ricketts Marsh gauge was noted as erroneous and could not be utilised for the September 2016 Event). Rainfall data from the 8th of September was also extracted from the Lake Colac Station and represented as an extended storm within the RORB model, however similar hydrograph volume differences were also noted.
- Spatial variation for the September 2016 event spatial variation was not accounted for in the Barwon River RORB model. The fact that the Barwon River RORB model produced a set of loss parameters which resulted in a good match to the majority of survey marks across the Birregurra township meant that flooding within the township was not sensitive to spatial variation within the Barwon River catchment. This is logical considering the large difference in catchment sizes and resultant times of concentration.



- Limited data for other rainfall events (e.g. survey marks) within the study catchment results in challenges with the calibration / verification of model parameters.
- The loss parameters adopted for the Barwon River September 2016 calibration event do not inform the design loss parameters which will be used to define the flood overlays for the Birregurra township. The FFA Calibration parameters have been used to define the Atkin Creek and Unnamed Tributary design flood event modelling.
- The k_c parameter adopted for the Barwon River has been validated against regional equations and studies with the resultant flows validated against the neighbouring Gellibrand River at Bunkers Hill catchment RFFE analysis. These comparisons have indicated that it is appropriate for adoption and can be used to derive the k_c values for the Atkin Creek and Unnamed Tributary catchments.
- Comparisons of the modelled flood levels to surveyed marks for the September 2016 event within the township confirms the
 parameter's suitability with flood levels at 8 out of the 9 survey marks within an acceptable range for event calibration. This
 is described further in Section 4.2.2 along with a comparison of photos and anecdotal evidence providing further confidence
 that the hydraulic modelling results for the September 2016 event are a good match to those reported by residents across
 the township.
- Coincidence of flows (refer to Section 4.3.7) if the peak flow for the Barwon River at Birregurra from the critical 24 hour duration event (considered to be the township's highest tailwater boundary condition) was to coincide with the peak flow from the waterways within the township for their critical duration (12 hours), the difference in flood levels would be less than 30 mm when compared to a scenario whereby the 12 hour rainfall event fell consistently across the Barwon River, Atkin Creek and Unnamed Tributary catchments. The modelling undertaken also indicates this flood depth difference is limited to the downstream end of the township. This confirms that even though the difference in hydrograph volumes is significant (4000 ML) the resultant influence on flood levels and tailwater levels for the Birregurra township was considered minor.

3.5 ATKIN CREEK AND UNNAMED TRIBUTARY MODEL DEVELOPMENT

3.5.1 Catchment Boundary

The boundary of the Atkin Creek and Unnamed Tributary catchments was defined utilising Council provided LiDAR data and the corresponding 1 metre contours. Figure 3.7 displays the overall catchment area of approximately 30 km² and structure of the RORB model.

3.5.2 Sub-catchment Boundaries

A watershed analysis was run for the Atkin Creek and Unnamed Tributary catchment based on the Council provided LiDAR data from which sub-catchment boundaries were generated. These were further reviewed within the township in particular to ensure sub-catchments considered the key overland flow paths in addition to Council's drainage system and likely legal points of discharge. The sub-catchments were also modified to ensure consistency in areas and land use.

3.5.3 Fraction Impervious

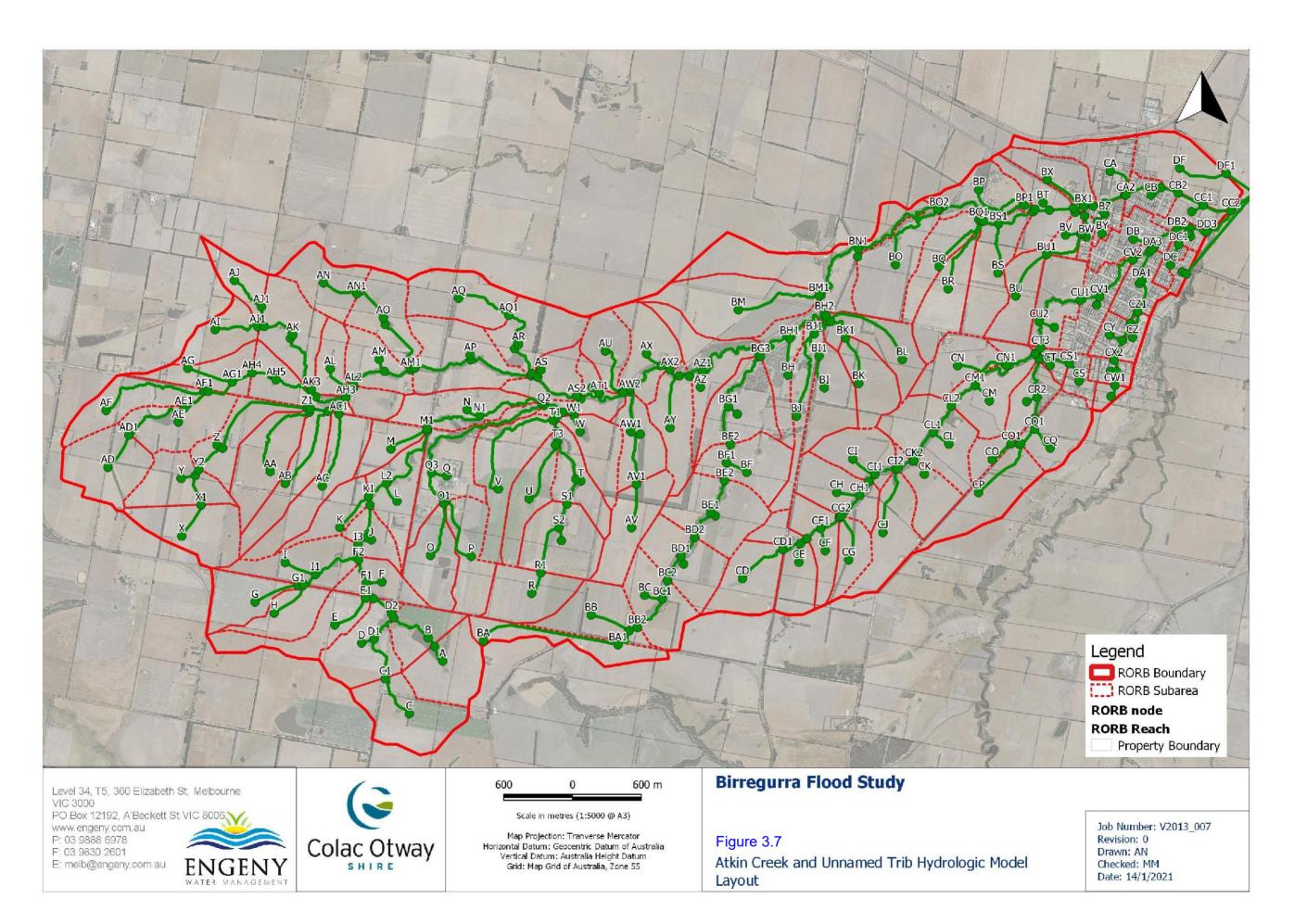
A weighted fraction impervious value was calculated for each sub-catchment based on typical values assigned to each land use type. Table 3.3 presented above includes the typical fraction impervious values which were adopted for the key land uses. These values adopted were within the industry standard ranges where the resultant weighted values were cross-checked against aerial photography.

3.5.4 Other Modelling Input Considerations

Appendix D provides details of other modelling considerations which informed the inputs during the development of the Atkin Creek and Unnamed Tributary RORB model including:

- Intensity-Frequency-Duration (IFD) Data adopted for base conditions, climate change and PMF scenarios.
- Application of spatial rainfall patterns.
- Application of initial loss duration factors to account for pre-burst rainfall depths.
- Temporal patterns adopted.
- Areal Reduction Factors (ARFs) calculations and resultant factors.

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3.5.5 Initial and Continuing Loss Model

The Atkin Creek and Unnamed Tributary RORB model utilised the same initial loss (IL) /continuing loss (CL) model approach discussed in Section 3.4.6 with the proportioning of the three surface types; EIA, ICA and Rural areas.

Table 3.15 presents the approach adopted for the subareas within the Atkin Creek and Unnamed Tributary RORB model based on the different land use types and Total Impervious Area (TIA) percentages. These TIA values were obtained from the weighted FI for each subarea calculated and discussed in Section 3.5.3.

Land Use Type	Total Impervious Area (TIA)	EIA proportion	ICA proportion	Rural proportion
Rural / Pervious Urban	0-15 %	Not utilized as rural subareas are assumed to have no direct connections to drainage	Total impervious area	Total pervious area (area – impervious area)
Low Density Residential	15 – 30 %	60 % of total impervious area (ARR 2016, Book 5. Ch. 3 - Section 3.4.2.2.2 quotes 50-70 %)	40 % of total impervious area	Total pervious area (area – impervious area)
General Residential / township	40- 75 %	60 % of total impervious area (ARR 2016, Book 5. Ch. 3 - Section 3.4.2.2.2 quotes 50-70 %)	Remaining area (40 % of total impervious area and total pervious area)	Not utilized as residential subareas are assumed to either have direct or indirect connections to drainage.

Table 3.15: Subarea Land Use Proportioning for Atkin Creek and Unnamed Tributary RORB Model

Based on the proportion summary provided above and the Atkin Creek and Unnamed Tributary catchment characteristics, the majority of the subareas were assigned a land use of either rural or low density residential. Subareas located within the Birregurra township which contained drainage or well-defined roadside swales were categorised as a General Residential / township land use to account for the greater portion of directly connected impervious areas.

The resultant directly and indirectly connected impervious areas were applied to each subarea within the RORB interface. In order to more accurately account for the application of losses for each surface type within the township, the RORB model was split to represent the EIA, ICA and Rural components separately. This approach was adopted for the ensemble runs only as it was focused on more accurately representing the flooding within the township area. RORB was utilised to generate the separate EIA, ICA, and Rural rainfall excess hydrographs for input to the ensemble simulations. As the Monte-Carlo simulations focused on more accurately representing the flooding associated to the waterways, a single set of rainfall excess hydrographs were generated. The averaging of losses across the township was acknowledged for the Monte-Carlo simulations. However, as the ensemble simulations were focused on representing flooding outside of the waterways, it was considered acceptable.

3.5.6 Design Run Parameters

The parameters summarised below were utilised for the design runs:

- m = 0.8.
- k_c values were derived from the Barwon River RORB model, using the k_c/ d_{av} ratio), and are shown in Table 3.16 below. As displayed, different k_c values were adopted to account for the different characteristics of the catchments reflected by the distance average parameter.

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Table 3.16: Atkin Creek and Unnamed Tributary RORB Model kc Values

Catchment	Distance Average (d _{av})	Adopted k _e
Atkin Creek	8.93 km	9.85
Unnamed Tributary	3.65 km	4.02

• Loss values informed by the Barwon River RORB model calibration to the FFA curve and recommendations within ARR 2019 guidelines. Table 3.17 displays the values adopted for each surface type.

Table 3.17: Atkin Creek and Unnamed Tributary Design RORB Model Loss Values

Surface Type	Initial Loss	Continuing Loss
Rural	14.95 mm (from Barwon River RORB model FFA calibration)	2.21 mm/hr (from Barwon River RORB model FFA calibration)
EIA	1 mm (ARR 2019 recommendation)	0 mm/hr (ARR 2019 recommendation)
ICA	10.47 mm (70 % of Rural IL – ARR 2019 recommendation)	1.55 mm/hr (ARR 2019 recommends a CL of 2.5 mm/h for South-East Australia, typically ranging between 1-3 mm/h. 70 % of Rural CL was adopted)

3.5.7 Validation of Design Parameters

Regional kc Equations

The adopted k_c values for the Atkin Creek and Unnamed Tributary catchment was compared to other values which could be derived utilising a series of regional equations.

Table 3.18 provides a summary of this comparison and highlights the adopted k_c values generally lie within acceptable ranges except for the Victorian mean annual rainfall less than 800 mm equation. This overall similarity provides confidence that the parameters adopted are appropriate.

Table 3.18: Atkin Creek and Unnamed Tributary RORB Model kc Comparison to Regional Equation Values

Source	Formula	Atkin Creek k₀ value	Unnamed Tributary k _c value
RORB Default (Eqn. 2.5 RORB Manual	$k_c = 2.2 \times A^{0.5}$	10.5	5.1
Victoria (Mean Annual Rainfall < 800 mm) – Equation 3.21 from AR&R Book V	$k_{c} = 0.49 \times A^{0.65}$	3.7	1.5
Victoria (Mean Annual Rainfall > 800 mm) – Equation 3.21 from AR&R Book V	$k_c = 2.57 \text{ x } A^{0.45}$	10.5	5.5
Victoria Data (Pearse et al, 2002)	k _c = 1.25 x dav	11.2	4.6
Australia Wide Dyer (1994) data (Pearse et al, 2002)	k _c = 1.14 x dav	10.2	4.2
Australia Wide Yu (1989) data (Pearse et al, 2002)	k _c = 0.96 x dav	8.6	3.5
Adopted k _c Value		9.85	4.02

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Regional Flood Frequency Estimation (RFFE)

Flood frequency curves were generated using the RFFE method available online to validate the Atkin Creek and Unnamed Tributary inflows estimated within the township mid-way along the watercourses at location CA2 and CV2. The Atkin Creek and Unnamed Tributary catchment area, centroid and model outlet coordinates were used as inputs. Table 3.19 and Table 3.20 provides a comparison of the resultant RFFE flood quantiles and modelled design flows for the range of AEP events.

As shown, the Atkin Creek design flows are within a marginal range to the expected RFFE Quantiles. In contrast however, the RFFE outputs obtained for the Unnamed Tributary resulted in flood quantiles which were consistently lower than the modelled design flows. This is likely to be as a result of the catchment's characteristics based on the area, centroid coordinates and model outlet coordinates which as highlighted by the RFFE online interface 'has an unusual shape' noting that the 'results have lower accuracy and may not be directly applicable in practice'.

Table 3.19: RFFE Comparison to Design Flow Estimates for Atkin Creek within township

AEP (%)	Expected Quantiles (m ³ /s)	5 % Confidence Limit (m³/s)	95 % Confidence Limit (m³/s)	Design RORB flow (m ³ /s)
50	6.3	2.3	17.0	-
20	11.8	4.6	30.5	10.8
10	16.5	6.4	43.2	15.3
5	21.9	8.3	59.0	19.3
2	30.4	10.9	85.1	28.6
1	37.8	13.1	110.0	36.4

Table 3.20: RFFE Comparison to Design Flow Estimates for Unnamed Tributary within township

AEP (%)	Expected Quantiles (m³/s)	5 % Confidence Limit (m³/s)	95 % Confidence Limit (m³/s)	Design RORB flow (m³/s)
50	1.5	0.5	4.1	-
20	2.8	1.1	7.3	6.9
10	3.9	1.5	10.3	9.6
5	5.2	2.0	14.1	13.1
2	7.2	2.6	20.3	18.1
1	9.0	3.1	26.2	22.2

Based on the nearby gauged catchments utilised to inform the RFFE outputs, the catchment draining to the Atkin Creek West Branch at Wyelangta gauge (235205) was identified as having comparable catchment characteristics including a similar catchment area of 3 km² and rainfall intensities. Table 3.21 provides this neighbouring catchment's RFFE output in addition to a factored expected quantile informed by the slightly greater area of the Unnamed Tributary catchment. A comparison of these flows to the design RORB flows provides confidence that the design parameters adopted are appropriate.

Table 3.21: Nearby	Catchment's RFFE	Comparison to	Design Flow	Estimates for	Unnamed Tributary
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AEP (%)	Expected Quantiles (m ³ /s)	5 % Confidence Limit (m³/s)	95 % Confidence Limit (m³/s)	Factored Expected Quantiles (m ³ /s)	Design RORB flow (m³/s)
50.0	1.8	1.5	2.1	2.7	-
20.0	3.3	2.6	4.4	5.1	6.9

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AEP (%)	Expected Quantiles (m ³ /s)	5 % Confidence Limit (m³/s)	95 % Confidence Limit (m ³ /s)	Factored Expected Quantiles (m ³ /s)	Design RORB flow (m³/s)
10.0	4.9	3.5	7.6	7.6	9.6
5.0	7.2	4.7	12.7	11.1	13.1
2.0	11.6	6.7	24.6	17.8	18.1
1.0	16.4	8.6	40.8	25.2	22.2

3.5.8 September 2016 Event Validation

A uniform rainfall depth of 47.8 mm in addition to the corresponding temporal pattern as described in Section 3.4.10 was applied to the Atkin Creek and Unnamed Tributary RORB model. The routed local watercourse inflows and rainfall excess hydrographs representing the September 2016 event were generated as outputs.

These outputs were applied to the hydraulic TUFLOW model described in Section 4.4 where iterative modifications to the losses were undertaken to calibrate the modelled flood levels to the surveyed flood levels.

Similar to the September 2016 event calibration undertaken for the Barwon River catchment, due to the storm's rear loaded rainfall distribution, the initial loss did not have a significant impact on the generated peak flows. As such the continuing loss was the only adjusted parameter. Table 3.17 summarises the loss values applied to represent the Atkin Creek and Unnamed Tributary September 2016 event RORB model.

As presented, the rural continuing loss value was reduced to 0.25 mm/hr which could be considered low particularly when compared to the rural continuing loss adopted for the Barwon River calibration of 1.76 mm /hr. However, this was considered appropriate given:

- The difference in antecedent catchment conditions particularly between the larger Barwon River catchment and the local Atkin Creek & Unnamed Tributary catchments.
- The continuing loss value of 0.25 mm/hr results in a close match between the modelled and surveyed flood levels discussed in Section 4.4.
- The continuing loss value of 0.25 mm/hr are within the ranges utilised for previous flood studies including the neighbouring Deans Creek and Barongarook Creek calibration events.

Table 3.22: Atkin Creek and Unnamed Tributary September 2016 Event RORB Model Loss Values

Surface Type	Initial Loss	Continuing Loss
Rural	14.95 mm (from Barwon River RORB model FFA calibration)	0.25 mm/hr (from Barwon River RORB model FFA calibration)
EIA	1 mm (ARR 2019 recommendation)	0 mm/hr (ARR 2019 recommendation)
ICA	10.47 mm (70 % of Rural IL – ARR 2019 recommendation)	0.18 mm/hr (ARR 2019 recommends a CL of 2.5 mm/h for South-East Australia, typically ranging between 1-3 mm/h. 70 % of Rural CL was adopted)



3.6 SUMMARY OF RORB DESIGN FLOWS

Table 3.23 provides a summary of the design flows generated from the RORB model and the associated critical duration. These formed the inflows applied to the hydraulic TUFLOW model. The Barwon River flow at Node Location 'R4' was applied directly as the inflow hydrograph to the TUFLOW model. The separate upstream hydrographs used to produce the combined flows presented at location CA2 and CV2 were extracted and applied to the hydraulic TUFLOW model.

AEP (%)	Atkin Creek flow	at CA2	Unnamed Tributa	ary flow at CV2	Barwon River flo	w at R4
	Flow (m³/s)	Critical Duration	Flow (m ³ /s)	Critical Duration	Flow (m ³ /s)	Critical Duration
39.35	5.9	12hr	3.9	6hr	76.0	12hr
20	10.8	12hr	6.9	3hr	145.6	12hr
10	15.3	12hr	9.6	3hr	256.9	12hr
5	19.3	12hr	13.1	2hr	373.9	24hr
2	28.6	12hr	18.1	2hr	512.3	12hr
1	36.4	12hr	22.2	2hr	602.1	24hr

Table 3.23: Atkin Creek and Unnamed Tributary Design RORB Flows

3.7 SUMMARY OF RORB SEPTEMBER 2016 EVENT FLOWS

Table 3.24 provides a summary of the September 2016 calibration flows generated from the RORB model and utilised to form the inflows applied to the hydraulic TUFLOW model. Figure 3.8 displays the corresponding hydrographs and highlights the differences in each catchment's response to generate the peak flow. When the Atkin Creek flows and the Unnamed Tributary flows are compared to the previous outlined design flows, the September 2016 event which affected the Birregurra township is estimated to be between a 10 % AEP event and a 20 % AEP event.

Table 3.24: Atkin Creek and Unnamed Tributary September 2016 Event RORB Flows

Event	Atkin Creek flow at CA2	Unnamed Tributary flow at CV2	Barwon River flow at R4
September 2016	15.9 m³/s	5.9 m³/s	84.3 m3/s

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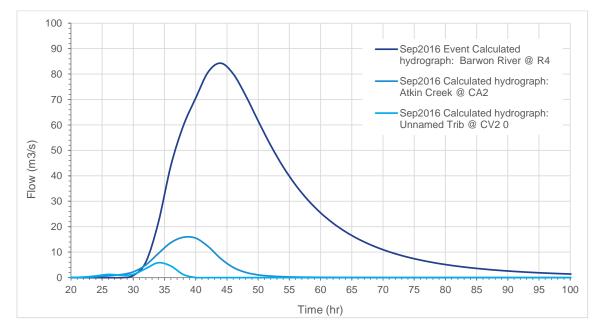


Figure 3.8: Comparison of September 2016 Event Hydrographs

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4 HYDRAULIC MODELLING

4.1 OVERVIEW

Combined one-dimensional (1D) and two-dimensional (2D) dynamic hydraulic modelling of the study area was undertaken using TUFLOW version 2020-01-AA-iDP-w64 to estimate flood water levels, extents, flows and other hydraulic variables for a range of scenarios and design events. The model has been run using the TUFLOW HPC (Heavily Parallelised Compute) scheme. Although HPC does not typically require the use of double precision, in this instance due to the terrain elevations being above 100 m AHD, it was required to ensure sufficient decimal places were available for the correct computation of flows and velocities within the 1D domain. A sensitivity run utilising the single precision solver highlighted issues with the 1D mass error particularly during the model's start-up phase which confirmed the requirement to use the alternative double precision server for all flood modelling simulations.

A single hydraulic model was constructed using a 3-metre cell size to represent urban areas and the associated Council drainage networks. Urban areas include and are limited to the Birregurra township as defined by Council's brief.

4.2 METHODOLOGY

The following steps outline the tasks undertaken to develop the TUFLOW model for the study area and to obtain the flood mapping outputs:

- Generate Digital Elevation Model (DEM).
- Create inflow boundary conditions in order to reference the relevant inflow hydrographs generated in RORB including both rainfall excess hydrographs and routed inflow hydrographs.
- Input surface roughness (materials layer) based on given parcel's existing land use defined by the obtained aerial photographs and standard industry values.
- Input and verify data for the 1-D network (pits and pipes).
- Improve the representation of waterways / open channels / drains where required (utilising z-shapes and the obtained survey data).
- Set 1-D and 2-D boundary conditions to pipes / pits and overland flows where required.
- Undertake a blockage assessment as detailed within the ARR 2019 guidelines to assess the potential for blockage and the associated flood impact.
- Run the TUFLOW model for the September 2016 flood event where the generated inflow hydrographs are applied and
 undertake iterative modelling to calibrate / validate the modelled flood levels to the surveyed flood marks with modifications
 to hydrology loss values (influencing the magnitude of waterway inflows), roughness values along Atkin Creek and the
 Unnamed Tributary and the refinement of waterway invert levels using the commissioned survey data.
- Run the TUFLOW model for the 0.2 %, 0.5 %, 1 %, 2 %, 5 %, 10 %, 20 %, 39.35 % AEP design events including both the Monte Carlo inflows and the ensemble inflows. This included:
 - Monte Carlo simulations representing the critical durations for the waterway inflows
 - Ensemble simulations representing flooding within the local township for the 10 minute to 2 hour storm durations
- Run the TUFLOW model for the PMF scenario.
- Run the TUFLOW model for the 1 % and 10 % AEP Climate Change Conditions.
- Prepare relevant outputs including flood depth, extents, velocities layout plans in addition to GIS deliverables compliant with the Flood Spatial Data Specifications requirements.



4.3 MODEL DEVELOPMENT

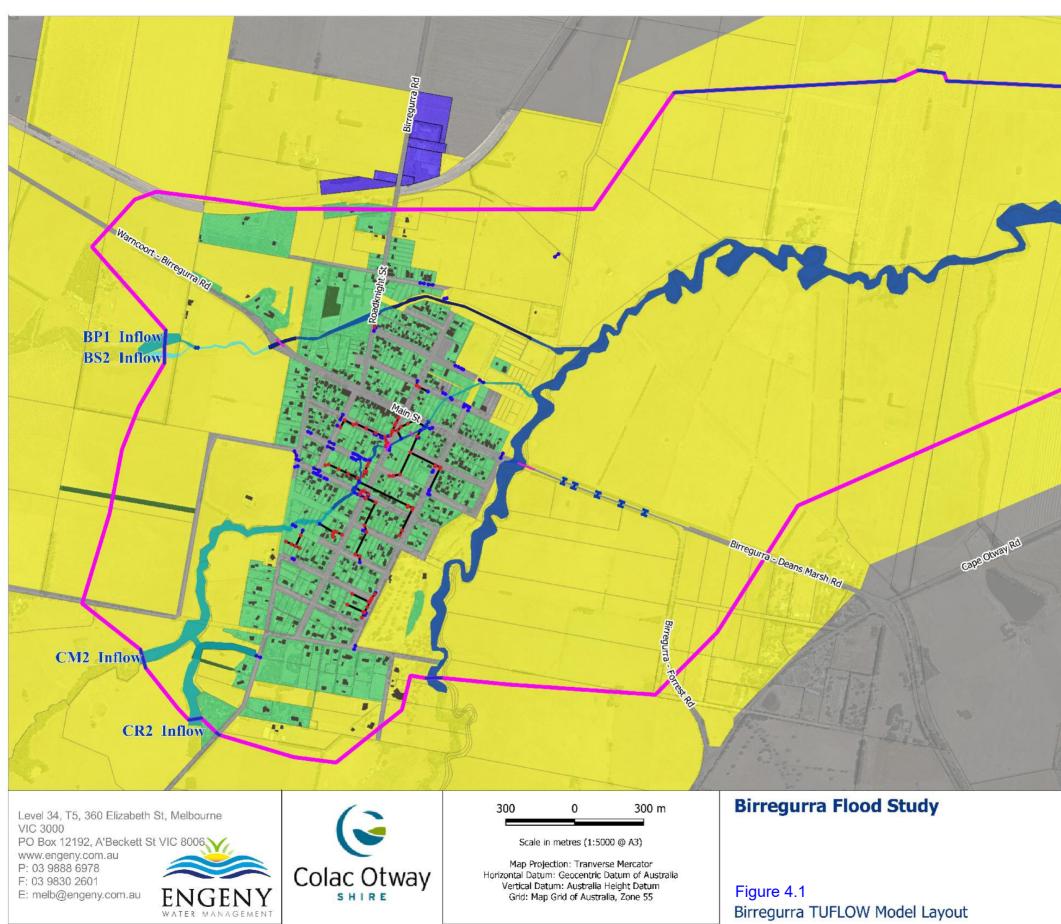
4.3.1 Model Extent

The extent of the hydraulic model is based on enabling the key topographical features of the study area (such as waterways and open drains) to be modelled focussing on the Birregurra Town. It was not necessary to model the entire hydrologic catchment. Use of inflow boundaries from the RORB models developed for the Barwon River and Atkin Creek and Unnamed Tributary catchments discussed in Section 3 assisted to limit the required extent of the TUFLOW model.

The extent of the TUFLOW hydraulic model is sufficient to ensure that runoff through Birregurra township and surrounds is accurately modelled, as well as being able to identify key flooding hotspots.

Figure 4.1 shows the extent of the hydraulic model and depicts some of the key inputs to the model which are described further in the following sections of this report.

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Attachment 10.6.4 Draft Birregurra Flood Study Report

Legend TUFLOW Model Boundary Drainage Pipe Drainage Pit 2D Boundary Condition Point 2D Boundary Condition Line 2D Layerd Flow Constricion Property Boundary Building Footprint	No. of the second secon
Mannings 'n' Rougness (refer to Table 4.1) 0.03 0.035 0.06 0.07 0.08 0.09 0.12 0.09 0.2 0.35 0.5	

Job Number: V2013_007 Revision: 0 Drawn: AN Checked: MM Date: 23/11/2020



4.3.2 Topography

A model resolution (grid size) of three metres has been used, resulting in the definition of elevation every 1.5 horizontal metres in the model. This grid size is in accordance with recommendations in industry guidelines and allows for key catchment features such as waterways, open channels, and roads to be defined in the model.

The hydraulic model uses a combination of LiDAR and Digital Terrain Model data as detailed within Section 2.4 to assign elevations throughout the flood model. Where appropriate, survey data was used to address uncertainties in the Atkin Creek and Unnamed Tributary LiDAR data. Z-shapes were used to represent waterway / open channel sections and to improve the overall representation of the Atkin Creek and Unnamed Tributary waterways. Atkin Creek downstream of Anderson Street was represented with a DEM that was created from the cross-sections surveyed at 100 metre intervals. Due to the width of the channel in this area, a Sub-grid Sampling (SGS) approach was also adopted within the TUFLOW model to allow for a finer resolution of the DEM at a grid size of 1 metre rather than 3 metres.

4.3.3 Drainage Assets

All assets identified in Council's Geographic Information System (GIS) database have been included in the model and considerable effort has gone into the capture of additional drainage assets missing from the GIS database so that they can be included in the model.

Particular emphasis was placed on accurately modelling the drainage assets that convey significant overland flow paths under roads, driveways and into waterways and open channels. A large number of those assets were inspected and measured during the site visit conducted by Engeny and/ or by the engaged surveyors.

The hydraulic model requires invert levels at upstream and downstream ends of all pipes and culverts. This information is not available for most pipes within Council's GIS database. Invert levels were estimated by adopting the following formula:

• Invert level = Ground level RL - 600 mm (pipe cover) - pipe diameter.

The estimated invert levels were then checked to ensure that they were connected appropriately with the inverts of upstream and downstream pipes and adjusted where necessary to produce a downward grade.

4.3.4 Waterways and Open Drains

The study area includes three main waterways: Atkin Creek; Unnamed Tributary and Barwon River that run through / or adjacent to the Birregurra township. The available terrain data consisting of both LiDAR and survey data provides a satisfactory definition of these watercourses and open drains and as such it's representation within the 2-D domain was deemed acceptable. Culverts and bridge structures have been included in the model, with the culverts modelled as pipes in the 1-D domain and bridges modelled as layered flow constrictions in the 2-D domain.

Survey data (as discussed in Section 2.4) was captured to address uncertainties in the Atkin Creek and Unnamed Tributary LiDAR data. This data was supplied in the form of cross sections representing waterway invert levels and bridge / overpass structures. Particular emphasis was put on accurately representing cross-sections at the key drainage structures along Atkin Creek and Unnamed Tributary. Z-shapes were used in TUFLOW to represent channel invert levels as shown in the survey plans and to address inaccuracies with the LiDAR data at drainage structure surface levels and densely vegetated areas where appropriate. Figure 4.2 displays the location of the model's terrain modifications including:

- The yellow highlighted areas which were informed by the survey obtained at the upstream and downstream end of key
 drainage structures along the waterways.
- The green highlighted areas which consisted of a series of interpolation z-shapes from the known surveyed locations ensuring the waterway's slope (defined by the LiDAR data) was maintained.

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Poperty Boundary Survey Z-Shape Interpolation Z-shape

Figure 4.2: Location of Model's Terrain Modifications Informed by Survey Cross-Sections

As shown in Figure 4.2 above, additional cross-sectional survey data captured along Atkin Creek downstream of Anderson Street was also provided (orange lines). Engeny utilised this data to generate a DEM in 12d which was integrated into the hydraulic model to further improve the model accuracy and representation of the Atkin Creek waterway upstream of its confluence with the Barwon River.

Figure 4.3, Figure 4.4, Figure 4.5, Figure 4.6 and Figure 4.7 presents a series of cross-sections comparing the surveyed data and the LiDAR data along Atkin Creek downstream of Anderson Street in addition to other locations upstream and downstream of key drainage structures. These highlight the improved representation of the waterway's invert level when compared to the LiDAR data elevations which were typically higher due to overgrown vegetation and / or ponded water.



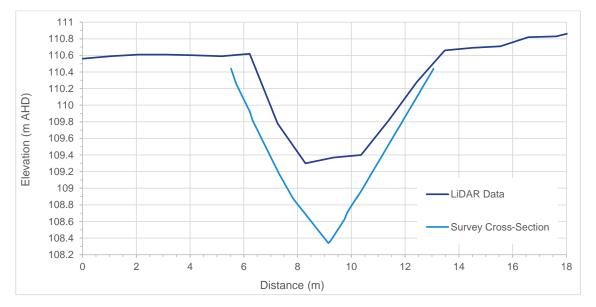
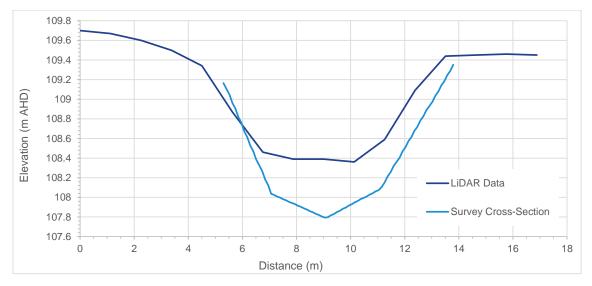


Figure 4.3: Comparison of Survey Cross-Sections to LiDAR data for Atkin Creek at Location B2 Atkin





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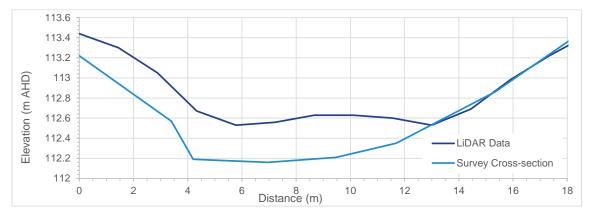
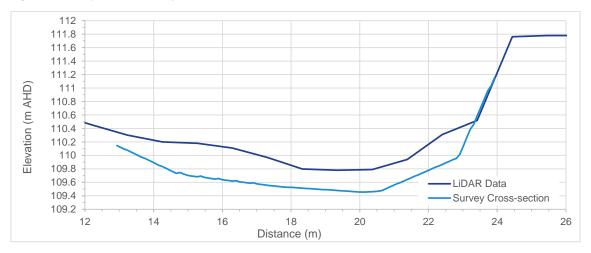
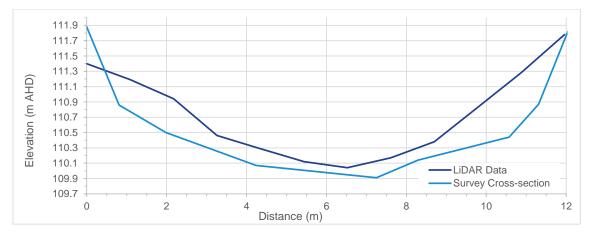


Figure 4.5: Comparison of Survey Cross-Sections to LiDAR data for Atkin Creek at Location 1

Figure 4.6: Comparison of Survey Cross-Sections to LiDAR data for Atkin Creek at Location 2









4.3.5 Surface Roughness

The hydraulic model includes a land use (materials) layer that reflects the surface roughness (Manning's 'n') throughout the catchment. The surface roughness defines how much resistance there is to runoff / overland flow passing over different land use types. For instance, high surface roughness values are found in residential properties due to the presence of buildings, fences and other structures that impede the flow of water, while flow through a paddock will have a lower surface roughness value.

Table 4.1 summarises the roughness values applied to the hydraulic model. These values are based on industry guidelines and were verified during site visits and from aerial photographs. The outcomes of the September 2016 Validation run were also utilised to inform the roughness values particularly along the Atkin Creek and the Unnamed Tributary where higher roughness values were adopted after iterative modelling to appropriately represent the areas of thick / high density vegetation in order to ensure the modelled flood levels account for the resistance. The results of the sensitivity analysis undertaken for the September 2016 event and influence of thick vegetation on the flood levels is discussed and included within Section 4.3.9.

Table 4.1: Hydraulic Model Surface Roughness Values

Land Use	Manning's n
Low density residential property	0.20
Remainder of parcel (residential)	0.10
Commercial or industrial / Building footprints	0.50
Parks, Recreational, Public Conservation and Resource Zone	0.035
Waterway / Parks - grass, some weeds	0.035
Waterway / Parks - minor density vegetation	0.06
Waterway / Parks - medium density vegetation	0.09
Waterway / Parks – high density vegetation	0.12
Car parks and roads (RDZ1, RDZ2)	0.02

Figure 4.8 and Figure 4.9 displays two areas where high Manning's roughness values of 0.12 were adopted along Atkin Creek immediately upstream of Warncoort-Birregurra Road and downstream of Anderson Street.

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Figure 4.8: Photo of High-Density Vegetation within Atkin Creek Downstream of Warncoort-Birregurra Road

Figure 4.9: Photo of High-Density Vegetation within Atkin Creek Downstream of Anderson St



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4.3.6 Boundary Conditions and Model Inflows

The TUFLOW model includes a series of boundary conditions to control points where flow enters or leaves the model. A HQ (head versus discharge) boundary was drawn to allow flows from the Barwon River floodplain to exit the model. This boundary uses a water surface slope of 0.01 m/m or 1 % to represent the minimal grade and permit the calculation of the stage-discharge relationship.

A series of QT (flow versus time) boundaries were also placed at the upstream extents of the model in order to represent the inflows from Atkin Creek, Unnamed Tributary and Barwon River. These relationships were set up to reference the plot outputs of flow versus time results from the RORB hydrological models discussed in Section 3 and enabled the TUFLOW model extent to be reduced to focus on the study area / township.

The TUFLOW design ensemble simulations used to define flooding within the local township (not associated with the waterway flooding) involved the application of inflows for the 10 minute to 2-hour storm durations with front, rear and mid loaded temporal patterns. The 1 % AEP hydraulic modelling results found the following mid-loaded temporal patterns to result in the median flood levels for each modelled duration:

- 10 minute tp26.
- 15 minute tp28.
- 30 minute tp28.
- 1 hour tp28.
- 2 hour tp25.
- 3 hour tp28.

Rainfall excess hydrographs were also applied as 2-D source areas onto the ground surface covering the sub-catchments within the township.

4.3.7 Barwon River Influence

An assessment of the interaction between the Barwon River and the local Atkin Creek and Unnamed Tributary flows was undertaken for the 1 % AEP event. The following scenarios were modelled and compared:

- Scenario1: 12-hour duration hydrographs for the Atkin Creek and Unnamed Tributary (critical duration for these waterways)
 with the 24-hour duration hydrograph for the Barwon River (critical duration for the Barwon River at Birregurra). The peak of
 the Barwon River 24-hour duration hydrograph was shifted to coincide with the peak of the 12-hour duration hydrographs for
 the Atkin Creek and Unnamed Tributary.
- Scenario 2: 12-hour duration hydrographs for Atkin Creek, Unnamed Tributary and Barwon River. No shifting of the peak flow for the Barwon River was accounted for in this scenario.

Figure 4.10 displays the resultant hydrographs near the Atkin Creek and Unnamed Tributary outlet to the Barwon River floodplain in addition to the Barwon River hydrograph for each of the relevant critical 1 % AEP storm durations. The figure also annotates the significant difference in volumes between the scenarios of 4000 ML prior to the local Atkin Creek peak flow occurring.

Figure 4.11 displays the corresponding flood depths and Barwon River area of influence for each of the scenarios modelled. As displayed the Barwon River area of influence is limited to the downstream end of the township where the same number of properties are predicted to be impacted regardless of the modelled scenario. The figure also displays the flood depth afflux, highlighting that there would generally be less than 30 mm of flood level difference within the area of influence.

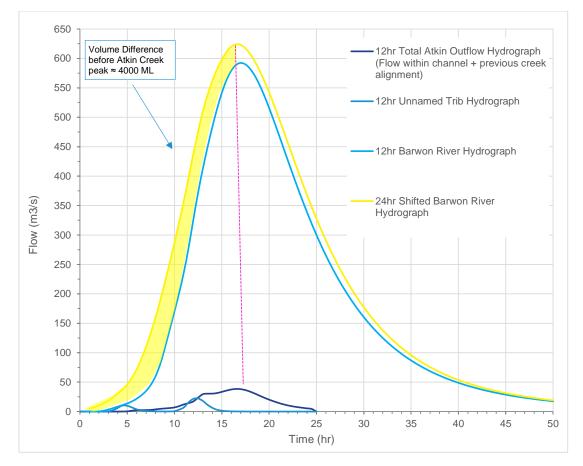
As a result of this analysis it was considered appropriate that for each design storm duration modelled the corresponding Barwon River storm duration inflow would be applied for design events. This allows for a conservative representation of the downstream Barwon River flood levels while noting:

- The design hydraulic model is not intended to run long enough to capture the peak flood levels within the Barwon River. It is also not focused on running the critical 24-hour duration since defining the Barwon River floodplain extent is not required from this study.
- If the peak flow for the Barwon River at Birregurra from the critical 24 hour duration event (considered to be the township's highest tailwater boundary condition) was to coincide with the peak flow from the waterways within the township for a 12hour

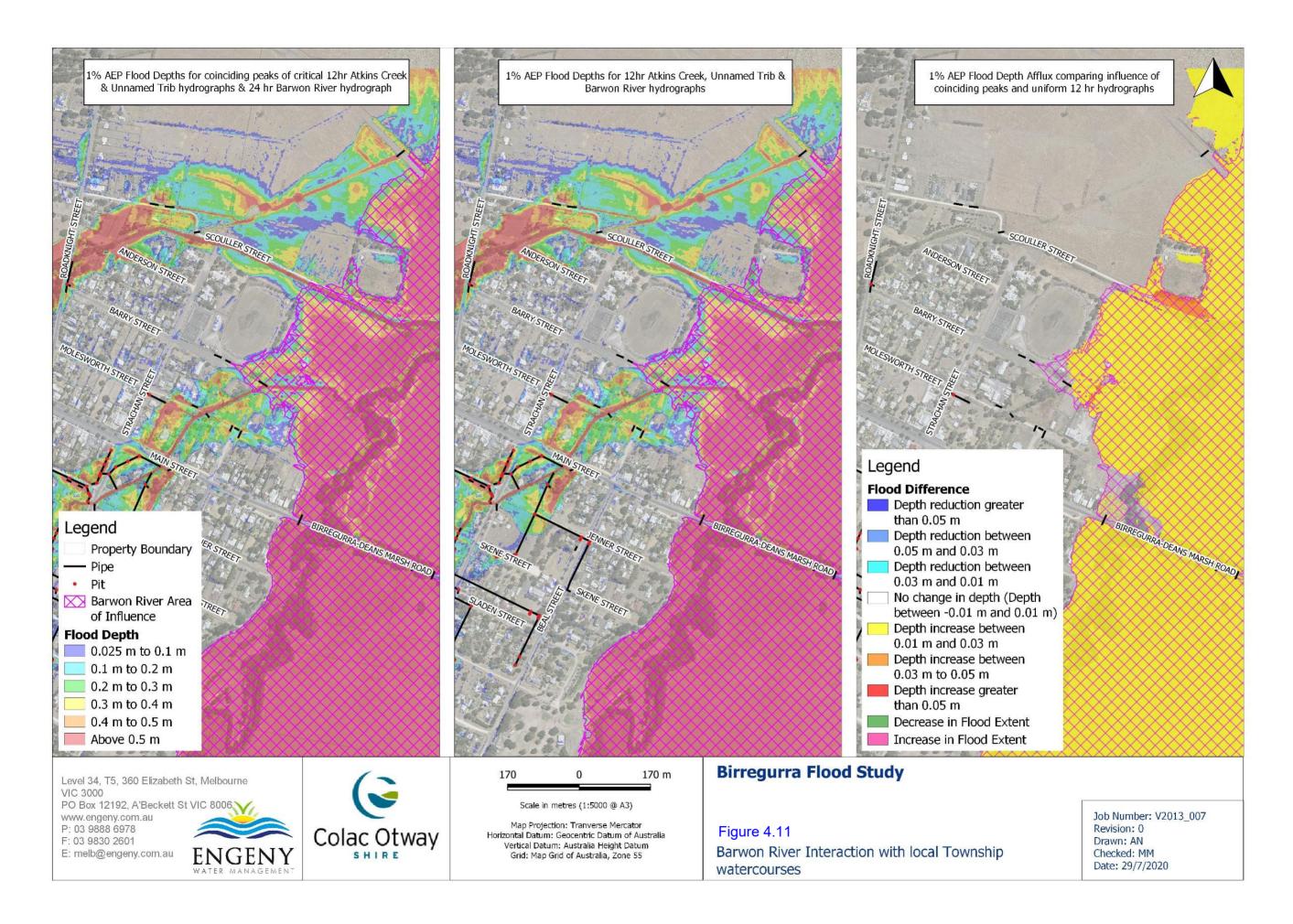
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critical duration, the difference in flood levels would be less than 30 mm when compared to a scenario whereby the 12 hour rainfall event fell consistently across the Barwon River, Atkin Creek and Unnamed Tributary catchments. The modelling undertaken also indicates this flood depth difference is limited to the downstream end of the township. This confirms that even though the difference in hydrograph volumes is significant (4000 ML) the resultant influence on flood levels and tailwater levels for the Birregura township was considered minor.







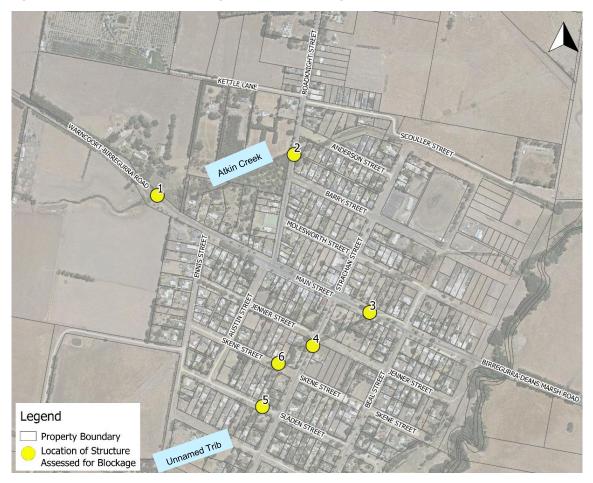
Attachment 10.6.4 Draft Birregurra Flood Study Report



4.3.8 Blockage Considerations

ARR 2019 provides a framework to assess blockage risk of culverts and bridges. The guidelines recommend this assessment be undertaken, to determine the potential for the blockage of structures and the likely impact to flood behaviour. Engeny has assessed the blockage risk of six key structures located along Atkin Creek and the Unnamed Tributary within the township for the 1 % AEP. The locations of these structures are shown on Figure 4.12.

Figure 4.12: Location of Culverts and Bridges Assessed for Blockage Potential



In line with the ARR 2019 guidelines, the risk of blockage is informed by several factors including the structures opening flow area and the availability, mobility and transportability of debris and sediment at the inlet and through the bridge/ barrel respectively.

The structures assessed within the township assumed a consistent debris risk potential due to the similarities in land use and waterway slopes. By adopting this approach an inlet (debris) and barrel (sediment) blockage risk of medium to low was determined for all structures. This was based on the following underlying assumptions:

- Medium to Low Debris and Sediment Availability due to:
 - Catchment consisting of rural lands and grazed paddocks.
 - Moderate average bed slopes of 2.5 %.
- Medium Debris and Sediment Mobility due to:
- 60



- Moderate rainfall intensities.
- Moderately sloped catchment areas of 2.5 %.
- Medium Debris and Sediment Transportability due to:
 - Moderate bed slopes of 2.5 %.
 - Comparable stream size width to expected debris load dimension.

This medium to low blockage risk corresponds to the 1 % AEP blockage percentages shown in Table 4.2 for each structure analysed.

Location	Structure Type	% Blockage
1	Bridge	15 %
2	Bridge	15 %
3	Culvert	50 %
4	Bridge	15 %
5	Box culvert	15 %
6	Culvert	50 %

The 1 % AEP design event was run with these calculated percentages for each bridge and culvert structure to assess the impacts on flood behaviour. Figure 4.13 displays the 1 % AEP flood depth afflux results from this 1 % AEP blockage sensitivity scenario. As displayed by assuming blockage to the key structures within Birregurra a combination of both increases and decreases in flood depths were identified. These changes to flood depth are generally within + / - 100 mm with the exception of blockage to the culvert structure at Main Street (location 3) where flood depths increase up to 150 mm at the intersection of Main Street and Strachan Street in addition to upstream of the culvert structure. These differences do not however result in an increase to the 1 % AEP flood extent. The flood risk changes at this location were also assessed.

Figure 4.14 presents a comparison of the ARR 2019 flood hazard values without and with blockage at the Main Street structure. As shown, no significant changes to the flood risk were identified except for the changes immediately upstream of the Main Street culvert structure within the Council owned reserve. Due to these sensitivity results, blockage was not accounted for in the simulation of design events.

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Figure 4.13: 1 % AEP Blockage Sensitivity Scenario Flood Depth Difference

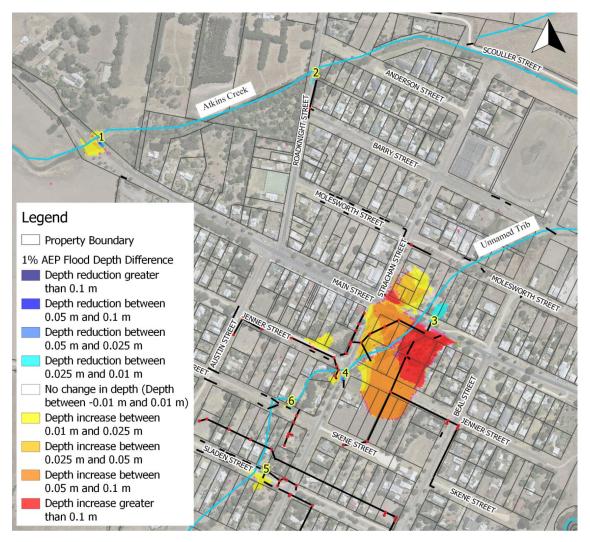
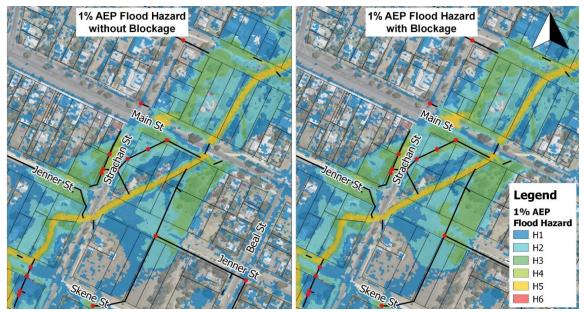




Figure 4.14: 1 % AEP Blockage Sensitivity Scenario Flood Hazard Comparison



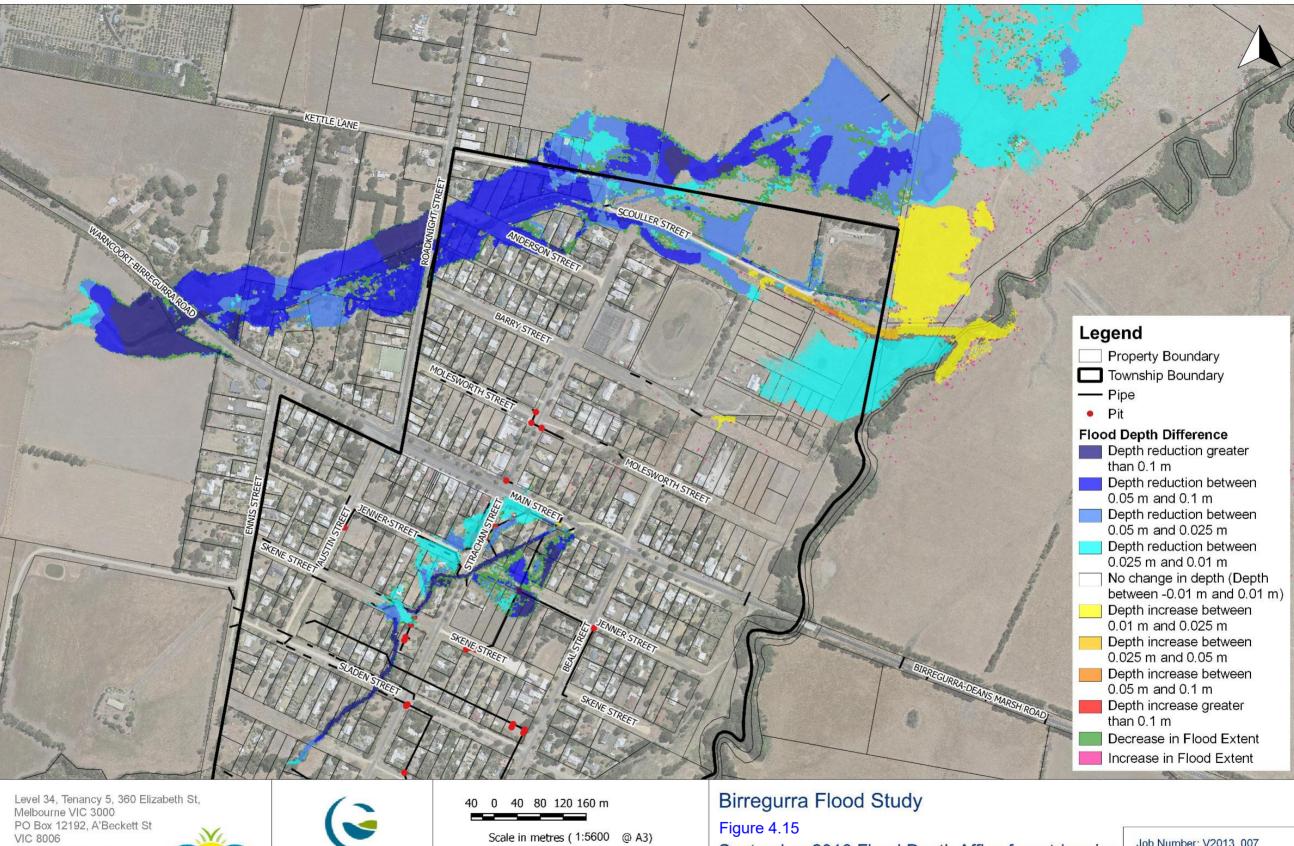
4.3.9 Waterway Vegetation Considerations

An investigation into the influence of thick vegetation within Atkin Creek and the Unnamed Tributary on the resultant flood levels was undertaken using the September 2016 rainfall event. Thick vegetation, as observed within Atkin Creek and the Unnamed Tributary can often be perceived as having a significant negative impact on the conveyance of flows. To understand this degree of influence, the September 2016 rainfall event was simulated with lower surface roughness values along Atkin Creek and the Unnamed Tributary. A maximum surface roughness value of 0.06 was adopted within the waterways. This value does not represent fully maintained waterways with all vegetation removed as this would not be realistic or desirable but instead, aims to represent a thorough trimming of vegetation.

Figure 4.15 displays the resultant flood depth afflux for the September 2016 event from the thorough trimming of vegetation. The plan highlights reductions of up to 100 mm along the waterways with an overall average reduction of 60 mm along Atkin Creek downstream of Warncoort-Birregurra Road. This flood depth difference is not significant and would not have contributed to a change in the number of dwellings affected by above floor level flooding during the September 2016 flood event.

Section 6.3 provides further discussion related to the feasibility of trimming vegetation within Atkin Creek and the Unnamed Tributary as a potential flood mitigation measure given the findings of this assessment and the highlighted minor changes to flood depths. Section 6.3 also discusses the importance of vegetation within waterways from an environmental perspective in stabilizing banks and reducing sediment runoff and erosion in addition to the flora and fauna significance.

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September 2016 Flood Depth Afflux from trimming of vegetation within Atkins Creek and Unnamed Tributary (Sensitivity Scenario)

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Map Projection: Tranverse Mercator Horizontal Datum: Geocentric Datum of Australia Vertical Datum: Australia Height Datum Grid: Map Grid of Australia, Zone 55

Job Number: V2013_007 Revision: 0 Drawn: AN Checked: MM Date: 30/11/2020



4.3.10 Simulation Parameters

The hydraulic model has been simulated with a minimum 1-D time step of 0.2 seconds. As the model was run with the HPC solver adaptive timesteps were applied.

4.4 SEPTEMBER 2016 EVENT MODEL CALIBRATION

4.4.1 Approach

The September 2016 inflow hydrographs were applied to the hydraulic TUFLOW model to represent the flood levels across the township. Iterative modelling was undertaken with modifications to the following parameters:

- Continuing Loss As discussed in Section 3.5.8, after a few iterations a lower continuing loss value was confirmed to
 provide a closer match to the September 2016 surveyed flood levels.
- Manning's roughness values Application of higher roughness values (within values specified in industry guidelines) within Atkin Creek and the Unnamed Tributary to represent densely vegetated sections indicated that flood levels generally increased by less than 100 mm providing a marginally closer match to the September 2016 surveyed flood levels. These values were also applied to the base case design event hydraulic modelling simulations.
- Refinement of terrain along the waterways following an initial model simulation some differences between the modelled flood levels and the September 2016 flood levels were identified within waterways and near key structures. Survey data was captured and the resultant outputs were used to refine the terrain along waterways and at structures. These refinements were also applied to the base case design event hydraulic modelling simulations.

4.4.2 Results

The TUFLOW model's resultant September 2016 event flows along the waterways are summarised in Table 4.3.

Table 4.3: September 2016 Event TUFLOW Flows Across Township

Location	September 2016 Event Flow
Atkin Creek - Upstream of Warncoort-Birregurra Road	16.0 m³/s
Atkin Creek - Upstream of Roadknight Street	16.0 m³/s
Atkin Creek – Downstream of Strachan Street	7.8 m³/s
Overbank flows from Atkin Creek along previous creek alignment	82 m³/s
Unnamed Tributary – Upstream of Sladen Street	5.8 m³/s
Unnamed Tributary – Upstream of Skene Street	6.4 m³/s
Unnamed Tributary – Upstream of Strachan Street	6.5 m³/s
Unnamed Tributary – Upstream of Main Street	6.7 m³/s
Unnamed Tributary – Upstream of Barry Street	6.9 m³/s

Table 4.4 provides a comparison of the surveyed flood levels with the modelled flood levels. As displayed the similarity in results provides confidence in the hydraulic model input parameters.

However, it was noted that the surveyed flood mark at location 9 was up to 400 mm higher than the modelled flood level. In some instances, differences between surveyed and modelled flood levels could be attributed to the blockage of structures during the given storm event noting that blockage generally occurs at the upstream end of structures. In this instance if the Sladen Street structure was blocked during the September 2016 event it would result in a lower modelled flood level at the structures downstream end where the surveyed mark was captured. Alternatively, blockage at the downstream Skene Street structure may result in some banking up and subsequent higher flood levels at Sladen Street, however the modelling suggests that there

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is already a close match between surveyed and modelled flood levels here (locations 6, 7 and 8). As such, the accuracy of the survey flood level at location 9 was considered questionable.

The location of the surveyed flood marks which matched closely to the modelled flood levels and the questionable survey mark at location 9 are displayed within Figure 4.16.

Location	Description	Surveyed Flood Level	Modelled Flood Level
1	Warncoort-Birregurra Rd (Fence line)	113.44	113.3
2	Roadknight Street	111.61	111.6
3	Scouller St (Side of Shed)	Unable to access property (approx. 200 mm from shed base @ Lidar level 110.4 m AHD)	110.63
4	Scouller St (Sewer pit)	110.49	110.34
5	Anderson St (Fence post)	111.3	111.12
6	Main Street (US left bank bridge abutment)	109.89	109.98
7	Skene St (Top of crossing)	112.4	112.3
8	Skene St (Base of letter box)	112.63	112.65
9	Bridge abutment (DS Right bank)	114.3	113.94

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Figure 4.16: Location of September 2016 Event Surveyed Flood Marks

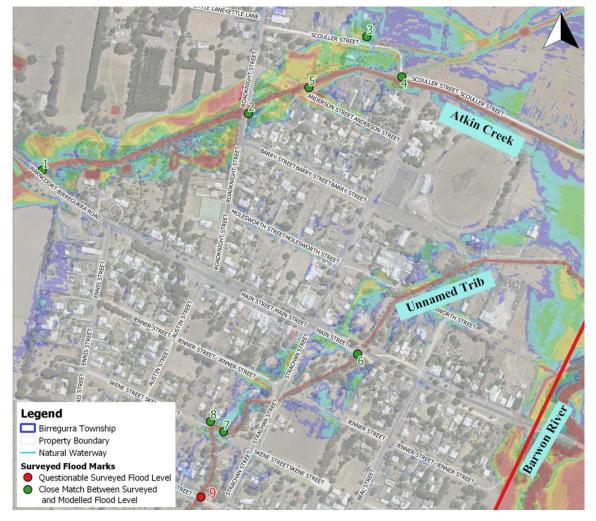


Table 4.5 provides a comparison of the modelled flood depths to photographs and anecdotal evidence collated for the September 2016 event. Comparisons of anecdotal evidence and photographs has provided further confidence that the hydraulic modelling results for the September 2016 event are a good match to those reported by residents across the township.

Information obtained from the targeted community engagement sessions conducted in April 2020 to obtain feedback of the results of draft calibration for the September 2016 event also provided support for the results produced with participants having witnessed flooding at key locations across the entire study area.

Appendix E displays the resultant flood depth layout plan for the September 2016 flood event.

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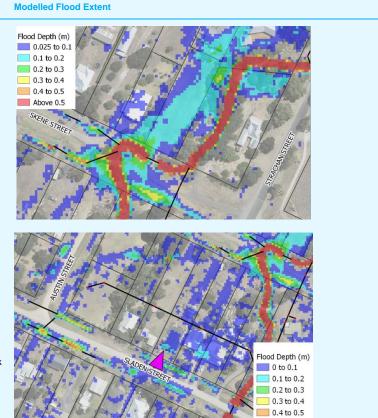


Table 4.5: Comparison of September 2016 Event Photograph / Anecdotal Evidence to Modelled Flood Extent

50 Skene Street

Location





Resident noted:

House did not flood above floor level in 2016.
 Water reached the bottom of the weepholes in

Photograph / Anecdotal Evidence

- Water reached the bottom of the weepholes in the brick work. Considers that the water is backing up the swale because the cross over pipes
- 42 Sladen Street
 - are not big enough.Shed floods regularly.
 - Skene Street and Strachan Street provide overspill point in 2016 near the creek bend.

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Above 0.5

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Location	Photograph / Anecdotal Evidence	Modelled Flood Extent
Football Oval	Resident noted that '2016 flood reached the northern boundary of the football oval"	Flood Depth (m) 0 to 0.1 0.1 to 0.2 0.2 to 0.3 0.3 to 0.4 0.4 to 0.5 Above 0.5
6 Anderson Street	Resident noted that '2016 flood reached their western boundary"	SOULLER STREET ANGERSON STREET Flood Depth (m) 0 to 0.1 0.1 to 0.2 0.3 to 0.4 0.4 to 0.5

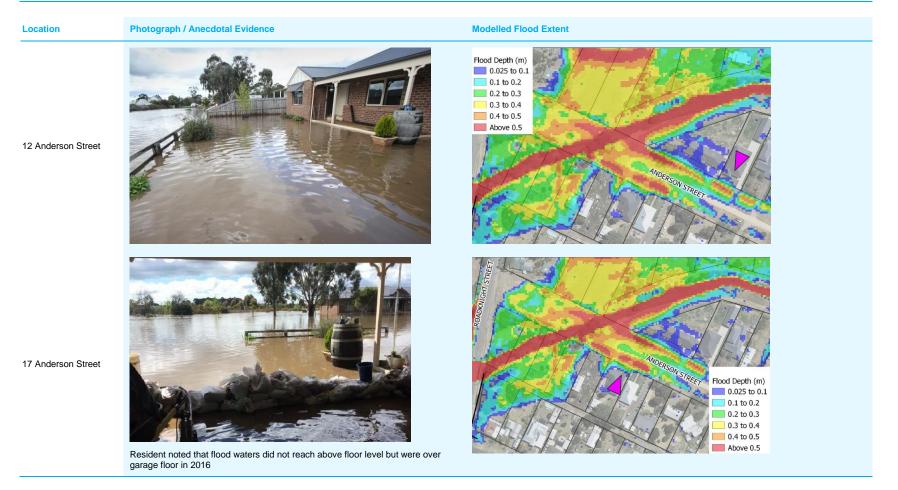
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Attachment 10.6.4 Draft Birregurra Flood Study Report

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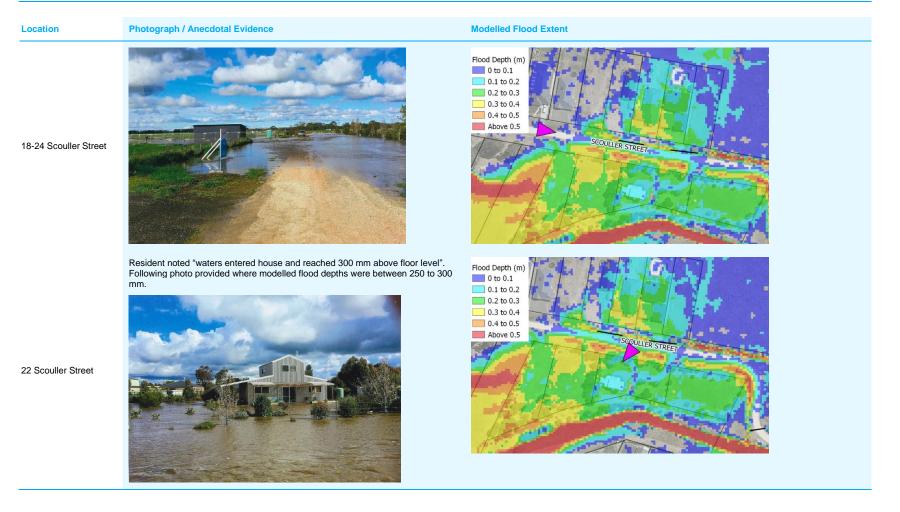
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Attachment 10.6.4 Draft Birregurra Flood Study Report

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Attachment 10.6.4 Draft Birregurra Flood Study Report

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Photograph / Anecdotal Evidence Location **Modelled Flood Extent** Flood Depth (m) 0.025 to 0.1 0.1 to 0.2 0.2 to 0.3 0.3 to 0.4 0.4 to 0.5 Above 0.5 Main Street looking east towards Unnamed Tributary Roadknight Road looking south towards Main Street Flood Depth (m) 0.025 to 0.1 0.1 to 0.2 0.2 to 0.3 SARRY STREET 0.3 to 0.4 0.4 to 0.5 Above 0.5

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Attachment 10.6.4 Draft Birregurra Flood Study Report

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Location	Photograph / Anecdotal Evidence	Modelled Flood Extent
43 Roadknight Street	Resident noted: • House didn't flood in 2016 • Flood waters reached bearers of the dwelling	Flood Depth (m) 0 to 0.1 0.1 to 0.2 0.2 to 0.3 0.3 to 0.4 0.4 to 0.5
36 Sladen Street	Resident noted that house didn't flood in 2016	Flood Depth (m) 0 to 0.1 0.1 to 0.2 0.2 to 0.3 0.3 to 0.4 0.4 to 0.5 Above 0.5 4 bove 0.5 5 Above 0.5
64 Strachan Street	Resident noted that "block didn't flood - water stayed within its banks"	Consistent with Modelled September 2016 Event Results
71 Jenner Street and 19 Ennis Street	Resident noted that "House didn't flood in 2016" and that the subsoil was saturated	Consistent with Modelled September 2016 Event Results
73		V2013_007-REP-001-4 / 25 March 2021



4.5 DESIGN EVENT FLOOD MAPPING

4.5.1 BASE CASE / EXISTING CONDITIONS

Appendix F provides the resultant flood depth layout plans for all modelled design storm events for existing base case climate conditions. These results were produced with the combination of the maximum grids generated from the following:

- Monte Carlo simulation (representing the flooding along the Atkin Creek and Unnamed Tributary) for the given critical storm durations.
- Ensemble simulations for the 10 minute to 2 hour storm durations (representing flooding within the local township) for the defined mid-loaded temporal patterns.

Table 4.6 provides a summary of the peak 1 % AEP to 20 % AEP flows at road crossings along Atkin Creek and the Unnamed Tributary.

Table 4.6: Design TUFLOW Flows Across the township

Location	39.35 % AEP Flow (m³/s)	20 % AEP Flow (m³/s)	10 % AEP Flow (m³/s)	5 % AEP Flow (m³/s)	2 % AEP Flow (m³/s)	1 % AEP Flow (m³/s)
Atkin Creek - Upstream of Warncoort-Birregurra Road	5.89	10.69	15.12	19.33	28.70	36.30
Atkin Creek - Upstream of Roadknight Street	5.79	10.73	15.21	19.30	28.70	36.31
Atkin Creek – Downstream of Strachan Street	5.22	6.47	7.39	8.32	10.56	12.33
Overbank flows from Atkin Creek along previous creek alignment	1.56	4.30	7.71	10.73	16.94	22.11
Unnamed Tributary – Upstream of Sladen Street	3.96	6.82	10.77	13.23	20.26	22.57
Unnamed Tributary – Upstream of Skene Street	4.40	7.34	11.64	14.13	21.61	24.09
Unnamed Tributary – Upstream of Strachan Street	4.24	7.40	11.64	14.13	21.61	24.09
Unnamed Tributary – Upstream of Main Street	4.29	7.68	11.94	14.69	22.03	25.00

4.5.2 CLIMATE CHANGE CONDITIONS

Modelling of climate change for the 1 % and 10 % AEP storm events consisted of an increase in rainfall intensity based on the forecasted year 2100 and representative concentration pathway (RCP) 8.5 percentage of 18.5 %. This increase was applied via the IFD within the hydrological model (detailed within **Appendix C** and **Appendix D** for both the Barwon River and Atkin/Unnamed Tributary hydrology models).

Appendix G provides the resultant Flood Depth Layout Plans produced as part of the Climate Change Conditions modelling for the 1 % and 10 % AEP storm events: **Appendix H** provides the associated Flood Depth Afflux Plan when compared to existing base climate conditions.

As displayed within these layout plans, an increase of 18.5 % to rainfall intensity increases flood depths, on average, by up to 100 mm in most areas along Atkin Creek and the Unnamed Tributary particularly where the flow path is wider and consists of greater flood storage. In contrast the Unnamed Tributary upstream of Sladen Street is narrow and well incised and as such average flood depth increases of up to 500 mm were noted.

Although these flood depth increases are evident, the resultant flood extent has not significantly changed when compared to existing / base climate conditions.

Appendix I provides a comparison of the changes to the ARR 2019 Flood Hazard criteria values for the 1 % AEP storm event between existing climate conditions and the predicted future climate change conditions. As noted above, although the flood extent does not significantly change when compared to existing conditions, some differences to the flood risk were noted. This

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would in turn contribute to changes to the proposed planning overlays. Some areas assigned a Land Subject to Inundation Overlay (LSIO) under existing climate conditions, would be assigned a Floodway Overlay if climate change conditions was considered. Based on this comparison, consideration of climate change conditions may be required for the development of the planning overlays. Further discussion is provided in Section 8.

4.6 EXTERNAL INDEPENDENT PEER REVIEW

The hydrological and hydraulic modelling analysis was independently reviewed to ensure the models and their outputs were fit for purpose. The Quality Assurance (QA) review considered the modelling methodology, assumptions and model input parameters. This phase identified the need to include all underlying assumptions and discussion on the limitations related to the data available (rainfall and calibration data) within the study report but also highlighted the overall suitability of the modelling parameters adopted in producing the resultant close match between the surveyed and modelled flood levels presented in Section 4.4.

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5 FLOOD DAMAGES

5.1 BACKGROUND

The Average Annual Damages (AAD) assessment estimates the average probable tangible flood damages expected in a year for residential, commercial and industrial property land use types, as well as major, minor and unsealed roadways. The AAD was calculated using Melbourne Water's 2020 AAD spreadsheet which utilises the flood mapping results from a range of storm events including the 20 %, 10 %, 5 %, 2 %, and 1 % AEP.

A flood damages assessment for existing flooding conditions is useful in understanding whether the cost of structural mitigation works is justified. Section 6 presents the mitigation assessment undertaken and also provides a comparison of the mitigation work's resultant AAD value to that presented in this section for base case.

The following provides a summary of the key steps and assumptions made as part of the calculation:

- A building footprint layer digitised using aerial imagery and surveyed floor levels was utilised to determine the maximum water surface level within each flood affected building footprint for the various flood events.
- An up to date property parcel layer obtained from the Department of Environment, Land, Water and Planning (DELWP) was utilised to determine the total area within each property affected by flooding.
- Melbourne Water's AAD spreadsheet contains stage-damage curves that were utilised to inform the damages estimates. These stage-damage curves are not intended to represent the full financial impact caused by flood damage. The damage estimation methodology for residential and commercial / industrial properties utilises a combination of the following methods:
 - The Department of Natural Resources & Mines methodology (DNRM, 2002), which is based on the stage-discharge curves developed by ANUFLOOD (Smith & Greenway, 1988). This methodology was adopted for commercial / industrial properties and uses both building size and contents value to inform the costs associated with the stage-damage curve.
 - The Department of Environment and Climate Change Residential Flood Damages Guidelines as documented in the Floodplain Risk Management Guideline: Residential Flood Damages (DECCW, 2007). This methodology was used to inform the flood damage costs associated with residential properties.
- Indirect damage costs, which represents inconveniences such as emergency assistance, community support and temporary relocation, are assumed to be 30 % of the direct damage costs.
- The AAD assessment does not consider depth or safety in roads but does consider the area of roads that are inundated.
- Calculation of event damages has been undertaken for all surveyed building footprints and roadways within the 2D code boundary delineated for the extent of the TUFLOW flood model.

5.2 FLOOD DAMAGE TYPES

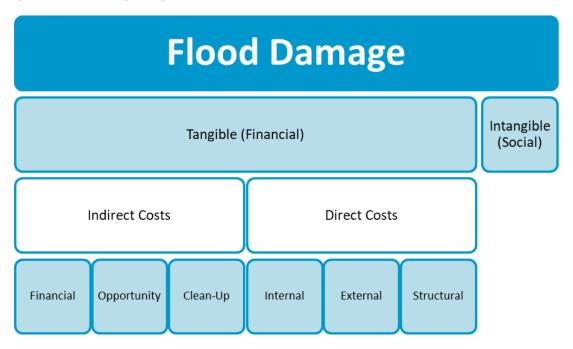
5.2.1 Actual vs Potential

Various types of flood damage may occur and can be measured in different ways. Figure 5.1 presents a summary of the various categories of flood damages, where each type can be either an 'actual' or 'potential' damage. Actual damages are a direct result of a flood event whereas, potential damages are the probable damages that could occur from a flood event. Both types of damages can be minimised or in some cases prevented by community awareness and structural or behavioural measures such as flood mitigation works and flood warning procedures.

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Figure 5.1: Flood Damage Categories



5.2.2 Tangible vs Intangible

Flooding that results in direct damage to a physical building's structure or its contents is considered to be tangible damage and is quantifiable. Intangible damage is when social processes are impacted due to inconvenience, loss of cultural heritage, biodiversity and psychological distress. It is recognised that intangible damages have a level of significance, however their incurred damages cannot be quantified in monetary terms.

5.2.3 Direct vs Indirect

As presented in Figure 5.1 tangible damages can be further classified as either direct or indirect flood damages. Direct damages include flood waters contacting a structure or its contents and causing damage due to either high velocities or above floor level flooding. Typical methods for assessing flood damages estimate costs differently for various land use types. This investigation has separated costs between residential and commercial / industrial land uses as well as roadways.

Indirect damages generally include disruptions to community wellbeing, social activities and economic procedures, where costs are incurred to cover inconveniences such as emergency assistance, community support, temporary relocation and transport.

5.2.4 Average Annual Damage (AAD)

The AAD assessment has considered the potential damage to roads and buildings based on the existing conditions flood modelling for storm events between the 20 % AEP and 1 % AEP.

With regards to buildings considered in the AAD assessment:

- Buildings are included in the assessment if they intersect the proposed flood overlays including the LSIO, FO and SBO extents (based on the 1 % AEP existing conditions flood mapping results). This captured 60 buildings.
- The AAD is then calculated by subtracting the maximum flood level within the building footprint to the surveyed floor level.
- Increased damages are assigned proportional to the difference between flood level and floor level.
- Of the 60 buildings considered at risk of flooding for the 1 % AEP base case scenario (existing conditions), 26 buildings were
 determined to be flooded above floor level based on the surveyed floor levels and detailed interrogation of the modelling
 outputs.

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- These 26 buildings 'flooded above floor level' were assigned higher damage costs comparative to the remaining buildings 'at risk of flooding' but not flooded above floor level.
- If the flood level was below the surveyed floor level a flat rate of \$12,261 was applied to capture the potential flood damage to the overall property surrounding the dwelling.

In order to determine the number of dwellings affected by above floor level flooding, the interrogation of the modelling outputs was considered essential to ensure dwellings most likely affected were included only. This was particularly important given the influence higher dwelling counts would have on potentially unrealistically inflating the benefits of mitigation works when comparing the AAD to existing conditions. The interrogation of the dwelling counts informed by the raw modelling results included the removal of dwellings initially identified as affected by flooding if:

- The dwelling had high flood depths as a result of the model's grid cell representation of steep terrain slopes and subsequent interpolation within model outputs (grid results).
- The dwelling had high flood depths as a result of the model's applied higher manning's roughness value whilst flood depths surrounding the dwelling were shallow / insignificant.
- Google Street View identified a step up to the dwellings floor level as such indicating a minor discrepancy between the surveyed floor level and the dwellings surround natural ground levels particularly if flood depths above floor level were minor.

Table 5.1 provides a summary of the number of dwellings identified as most likely affected by above floor level flooding under existing conditions for each modelled storm event following the detailed interrogation of raw modelling results. These dwelling counts differ from those presented within Section 0 as the flood warning and MFEP assessments have focused on conservatively ensuring all dwellings with a potential for above floor level flooding are considered. As such the counts presented within this later section of the report consists of a greater overall count as they have been based on the raw flood mapping results.

AEP	Number of Dwellings	Number of Properties
20 %	5	14
10 %	7	27
5 %	9	34
2 %	23	44
1 %	26	47

Table 5.1: Number of Dwellings Most Likely Affected by Above Floor Level Flooding

Table 5.2 provides a summary of the calculated damages for each AEP event. The total AAD of **\$746,741 / year** is also displayed which captures the contribution of each AEP's calculated flood damage when considering the likelihood of the flood event. As an example, the 1 % AEP contribution to AAD is generally less than the 10 % AEP due to the lesser likelihood of occurrence, despite the 1 % AEP event predicting a larger number of buildings / larger extent of the roadways at risk of flooding.

AEP	Calculated Damages
20 %	\$1,316,613
10 %	\$2,543,329
5 %	\$3,662,597
2 %	\$5,664,210
1 %	\$6,576,244
Total AAD	\$746,741 / year

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6 FLOOD MITIGATION

6.1 INTRODUCTION

This phase of the study has focused on conceptually identifying and assessing structural flood mitigation measures which aim to balance:

- The extent and cost of works.
- The flood mitigation benefits focused on reducing the number of dwellings affected by above floor level flooding.
- The impacts to surrounding properties as a result of the mitigation works ensuring works do not cause adverse flooding
 impacts to adjacent / downstream private properties.

As noted within Section 1.3, while the strategy has a focus on flood management it is important to note the importance of waterways in relation to broader ecological, cultural and aesthetic values. Therefore prior to progressing with any conceptual options outlined within this section, outcomes from the following investigations / assessments need to be considered:

- Environmental flora and fauna impact assessment highlighting the ecological values within the mitigation locations and potential impacts, particularly to endangered species.
- Cultural and heritage assessment with further engagement with the traditional owners.
- Geotechnical assessment which identifies the potential erosion and degraded bank stability risks as a result of the mitigation works.
- · Aesthetic and recreational values assessment.

This mitigation assessment has consisted of:

- 1. The identification of mitigation options which could be implemented to address the known flooding hotspots.
- 2. Selection of five (5) preferred mitigation options. These were selected following discussions with Council and CCMA and high-level consideration of the feasibility / practicality of each option.
- 3. Mitigation modelling of the selected mitigation works for the 20 % to 1 % AEP storm events and analysis of the resultant flood depth differences when compared to existing flooding conditions.
- 4. AAD assessment for the selected mitigation works and comparison to the damage's values calculated for existing conditions.
- 5. High-level cost estimate for the selected mitigation works.
- 6. High-level multi criteria assessment which summarises the estimated cost of works and AAD in addition to other qualitative factors for each selected option.

6.2 FLOODING HOTSPOTS

From the existing conditions modelling results several flooding hotspots were identified within Birregurra including:

- 1. The overtopping of Atkin Creek downstream of Roadknight Street caused from the creek's lack of conveyance capacity particularly along the channelised section south of Scouller Street. This affects a number of properties on Scouller Street, Anderson Street and Roadknight Street.
- 2. The overtopping of the Unnamed Tributary downstream of Sladen Street caused by the creek's lack of conveyance capacity and constriction of the Skene Street driveway culvert structure. This affects a number of properties adjacent to the Unnamed Tributary down to the Barwon River confluence.
- 3. Overland flow path from Prime Street to Sladen Street caused by the underground drainage system's lack of conveyance capacity. This flow path affects a few properties prior to connecting with the Unnamed Tributary.
- 4. Overland flow path along Sladen Street originating from the rural farmland east of Ennis Street caused by the road-side channel's lack of conveyance capacity. This results in sheet flows overtopping towards the northern side of Sladen Street and passing through several residential properties.

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6.3 IDENTIFIED MITIGATION OPTIONS

Table 2.1 summarises each of the mitigation options identified (Listed A to H) with a description of the works involved and the considerations made to determine whether the option was worth pursuing. To inform this decision making and the works effectiveness in mitigating flooding impacts and overall feasibility, some of these options were assessed in the hydraulic TUFLOW model for the 1 % AEP storm event only. The table clearly notes the options which were selected for further assessment within Section 6.4.

Table 6.1: Summary of Mitigation Options Identified

Mitigation Option	Description	Considerations	Selected for Further Assessment in Section 6.4
A – Atkin Ck Levee	1 metre high levee on northern bank of Atkin Ck, between Roadknight St and Scouller St	1 % AEP modelling results highlighted reduced flood depths to northern residential properties but increases to southern residential properties along Barry Street and Anderson Street. Levee along the southern side of Atkin Creek to maintain flows within waterway was not considered feasible due to obstruction which would be created for overland flows entering the creek from southern side.	Νο
		Option was not considered feasible due to impacts to existing properties south of Atkin Creek along Anderson Street.	
		Proposed channel works contained to Council owned land	
В	Widened Atkin Ck waterway, from	Sized to convey a majority of the 1 % AEP Atkin Creek flow from Roadknight Street.	
Atkin Ck Waterway Widening	Roadknight Street to Barwon river confluence.	Requires the removal of vegetation for widening works and as noted above if progressed there will be a need to undertake several investigations including flora and fauna impact assessments, cultural heritage assessment and geotechnical assessment.	Yes
С	Upgrade of existing 375 mm diameter culvert	Need to maintain full access along Scouller Street and maintain minimum required road cover (600 mm) for vehicles.	
Scouller Street Culverts	crossing Scouller Street to allow conveyance of flows along previous Atkin Creek alignment towards now abandoned rail embankment	Flood modelling results indicate the flood depth reductions would be limited to the areas immediately surrounding the upgraded culverts and would not reduce flooding for properties along Anderson Street or Scouller Street. This option would also result in an increase to flood depths on the farmland immediately north of the culverts.	No
		Storages sized assuming the existing topography is maintained and an embankment along Warncoort Road is constructed.	
D1	Formalise a retarding basin upstream of Warncoort-Birregurra Road for the attenuation of Atkin Creek flows.	The required flood storage to attenuate Atkin Creek to the estimated capacity of the existing Atkin Creek is significant. Based on the preliminary hydrological modelling sizing runs it was estimated that even assuming a 4-metre-high embankment, which would provide approximately 158,000 m ³ of flood storage, would not provide sufficient attenuation for flows greater than a 10 % AEP storm event.	
Atkin Creek Retarding Basin		This option was not considered feasible given the flood storage requirements and minimal associated downstream flooding benefits. Although, consideration could be given to reducing the designated flood storage and pairing this option with additional mitigation works downstream such as the Atkin Creek waterway widening option.	No
		A flora and fauna impact assessment, cultural heritage assessment and geotechnical assessment would be required if this option is progressed given the expected changes to flood storage provided upstream of Warncoort-Birregurra Road.	

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Mitigation Option	Description	Considerations	Selected for Further Assessment in Section 6.4
		The location of this storage will need to consider future land acquisition which could be considered as part of a Birregurra Structure Plan review.	
D2 Unnamed	Formalise a retarding basin upstream of Ennis	The flood storage has been sized to attenuate the 1 % AEP flow back to the capacity of the Unnamed Tributary at Sladen Street. These works would also require the upgrade of the Skene Street driveway culvert at 48 Skene Street (due to the hydraulic constraint it creates) or alternatively straightening of the Unnamed Tributary at this location (described as Mitigation Option E).	
Tributary Retarding Basin	Street for the attenuation of the Unnamed Tributary flows.	The excavation costs associated with these works are significant and the consideration of how and where this storage would lie within the existing steep topography needs to be considered. Nonetheless this option does realise flood reduction benefits to several properties downstream of Sladen Street.	Yes
		A flora and fauna impact assessment, cultural heritage assessment and geotechnical assessment would be required if this option is progressed given the excavation required in order to achieve the flood storage requirements.	
E		Required works on upstream end would be within property at Number 36 Skene Street	
Waterway Straightening of Unnamed	Modify (straighten) waterway along Unnamed Tributary at Skene Street to improve conveyance from existing meandering	Works are expected to improve conveyance of flows for minor and more frequent storm events however due to the magnitude of flows, particularly in the modelled 1 % AEP event, the works also essentially move flows from one area to another creating localised increases in flood level (afflux).	Νο
Tributary at Skene Street	alignment.	Outcomes from a flora and fauna impact assessment, cultural heritage assessment and geotechnical assessment would be need to be considered if this option is progressed.	
		Design to convey medium / high flows only, maintain baseflow and low flow environmental requirements	
F Hopkins	1500 mm pipe draining Unnamed Tributary to Barwon River along	Works would require the need for pipe jacking the last pipe section due to the excessive trench depths (10 metres) and adding significantly to the capital costs. This mitigation option is however expected to have significant benefits for several downstream properties.	Yes
Street Pipe Diversion	Hopkins Street	A flora and fauna impact assessment, cultural heritage assessment and geotechnical assessment would be required if this option is progressed given the size of the proposed diversion pipe and the significant trench depths.	
G	and increased pipe	In major storm events the ability for pipes to freely drain is restricted downstream tailwater levels in the Unnamed Tributary.	
Drainage Upgrades along Sladen Street	capacity along the southern side of Sladen Street to improve conveyance of overland flows originating from rural farmland west of Ennis Street.	Increased pipe and pit capacity have potential to worsen flooding through residential properties if pipes cannot drain freely and / or pits are surcharging during rare storm events.	Yes
н	Construct large grated	Inflow to existing 600 mm drainage is limited by inlet pit capacities running between Prime Street and Hopkins Street	
Drainage	inlet pits at low point of	Grated pits located within low points ensures underground stormwater	
Upgrades	Prime Street and Hopkins Street to allow greater inlet	conveyance is maximised.	Yes
between	capacity and maximise capacity of underground		
Prime &	drain		
Sladen Street			

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Mitigation Option	Description	Considerations	Selected for Assessment Section 6.4	
l Vegetation Removal from Atkin Creek and the Unnamed Tributary	Thorough Trimming of vegetation within Atkin Creek and Unnamed Tributary (downstream of Warncoort-Birregurra Road and Ennis Street respectively)	Dense vegetation (as is the case within Atkin Creek and the Unnamed Trib) can often be perceived as having a significant negative impact on the conveyance of flows. Due to this, vegetation removal can sometimes be considered a potential flood mitigation measure. However, as discussed within Section 4.3.9, following the modelling of the September 2016 sensitivity scenario which assessed the difference in flood depths as a result of thorough vegetation trimming within the waterways, the reductions to flood depths were not considered extensive (typically achieving reductions of up to 100 mm only). The cost of wide-spread vegetation trimming would be a significant ongoing maintenance cost for Council. Consideration of the subsequent impacts to the waterway's ecological values would also need to be investigated to determine whether this option is feasible. This would consist of a flora and fauna impact assessment as well as a cultural heritage assessment.	No	

6.4 ASSESSED MITIGATION OPTIONS

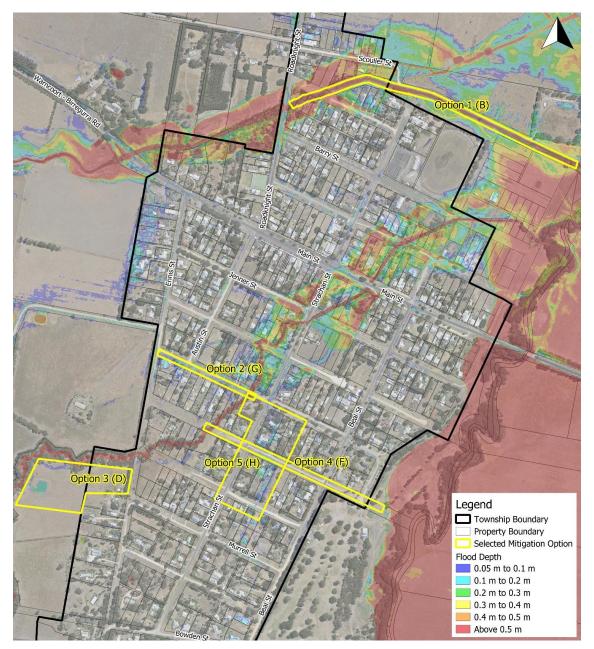
Following discussions with Council and Corangamite CMA and consideration of the above listed notes, five (5) mitigation options were selected for further assessment. These options are displayed in Figure 6.1 below.

The following sections provide a summary on the assumptions, considerations, and the required works for each mitigation option and where relevant references are made to the resultant flood depth afflux results provided within **Appendix J**.

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Figure 6.1: Location of Selected Mitigation Options (1 % AEP Flood Depth)



6.4.1 Option 1 – Atkin Creek Waterway Widening (B)

The key objective for mitigation Option 1 is to improve the conveyance of flows within Atkin Creek from Roadknight Street to the Barwon River confluence. This option aims to reduce the overtopping of flows which currently result in the flooding of adjacent properties particularly along Scouller Street and Anderson Street.

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A widened trapezoidal channel has been included within the hydraulic TUFLOW model between Roadknight Road and the Barwon River confluence. This channel's widened flow area and resultant conveyance capacity was maximised by making the following assumptions:

- No changes to the existing waterway's invert level (to ensure conveyance into the Barwon River is still possible).
- Base width of 8 meters.
- 1 in 3 side slopes.
- Maximum top width of 20 meters which would ensure the widened channel can be accommodated within constrained areas
 particularly downstream of Strachan Street where based on the road reserve width would only have 20 meters available
 south of Scouller Street. The total width upstream of Strachan Street is however 30 meters which allows for a small buffer
 between the widened channel's top of bank and property boundaries.

Based on the modelling undertaken, it is predicted that this widened channel would be able to convey approximately 35 m³/s. Given the 1 % AEP flow upstream of Roadknight Street is 36.5 m³/s, assuming limited tailwater impacts, the proposed channel would be capable of conveying the majority of the 1 % AEP flows in contrast to its current capacity of less than 20 m³/s.

The mitigation modelling results indicate that flows in excess of the widened channel's capacity will impact adjacent properties as is the case in existing conditions, however the reduction in overtopping flows is predicted to result in flood depth decreases of up to 200 mm within properties along Scouller Street and Anderson Street. Minor localised raising of the channel's northern bank between Roadknight Road and Anderson Street could also be considered as part of future works to reduce the magnitude of shallow sheet flows overtopping the Atkin Creek bank.

Appendix J displays the 1 % AEP flood depth afflux highlighting the significant reduction to flood depths. The plan also shows the subsequent increase to flood depths (up to 150 mm). However, this is limited to farmland areas within the Barwon River floodplain.

This is a significant intervention to the waterway and will require further investigation in relation to flora and fauna, cultural heritage and geotechnical considerations to determine whether it is feasible and acceptable in relation to wider legislative requirements.

6.4.2 Option 2 – Drainage Upgrades along Sladen Street (G)

The current drainage system along Sladen Street consists of grassed roadside swales and generally 300 mm driveway culvert crossings. These existing swales and driveway culverts aim to convey runoff originating from the farmland west of Ennis Street to the Unnamed Tributary. However, due to the relatively flat grade and channel flow area, flows overtop Sladen Street in existing conditions and pass through properties on the northern side of the street.

Mitigation Option 2 includes the addition of a drainage line beginning at the corner of Ennis Street and Sladen Street and continuing east along the southern side of Sladen Street and out falling into the Unnamed Tributary. The proposed pipe includes three grated inlet pits located at low points within the existing grass swale to capture overland flows which would have previously overtopped Sladen Street. The following provides a summary of the drainage works and assumptions included in the mitigation modelling undertaken for Option 2:

- 450 mm pipe from Ennis Street to Number 49 Sladen Street.
- 525 mm pipe from Number 49 Sladen Street to discharge at Unnamed Tributary.
- 1 in 80 longitudinal pipe slopes.
- Minimum 600 mm cover on all pipes.
- Three 600 x 600 (length x width) grated pits providing 0.45 m³/s inlet capacity at ponding depths of up to 500 mm.

Following the modelling of this option for all storm events from the 20 % AEP to the 1 % AEP and closer analysis of the receiving Unnamed Tributary peak flood levels the following was identified:

- A flood depth reduction of less than 25 mm to properties north of Sladen street during a 1 % AEP event.
- The flood mitigation benefits in the 1 % AEP event were limited by the Unnamed Tributary's peak flood level.
- For small to moderate flood events, where the mitigation works would be less inhibited by the downstream peak flood level, the flooding impacts to properties north of Sladen Street were less critical.

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As a result of these modelling outcomes, the value provided by this option was considered insignificant and as such disregarded from further assessments presented within this section.

6.4.3 Option 3 – Unnamed Tributary Retarding Basin Upstream Ennis Street (D2)

Option 3 consists of a retarding basin west of Ennis Street, intended to attenuate the peak flows along the Unnamed Tributary prior to entering the Birregura township. These works would include the design of an inlet and outlet which allows low flows to bypass the storage and high flows to become attenuated respectively. Although the storage has been conceptually located within farmland, the feasibility of this option could be further considered as part of the township's review of the Birregura Structure Plan. It is however important to note that due to the steep topography west of Ennis Street further design and terrain modelling would need to be undertaken to determine the exact land take requirements. The area presented within this report has excluded the additional land take required for matching the top of bank of the storage to existing ground levels and as such the total asset footprint is expected to be larger than the storage area presented below.

The proposed retarding basin was modelled in RORB with the storage outflow hydrograph applied to the hydraulic TUFLOW model. The following provides details of the retarding basin size and relevance to the 1 % AEP storm event:

- Top of Bank Area = 33,900 m².
- 1 in 5 side slopes.
- 1 % AEP Peak Outflow = 7.6 m³/s (attenuated from 1 % AEP inflow of 20 m³/s).
- 1 % AEP Storage Depth = 4.33 meters.
- 1 % AEP Peak Flood Storage Volume = 109 ML.

The modelling also identified a constraint caused by the existing driveway crossing at Skene Street. The results indicated the existing 1200 mm diameter culvert had a capacity of approximately 3 m³/s where the majority of the excess flows would continue north and not within the Unnamed Tributary. As such, the storage works should also consider the need to upgrade this driveway culvert by adding at least 2 additional 1200 mm diameter pipes.

With these works combined, the flood mitigation benefits are significant for all events from the 20 % AEP to the 1 % AEP. **Appendix J** displays the resultant 1 % AEP flood depth afflux plan highlighting reductions of up to 200 mm along the Unnamed Tributary. The plan also indicates that at the Barwon River confluence a marginal increase to flood depths (11-15 mm) is predicted occur. This is likely as a result of the Skene Street culvert upgrade and the improved conveyance of flows within the Unnamed Tributary. As this afflux is limited to the Barwon River floodplain and does not affect existing dwellings, it was considered acceptable.

Should Council determine to pursue investigation of this option, the cultural heritage values will need to be determined with an assessment including field work before confirming the location for this asset.

6.4.4 Option 4 – Hopkins Street Pipe Diversion (F)

Option 4 consists of a 1500 mm drainage pipe diverting water from the Unnamed Tributary at Hopkins Street east towards the Barwon River. The goal of this diversion pipe is to convey medium – high flows which exceed the waterway's capacity downstream and contribute to the overbank flooding under existing conditions. The Unnamed Tributary offtake would be configured to allow low flows to continue within the Unnamed Tributary and high flows to enter the 1500 mm diameter pipe via a large grated pit. The 1500 mm drainage pipe is capable of conveying 6 m³/s in the 1 % AEP and assumes:

- 1 in 250 longitudinal slope.
- Minimum 600 mm cover.
- There is a need for pipe jacking for some sections of the alignment when depths to invert are as much as 10 meters.

Appendix J displays the resultant flood depth afflux with the implementation of this pipe diversion. As shown, consistent flood depth decreases of up to 100 mm are predicted to be achieved along the Unnamed Tributary.

6.4.5 Option 5 – Drainage Upgrades between Prime & Sladen Street (H)

The TUFLOW hydraulic model indicates that the existing 600 mm drainage pipes between Prime and Hopkins Street are approximately 50 % full for the 1 % AEP event. To achieve full pipe capacity and reduce flood impact / damage to residential

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properties in the area, an upgrade to the inlet pits capacity is proposed south of Prime Street and Hopkins Street between Beal Street and Strachan Street. Pits have been sized to provided sufficient inlet capacity to the 600 mm drainage pipes such that the system is flowing full for a 1 % AEP event.

The following provides a summary of the pit upgrades, considerations, and key assumptions for mitigation option 5:

- Upgrade pit inlet at low point of grassed swale fronting 11 Prime Street.
- Upgrade pit inlet at low point in grassed swale along the southern side of Hopkins street fronting 23 Hopkins Street.

Following initial model iterations, the modelling results identified:

- Increases to flood depth within private property in the 1 % AEP north east of the Strachan Street and Sladen Street intersection. This was due to an increase in flows surcharging from the pit immediately upstream of the Strachan Street pipe crossing.
- Approximately 0.6 m³/s of overland flows remains downstream of the pit upgrade in Prime Street in a 1 % AEP event.

Due to these findings new 750 mm / 900 mm diameter drainage pipes were included in the model to divert the flows in excess of the existing drainage system's capacity to the Unnamed Tributary at Sladen Street. These drainage upgrades assumed:

- Minimum 600 mm cover.
- Minimum 1 in 200 longitudinal grade, steepening to 1 in 30 at the intersection of Prime and Strachan Street to match the grade of Strachan Street.
- Only minor Council road works trenching, and traffic management required.

The resultant 1 % AEP flood depth afflux plan is displayed within **Appendix J**. As shown minor flood depth reductions up to 25 mm were obtained.

6.5 COST ESTIMATE OF MITIGATION OPTIONS

Table 6.2 presents high-level cost estimates for each of the selected mitigation works (excluding the Sladen Street Works). Direct construction cost estimates were derived from Melbourne Water's Development Services Scheme (DSS) costing spreadsheet (2019). The total capital costs have made an allowance for the indirect costs that are likely to be incurred by each option in addition to an overall 20 % contingency rate applied to the sum of the direct and indirect costs. The indirect cost was calculated with an allowance for the following items, presented as a percentage of the total direct cost:

- Site establishment, preparation & reinstatement costs, site supervision and administration fees (~16 % of direct cost).
- Site environmental and traffic management plans (~5 % of direct cost).
- Engineering / consultancy design fees (~15 % of direct cost).

These cost estimates and associated contingencies have not made an allowance for the outcomes which may arise following the completion of further investigations such as flora and fauna impact assessments, cultural heritage assessments and geotechnical assessments. The findings from these assessments may highlight the need for additional approvals and / or changes to the conceptual mitigation options presented and as such alterations to the cost estimates presented below would be required.

Table 6.2: Cost Estimate Mitigation Options

Mitigation ID	Description	Direct Cost	Indirect Cost	Total Capital Cost (Direct + Indirect) + 20 % Contingency)
1	Atkin Creek Waterway Widening	\$800,000	\$268,000	\$1,282,000 ⁶

⁶ Estimated capital cost has used standard typical rates for channel works. They are indicative only and subject to further investigation with consideration of the specific site's characteristics and constraints.

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Mitigation ID	Description	Direct Cost	Indirect Cost	Total Capital Cost (Direct + Indirect) + 20 % Contingency)
3	Unnamed Tributary Retarding Basin Upstream Ennis Street	\$4,100,000	\$1,374,000	\$6,569,000
4	Hopkins Street Pipe Diversion	\$2,262,000	\$758,000	\$3,624,000
5	Drainage Upgrade Between Prime & Sladen Street	\$861,000	\$289,000	\$1,380,000

6.6 AVERAGE ANNUAL DAMAGES COMPARISON

Table 6.3 provides a summary of the calculated damages for each event and modelling scenario. Table 6.4 presents the number of buildings flooded above floor level. Option 3 show the greatest reduction in flood damages and number of buildings flooded above floor level for the rare storm events (5 %, 2 %, and 1 % AEP) while Options 1 presents more benefit for frequent storm events (20 % AEP).

Table 6.3: Summary of Calculated Event Damages per Modelling Scenario and AEP Event

Scenario			AEP Event		
Scenario	20 %	10 %	5 %	2 %	1 %
Existing Conditions	1,316,613	2,543,329	\$3,662,597	\$5,664,210	\$6,576,244
Mitigation Option 1 – Atkin Creek Waterway Widening	\$840,426	\$2,111,347	\$3,165,858	\$4,774,976	\$5,652,573
Mitigation Option 3 – Unnamed Tributary Retarding Basin Upstream Ennis Street	\$1,128,227	\$2,035,684	\$2,871,438	\$4,208,873	\$5,015,312
Mitigation Option 4 – Hopkins Street Pipe Diversion	\$1,124,668	\$2,086,476	\$3,013,181	\$5,044,947	\$5,868,252
Mitigation Option 5 – Drainage Upgrade Between Prime & Sladen Street	\$1,294,050	\$2,543,329	\$3,335,470	\$5,660,166	\$6,521,980

Table 6.4: Number of Buildings Flooded Above Floor Level per Modelling Scenario and AEP Event

Occurrie .	AEP Event				
Scenario	20 %	10 %	5 %	2 %	1 %
Existing Conditions	5	7	9	23	26
Mitigation Option 1 – Atkin Creek Waterway Widening	2	4	7	20	22
Mitigation Option 3 – Unnamed Tributary Retarding Basin Upstream Ennis Street	4	5	6	13	17
Mitigation Option 4 – Hopkins Street Pipe Diversion	4	5	7	14	20
Mitigation Option 5 – Drainage Upgrade Between Prime & Sladen Street	4	7	8	23	25

Calculation of the contribution of each AEP to the total AAD for each modelled scenario was then undertaken via consideration of the calculated event damage and the likelihood of the flood event. As a result of this, the 1 % AEP contribution to AAD is generally less than the 10 % AEP, despite the 1 % AEP event predicting a larger number of buildings / larger extent of the

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roadways at risk of flooding. The total AAD per each modelling scenario was then calculated as the summation of each AEP's contribution to the AAD. Table 6.5 provides a summary of the calculated AAD for each modelled scenario.

The Atkin Creek water widening option (Option 1) presents the largest cost savings, approximately \$170,000 / year, followed by the Unnamed Tributary Retarding Basin option (Option 3) at approx. \$144,000 / year. The Hopkins Street pipe diversion (Option 4) presents moderate AAD benefits, approx. \$115,000 / year, and the drainage upgrades between Prime and Sladen Street (Option 5) shows only minor benefits, approx. \$18,000 / year.

Table 6.5: Estimated AAD per Model Scenario

Scenario	AAD (\$ / year)	Reduction in AAD (\$ / year)
Existing Conditions	\$746,741	-
Mitigation Option 1 – Atkin Creek Waterway Widening	\$576,833	\$169,908
Mitigation Option 3 – Unnamed Tributary Retarding Basin Upstream Ennis Street	\$602,433	\$144,308
Mitigation Option 4 – Hopkins Street Pipe Diversion	\$632,187	\$114,554
Mitigation Option 5 – Drainage Upgrade Between Prime & Sladen Street	\$728,792	\$17,949

6.7 HIGHLEVEL MULTI-CRITERIA ASSESSMENT

Table 6.5 presents the high-level multi-criteria assessment for each mitigation option considering the tangible criteria such as the calculated AAD result and the capital cost in addition to the following non-tangible considerations for each option:

- Social impacts / benefits including:
 - Disruption to private properties / public open spaces.
 - Disruption to major / minor roads.
 - changes to flooding for vulnerable properties.
- Environmental impacts / benefits including:
 - Vegetation removal / potential disturbance to habitats.
 - Stormwater harvesting opportunity.
- Constructability considerations including:
 - Existing services.
 - Land acquisition requirements.
- Risks including:
 - Risk of worsening flooding conditions.
 - Propensity for ongoing maintenance / design issues.

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Table 6.6: Multi-Criteria Assessment for Selected Mitigation Options

Mitigation ID	Description	AAD Result (\$ / year)	AAD Reduction (\$ / year)	Total Capital Cost	Social and Cultural Impact / Benefit	Environmental Impact / Benefit	Constructability	Risks
1	Atkin Creek Waterway Widening	\$576,833	\$169,908	\$1,282,000	 Medium disruption to public open spaces as works are maintained within Council owned land or road reserve. Some disruption to Scouller Street likely. Benefits several properties currently subject to above floor level flooding in all storm events between 20 % to 1 % AEP Potential impact to areas of cultural heritage significance – Cultural Heritage Management Plan (CHMP) would be required 	 Disruption to existing environmental values provided by vegetation within Atkin Creek Habitat disturbance and potential impact to vulnerable species within waterway. A flora and fauna impact assessment would need to be conducted prior to any works to understand feasibility Potential for the vegetation removed to be reinstated / carefully established with appropriate management plans 	 Widening works do not include the deepening of the existing Atkin Creek invert and as such clashes with existing underground services is reduced. No additional land acquisition required 	 Increase to flood depths identified however afflux area is contained to the Barwon River Floodplain where no existing dwellings are present.
3	Unnamed Tributary Retarding Basin Upstream Ennis Street	\$602,433	\$144,308	\$6,569,000	 Disruption limited to farmland and driveway upgrade at 48 Skene Street Potential impact to areas of cultural heritage significance – Cultural Heritage Management Plan would be required 	wetland / stormwater	Land acquisition required	 Dependent on further investigations into design arrangement, RB likely to have inherent risk such as embankment failure.
4	Hopkins Street Pipe Diversion	\$632,187	\$114,554	\$3,624,000	heritage significance – CHMP would be required	 Removal of vegetation required within the Unnamed Tributary offtake location in addition to Barwon River outlet. Potential for habitat disturbance with vegetation removal A flora and fauna impact assessment would be required 	 Depth of Trenching and need to bore a section of the 1500 mm diameter pipe 	 Potential maintenance burden associated with pipe offtake and weir pit arrangement within the Unnamed Tributary to ensure low flow bypass functions as intended.
5	Drainage Upgrade Between Prime & Sladen Street	\$728,792	\$17,949	\$1,380,000	 Disruption to use of Prime Street and along Strachan Street Potential impact to areas of cultural heritage significance – CHMP would be required 	-	-	-

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7 STORMWATER TREATMENT ASSESSMENT

7.1 PURPOSE

Future development of Birregurra (informed by the Birregurra Structure Plan) poses potential risks to the environmental values of receiving waterways (Atkin Creek, Unnamed Tributary and Barwon River) if the stormwater quality from new developments is not appropriately considered and managed. There is also an opportunity to improve the stormwater quality from existing development to enhance the health of the Barwon River and local waterways.

Due to a new development's increased impervious fraction, additional pollutant loads are generated. Under legislative requirements, new developments are required to implement Water Sensitive Urban Design (WSUD) assets which treat the stormwater generated to meet a set of pollutant load reduction targets. These are referred to in the Commonwealth Scientific and Industrial Research (CSIRO) Urban Stormwater Guidelines (CSIRO, 1999) as the Best Practice Environmental Management Guidelines (BPEMG) targets and consist of an:

- 80 % reduction of Total Suspended Solids (TSS).
- 45 % reduction of Total Phosphorus (TP).
- 45 % reduction of Total Nitrogen (TN).
- 70 % reduction of Gross Pollutants (GP).
- Retention of flows to pre-development 1.5 year Average Recurrence interval (ARI) pre-development.

Birregurra is an established regional residential town with few vacant lots but significant opportunity for subdivision and densification as identified in the Birregurra Structure Plan. Due to these characteristics, the current planning of WSUD assets is challenging due to the need to retrofit drainage assets and the associated physical land constraints. Although the exact location of WSUD assets is uncertain, Engeny has undertaken this stormwater treatment assessment to provide Council with initial guidance on the type / extent of WSUD assets which could be considered given the predicted increase in stormwater runoff. The outcomes of this investigation could be used to inform the future planning for growth and could also be considered in the next revision of the Birregurra Structure Plan. The assessment has specifically:

- Identified the wetland asset footprint area which would be required to meet the pollutant load removal targets for the predicted increase in impervious area from future development.
- Assessed the benefits and practicality of incorporating street-scale bio-retention basins and lot-scale rainwater tanks.
- Assessed the benefits of sealing the roads within Birregurra.

7.2 METHODOLOGY

Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software has been used to assess the pollutant loads generated from the Birregurra township and the resultant removal rates achieved through the implementation of various WSUD treatment assets. The following provides a summary of the methodology and assumptions adopted:

- 1. Calculate the increased impervious area for future developed conditions considering the zoning, classification areas and associated minimum lot sizes outlined within the Birregurra Structure Plan (discussed Section 7.3).
- Include these areas as 'Urban Source Nodes in the MUSIC model to estimate the pollutant loads generated (Total Suspended Solids, Total Nitrogen, Total Phosphorus and Gross Pollutants) from the predicted total additional impervious area.
- 3. Calculate the pollutant loads (kg / year) which need to be removed to achieve the BPEMG targets.
- 4. Add a wetland treatment node assuming it is located at the downstream end of the Unnamed Tributary within the Barwon River floodplain with its catchment being the entire Birregurra township.
- 5. Size wetland to achieve BPEMG targets for the additional impervious area (calculated in Step 3).
- 6. Assess additional pollutant loads which would be removed through the implementation of 3 KL rainwater tanks.
- 7. Assess the pollutant load removal benefits which would be achieved through the implementation of a street-scale bioretention basin and factor up to determine the total treatment area which would be required to meet BPEMG targets.



8. Assess pollutant loads generated from unsealed road surfaces and the reduction of pollutants which could be achieved by sealing the roads within the township.

The water quality modelling has been undertaken in accordance with Melbourne Water's updated *MUSIC Guidelines* (2018) where the following parameters and assumptions were adopted in the general model set-up:

- 10-year 6-minute rainfall data (2000-2010) from the Winchelsea (post office) station dataset was extracted from the eWater online portal. This data contained an Average Annual Rainfall of 410 mm.
- Average annual Potential Evapotranspiration (PET) of 1059 mm extracted.
- Soil Storage = 120 mm and Field Capacity = 50 mm.
- Fraction Impervious values displayed in Table 7.1 for each land use.

These fraction impervious values were informed by the typical recommended ranges provided within Melbourne Water's MUSIC guidelines (2018). Due to the regional residential characteristics of Birregurra the road fraction impervious was assumed to be slightly lower than the standard range of 0.5-0.8 which are more representative of a paved kerb and channel road arrangement. The lower density residential areas have also been classified into allotment sizes to achieve a better representation of existing conditions. These values were interrogated against the township's aerial photography. Although the Infrastructure Design Manual (IDM) is Council's engineering guide, it only outlines recommended runoff coefficients for the various lot sizes which is calculated using both the fraction impervious and rainfall insensitivity. Given the rainfall intensity can vary when undertaking MUSIC modelling, the MUSIC guidelines and interrogation of aerial photography was considered an appropriate approach.

Land Use	Allotment Size (m ²)	Adopted Fraction Impervious	MUSIC Guidelines Recommended Fraction Impervious Range
Road	-	0.45	0.50 - 0.80
Open Space	-	0.05	0.00 - 0.20
Commercial	-	0.80	0.70 - 0.90
General Residential	300 - 600 m²	0.75	0.70 – 0.80
	600 - 1,000 m²	0.60	0.50 - 0.80
Low Density Residential	1,000 - 1,200 m²	0.55	0.10 – 0.30
	1,200 - 1,400 m²	0.50	0.10 – 0.30
	1,400 - 1,600 m²	0.45	0.10 – 0.30
	1,600 - 2,100 m ²	0.40	0.10 - 0.30
	2,100 - 8,000 m ²	0.20	0.10 – 0.30
	> 8,000 m²	0.15	0.10 – 0.30

Table 7.1: Fraction Impervious Values Adopted in MUSIC Model

7.3 PREDICTED FUTURE DEVELOPMENT AREA

Assumptions were made to estimate the predicted increase in impervious area as a result of future development within Birregurra. This was required in order to determine the target pollutant loads which should be removed to achieve the BPEMG targets.

The Birregurra Structure Plan outlines the identified character areas and associated minimum single and multi-unit dwelling lot sizes for each character area as displayed in Figure 7.1 and Table 7.2 respectively. In conjunction with this information the following assumptions were also used to estimate the increased impervious area:

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- Existing developed lots within Birregurra were summed for each character area and assumed to subdivide into the relevant single dwelling lot size value for each relevant character area.
- Existing undeveloped lots within Birregurra were summed for each character area and assumed to develop into the relevant minimum multi-unit lot size value (except character areas D and E where the single dwelling lot size value was used). For character areas D and E some increase in impervious fraction is possible given that the existing level of development is below guideline values.
- Existing undeveloped lots zoned with a commercial land use were assumed to develop with an 80 % impervious fraction under future developed conditions. This lies within MUSIC's recommended range and aims to more closely reflect the level of development which would be likely within the regional residential town of Birregurra based on aerial photography.

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Figure 7.1: Birregurra Structure Plan Preferred Character Areas

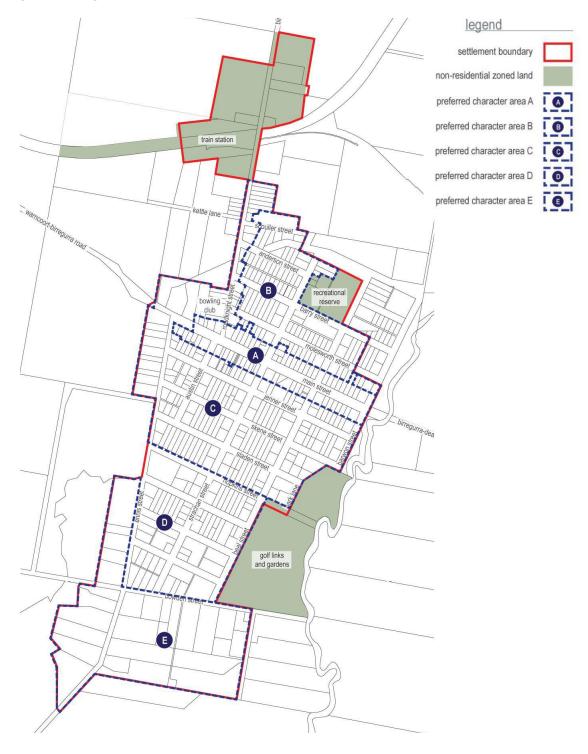




Table 7.2: Proposed Subdivision for Preferred Character Areas

Character Area	Min. lot size single dwelling (m ²)	Min. lot size multi-unit dwelling (m ²)
A	1,000	500
В	700	500
С	1,000	600
D	1,000	discouraged
E	4,000	discouraged

Table 7.3 summarises the estimated increased impervious areas for Birregura based on the assumptions made under the predicted fully developed conditions. The table also displays the percentage increase from existing conditions.

	Increase in Impervious Area (ha)			% Impervious Area Increase from Existing Conditions		
Character Area	Existing Developed Residential	Existing Undeveloped Residential	Existing Undeveloped Commercial	Existing Developed Residential	Existing Undeveloped Residential	Existing Undeveloped Commercial
A	0.28	0.22	0.08	6.9 %	70.0 %	4 %
В	0.95	2.08	0.00	10.8 %	64.3 %	0 %
С	5.21	5.53	0.60	22.0 %	70.0 %	33 %
D	3.18	2.52	0.00	26.6 %	55.0 %	0 %
E	0.89	1.23	0.00	3.5 %	15.0 %	0 %
Total	10.51	11.58	0.68	14.3 %	47.8 %	16.0 %

Table 7.3: Predicted Increase in Impervious Area from Future Development

7.4 POLLUTANT REMOVAL TARGETS

The increased residential and commercial impervious areas presented in Table 7.3 were modelled in MUSIC to determine the resultant mean pollutant loads generated. Table 7.4 summarises these pollutant loads in addition to the target pollutant removal loads required to meet the BPEMG reduction targets.

Table 7.4: Pollutant Removal Targets for Birregurra Township

Pollutant	Pollutant Load generated from Increased Impervious Area (kg / year)	Target Pollutant Load requiring removal to achieve BPEMG Target (kg / year)	% BPEMG Pollutant Reduction Target
Total Suspended Solids (TSS)	13,590.0	10,872.0	80 %
Total Phosphorus (TP)	21.8	9.8	45 %
Total Nitrogen (TN)	161.0	72.4	45 %
Gross Pollutants (GP)	2,968.5	2,078.0	70 %

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7.5 WETLAND ASSET FOOTPRINT

End of drainage line WSUD treatment assets such as wetlands reduce Council's long-term maintenance cost. Following discussions with Council, a consolidated wetland at the Unnamed Tributary's confluence to the Barwon River was modelled and sized. At this location it is noted that the land where the wetland is indicatively positioned is flood prone and as such future residential development is constrained and limited. The location also provides an opportunity to integrate a stormwater harvesting system which could provide an alternative water source for the irrigation of the oval located on the west.

The following assumptions were made during the sizing of the wetland asset in relation to its function and size:

- Contributing catchment area from the Unnamed Tributary consisting of:
 - township Area = 113.8 ha (Weighted Fraction Impervious = 0.44).
 - Upstream Agricultural Area = 417.3 ha (Weighted Fraction Impervious = 0.05).
 - Given its current assumed location there is also an opportunity for the wetland asset to receive some low flows from Atkin Creek if required. Although, future development within the contributing Atkin Creek catchment, is expected to be somewhat minor when compared to the Unnamed Tributary's catchment.
- Wetland Treatment Area = 9,000 m².
- Wetland Permanent Pool Volume (PPV) = 3,600 m³.
- Sediment Inlet Pond Area = 1,600 m².
- Sediment Inlet Pond Volume = 1,450 m³.
- Sediment Drying Area = 1,785 m².
- Extended Detention Depth = 0.35 m.
- Low Flow Bypass = 0.7 m³/s (50 % Q3-month remains within creek).
- High Flow Bypass = 6.9 m³/s (flows in excess of 20 % AEP bypass into creek).

The total wetland asset footprint was estimated at approximately 22,500 m². This area considers:

- The wetland and sediment inlet pond treatment areas and associated 1 in 5 battering.
- The predicted sediment drying area.
- A 25 % increase to allow for the terrain shaping associated with the wetland's bathymetry.
- A 10-metre buffer surrounding the total treatment and drying area to allow for a maintenance access track and associated 1 in 5 battering.

This estimated wetland footprint and part of its contributing catchment area is displayed below in Figure 7.2.

Based on these inputs, the MUSIC results shown in Table 7.5 were obtained. As shown when considering the pollutant source generated from the additional impervious area only and the total pollutant removed with the wetland asset, the BPEMG reduction targets are achieved.

Table 7.5: MUSIC Treatment Effectiveness of Wetland Asset

Pollutant	Pollutant Source from Additional Impervious Area	Pollutant Load Removed with Wetland Asset	% Reduction Achieved
Total Suspended Solids (kg/yr)	13,590.0	17,900.0	> 100 %
Total Phosphorus (kg/yr)	21.8	16.1	74.0 %
Total Nitrogen (kg/yr)	161.0	87.0	54.0 %
Gross Pollutants (kg/yr)	2,968.5	2,240.0	75.5 %

It is important to note that if the location of the wetland asset is not deemed suitable through the future planning and revision of the Birregurra Structure Plan, in order to achieve the treatment effectiveness required the following needs to be ensured:

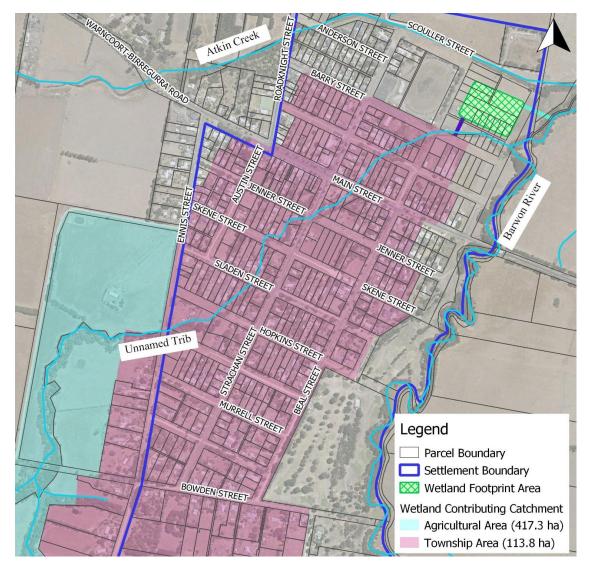
 The wetland cannot be located at the upstream end of the township and should at least have a contributing 20-hectare township catchment area.

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- Modifications to the low flow bypass in addition to the high flow bypass should be considered.
- MUSIC modelling should be revised with the updated contributing catchment area to confirm the resultant treatment effectiveness.

Figure 7.2: Wetland Footprint and Contributing Catchment Area





7.6 BENEFITS OF LOT-SCALE RAINWATER TANKS

Rainwater tanks are a lot-scale, at source stormwater quality treatment measure. They can provide multiple benefits including reducing the mean annual load of pollutants discharging into receiving environments and providing a valuable reuse alternative to potable water for toilet flushing, use in laundries and garden irrigation.

A MUSIC model was developed to quantify the additional pollutant load reductions that could be achieved with the installation of rainwater tanks in conjunction with the wetland asset sized above.

The following outlines the assumptions adopted within the MUSIC model:

- The calculated sum of the identified undeveloped lots for each character area was divided by the relevant minimum multiunit single dwelling lot size to calculate the number of lots. Each of these lot's roof areas was assumed to connect to 3KL rainwater tank. Although Section 7.3 also predicts the existing developed residential areas could also be further developed and subdivided into the identified minimum single dwelling lot size, these developments were not assumed to have connected rainwater tanks.
- Each lot's roof area was assumed to equal 80 % of the lot's impervious area (this percentage of roof area assumes the additional 20 % of imperviousness would be associated with driveways and paved areas).
- Daily reuse demand per person = 20 L/person/day (sourced from the Australian Government's Your Home online resource for Toilet Flushing demand).
- Number of people per household = 2.4 (sourced from the 2016 Census Data).

By adopting these assumptions for each character area within the previously sized wetland's contributing area, the MUSIC results presented within Table 7.6 were obtained. As shown, this would increase the % reduction achieved when compared to the scenario without rainwater tanks and potentially justify the reduction in the wetland area required to meet the BPEMG targets.

Pollutant	Pollutant Source from Additional Impervious Area	Pollutant Load Removed with Wetland Asset and 3KL Rainwater Tanks	% Reduction Achieved
Total Suspended Solids (kg/yr)	13,590.0	18,119.0	> 100 %
Total Phosphorus (kg/yr)	21.8	16.8	77.0 %
Total Nitrogen (kg/yr)	161.0	96.7	60.1 %
Gross Pollutants (kg/yr)	2,968.5	3,228.0	> 100 %

Table 7.6: MUSIC Treatment Effectiveness of 3KL Rainwater Tanks

Based on the results presented within this section, Council could consider the implementation of planning provisions/ subdivision policies to mandate the need for a rainwater tank particularly given the likely reduction to the required wetland asset footprint. Given that most of the town is already developed, other incentive schemes could be considered with Barwon Water to explore opportunities to encourage property owners to install water tanks.

7.7 BENEFITS OF STREET-SCALE BIORETENTION ASSETS

The treatment effectiveness of a single street-scale bioretention asset was assessed. The following was assumed:

- Single Bioretention Treatment Area = 100 m².
- Extended Detention Depth = 0.35 m.
- Filter Media Depth = 0.5 m.
- Contributing Catchment Area = 1.35 ha.
- Contributing Catchment Weighted Fraction Impervious = 0.6.

With a single asset and contributing catchment area of this size, the MUSIC treatment effectiveness displayed within Table 7.7 was obtained.



Table 7.7: MUSIC Treatment Effectiveness of Single Bioretention Asset

Pollutant		Pollutant Load Removed with Single 100 m ² Bioretention Asset	
Total Suspended Solids (kg/yr)	1,980.0	1,890.1	95.5
Total Phosphorus (kg/yr)	1.3	0.9	67.6
Total Nitrogen (kg/yr)	6.8	4.2	61.0
Gross Pollutants (kg/yr)	140.0	140.0	100.0

The asset area was factored up to estimate the treatment area required to meet the township's BPEMG targets assuming the same contributing catchment area characteristics. This resulted in the following areas in order to achieve the treatment effectiveness summarised in Table 7.8:

- Estimated Total Bioretention Treatment Area = 1740 m².
- Estimated Total Contributing Catchment Area = 23.66 ha.

Although this arrangement would meet the BPEMG targets, the following factors should also be considered:

- Although a bioretention treatment area greater than 100 m² could be implemented, guidelines recommend the contributing catchment area should be less than 5 hectares.
- If approximately 17 assets with treatment areas of 100 m² each are implemented an increased reliance on maintenance would be required.

Table 7.8: MUSIC Treatment Effectiveness of Bioretention Assets

Pollutant	Pollutant Source from Additional Impervious Area	Pollutant Load Removed with multiplied Bioretention Assets	% Reduction Achieved
Total Suspended Solids (kg/yr)	13,590.0	32,887.7	> 100 %
Total Phosphorus (kg/yr)	21.8	14.9	68.6 %
Total Nitrogen (kg/yr)	161.0	72.6	45.1 %
Gross Pollutants (kg/yr)	2,968.5	2,436.0	82.1 %

7.8 BENEFITS OF SEALED ROADS

The Birregurra township consists mostly of unsealed roads which can result in the generation of increased sediment and pollutant loads. MUSIC enables users to simulate the difference in pollutants generated from sealed versus unsealed roads to identify the benefits of potentially formalising the road network. Table 7.9 presents this comparison when assuming all roads within Birregurra become sealed. The results highlight that the sealing of roads reduces the TSS load by up to 73 % with minor decreases to the nutrient load as well.

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Table 7.9: MUSIC Treatment Effectiveness of Sealed Roads

Pollutant	Pollutant Source from Unsealed Roads	Pollutant Source from Sealed Roads	% Reduction Achieved
Total Suspended Solids (kg/yr)	56,300.0	15,000.0	73.4 %
Total Phosphorus (kg/yr)	25.6	25.5	0.4 %
Total Nitrogen (kg/yr)	107.0	104.0	2.8 %
Gross Pollutants (kg/yr)	2,190.0	2,190.0	0.0 %

7.9 OTHER CONSIDERATIONS

Other treatment measures which could also be considered are Gross Pollutant Traps (GPT). They are considered a primary treatment measure which can remove TSS and GPs. They can be installed to:

- Treat wetland asset inflows to reduce Council's long-term maintenance requirements in the wetland asset.
- Treat otherwise untreated outflows to the waterways to ensure the receiving waterways are protected from excessive sediment and gross pollutant loads.

These have not been included in the modelling undertaken as GPT's cannot claim nitrogen removal which is typically the pollutant which dictates the treatment areas required. It is also worth noting the GPTs have their own maintenance requirements and are ineffective if not maintained regularly.

7.10 COST ESTIMATE OF WSUD ASSETS

Standard rates sourced from Melbourne Water's DSS spreadsheet were used to inform the estimated capital cost of the wetland asset and bioretention assets discussed above. The following contingencies were applied to the capital cost estimates summarised within Table 7.10:

- Indirect costs calculated based on:
 - Site establishment, preparation & reinstatement costs, site supervision and administration fees (~16 % of direct cost).
 - Site environmental and traffic management plans (~2.5 % of direct cost).
 - Engineering / consultancy design fees (~15 % of direct cost).
- Additional 20 % contingency applied to the sum of Direct and Indirect Costs to account for potential changes during detailed/ construction phase.

Although these contingencies have made some allowance for uncertainties in the design of the proposed WSUD further investigations including flora, fauna, geotechnical and cultural heritage assessments will be required to confirm the feasibility and approvals required. These investigations and their outcomes may significantly increase the cost estimates presented in Table 7.10.

The table below also provides an estimate of the ongoing maintenance costs utilising the standard rates provided within the WSUD Life Cycle Costing Data Analysis Report prepared by Parsons Brinckerhoff for Melbourne Water (2013).



Table 7.10: WSUD Asset Cost Summary

Item Allowance	Cost
WETLAND CAPITAL COST	
Planting and Earthworks (Sediment Inlet Pond & Wetland Treatment Area)	\$1,666,700
Litter Trap / GPT	\$71,500
High flow Bypass	\$6,800
Outlet Control Structure	\$70,500
Total Direct Cost	\$1,816,000
Total Indirect Cost	\$609,000
TOTAL (including direct and indirect cost) + 20 % contingency	\$2,910,000
WETLAND ONGOING MAINTENANCE COST	\$20,000 / year
BIORETENTION CAPITAL COST	\$2,180,000
BIORETENTION ONGOING MAINTENANCE COST	\$26,000 / year

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8 PLANNING OVERLAYS AND CONTROLS

8.1 BACKGROUND

Flood related planning controls are applied in Council's Planning Scheme through the use of designated planning overlays. These are used to ensure flood risks are appropriately considered as part of any development of flood prone land. The strategy has identified that the existing flood planning controls in the Colac Otway Planning Scheme for Birregurra do not sufficiently identify flood prone land and therefore are not effectively informing decisions about development. In contrast to the construction of structural mitigation works, planning controls are one of the most cost-effective means of reducing the community's flood risk by:

- Encouraging people to, where possible, avoid development on flood-prone land.
- Minimising the potential impacts on existing flood-prone developments by raising floor levels of proposed habitable buildings and ensuring the development does not increase the risk of flooding on other properties.

As part of this study planning controls for a series of flood overlays were developed using the design 1 % AEP flood mapping outputs. Draft planning maps and associated schedule documentation has been prepared and is suitable for amendments to the Colac Otway Planning Scheme, to update and replace the existing flood controls currently covering parts of the Birregurra township.

There are three main planning controls to identify flood prone land within the Victorian Planning Provisions: the Floodway Overlay (FO), the Land Subject to Inundation Overlay (LSIO); and the Special Building Overlay (SBO). Their purpose reflects different levels of flood risk. Details of the relevant overlays proposed, and their significance is provided within the sections below. Refer to **Appendix K** for the associated parent clause which should be read in conjunction with the details provided below and the draft planning schedule documentation included as **Appendix L**.

8.1.1 Floodway Overlay (FO)

The FO applies to active flood paths including waterways, significant depressions and areas associated with high hazard. The FO can sometimes be identified as land conveying active flood flows or the high hazard portion of the floodplain and as such new development in these areas is quite restricted. The purpose of the FO is as follows:

- To identify waterways, major flood paths, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding.
- To ensure that any development maintains the free passage and temporary storage of floodwater, minimizes flood damage and is compatible with flood hazard, local drainage conditions and the minimization of soil erosion, sedimentation, and silting.
- To reflect any declarations under Division 4 of Part 10 of the Water Act, 1989 if a declaration has been made.
- To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).
- To ensure that development maintains or improves river and wetland health, waterway protection and floodplain health.

8.1.2 Land Subject to Inundation Overlay (LSIO)

The LSIO identifies land which is flood affected by overland flow, areas contributing to the floodplains storage or areas fringing a FO. Development and works proposed within an LSIO require a planning permit where the subsequent planning controls are imposed which are intended to ensure the development:

- Maintains unobstructed passage of floodwaters.
- Maintains flood storage.
- Minimises flood damage to proposed building footprints.
- Considers flood hazard and local drainage conditions.
- Does not increase flood levels or velocities on surrounding properties.

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The LSIO planning controls imposed through planning permits are similar to those imposed with Special Building Overlays (SBOs). The key difference is the mechanism of flooding and the LSIO and FO directly relate to flooding associated with waterways or runoff from rural land.

The LSIO produced for Birregurra covers flooding along the Atkin Creek and Unnamed Tributary waterways in addition to local minor tributaries which originate from the rural farmland west of the township boundary. The purpose of the overlay is to:

- To identify land in a flood storage or flood fringe area affected by the 1 in 100-year flood or any other area determined by the floodplain management authority.
- To ensure that development maintains the free passage and temporary storage of floodwaters, minimizes flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- To reflect any declaration under Division 4 of Part 10 of the Water Act, 1989 where a declaration has been made.
- To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).
- To ensure that development maintains or improves river and wetland health, waterway protection and floodplain health.

8.1.3 Special Building Overlay (SBO)

The proposed draft planning overlays produced for Birregurra include two key flow paths that have been included in the SBO extent as these areas are located within urbanized areas of the township where flooding is attributed to the lack of capacity in the underground drainage system to convey stormwater.

Current industry practice requires the consideration of both major and minor stormwater flows where in addition to conveying minor flows within underground drains, new developments also need to consider the conveyance of major flows resulting from the 1 % AEP event and in excess of the underground drainage capacity (gap flow). These flows are typically conveyed within road reserves and easements. In areas which are well established, such as Birregurra this allowance within development areas and drainage infrastructure has not been made due to differences in the now outdated industry standards and drainage guidelines. Many developments pre-date the introduction of industry standards or the drainage guidelines of the time did not adequately consider the conveyance of overland major flows. The SBO is a way to identify areas where overland flow paths exist. The defined SBO flow paths are included to ensure future developments covered by the overlay consider the flow path and meet the planning controls to manage flood risk.

8.2 EXISTING OVERLAYS AND PLANNING CONTROLS

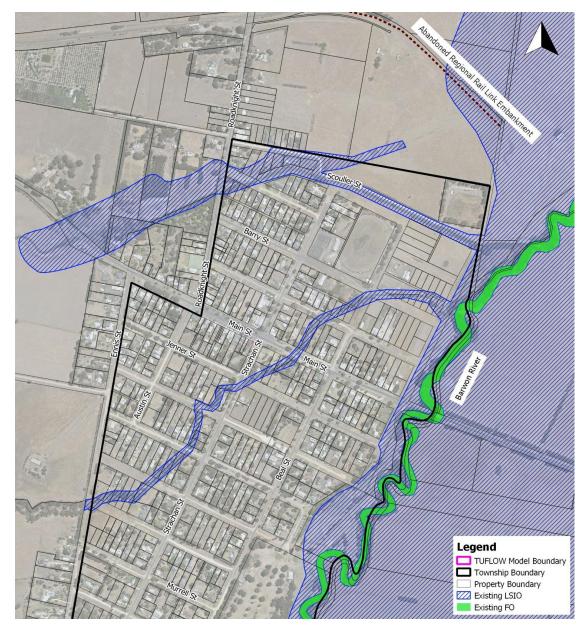
In the Colac Otway Planning Scheme, an existing LSIO covers sections of Atkin Creek and the Unnamed Tributary waterways in addition to the Barwon River floodplain. An existing FO covers the Barwon River waterway. These overlay extents are proposed to be replaced with the 1 % AEP extents delineated as part of this study and discussed within Section 8.3. Figure 8.1 displays the existing overlays which will be replaced on the west of the Barwon River FO and south of the abandoned regional rail link embankment.

Suggested amendments to the existing planning controls for the LSIO and FO have also been provided as part of this study's scope.

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Figure 8.1: Existing Birregurra Overlays



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8.3 DRAFT OVERLAY DELINEATION

Figure 8.2 displays the study's proposed draft overlays. The following sections provide a summary of the criteria and approach used to define the extent of each overlay type which have been discussed and agreed upon with Council and CCMA.

8.3.1 FO Delineation

The following approach was adopted to define the draft FO extent within the Birregurra township:

- The vehicle hazard criterion derived from ARR's 'Project 10: Stage 2 Appropriate Safety Criteria for Vehicles' report (ARR, 2011) was adopted. It was used as the initial cutoff and was applied directly to the relevant 1 % AEP Monte Carlo flood mapping output grids used to define critical flooding along Atkin Creek and the Unnamed Tributary;
 - a) Depth greater than 0.3 m.
 - b) Velocity greater than 3 m/s.
 - c) Hazard (Depth times Velocity) greater than 0.3 m²/s.
- 2. The extent was smoothed using the Feature Manipulation Engine (FME).
- Judgement calls to exclude isolated areas of flooding from the FO not within the main flow path were made with areas less than 1000 m² and transferred to the LSIO layer discussed below.
- 4. Small 'high' islands within the flood extent were included within the FO. Even though these areas are dry they still represent a significant flood hazard with the loss of safe access and egress.

8.3.2 LSIO Delineation

The following approach was adopted to define the draft LSIO extent within the Birregurra township:

- 1. The 1 % AEP Monte Carlo flood depth and critical durations source grid was used to inform the initial flood extent associated to flooding from the waterways only.
- 2. This extent was smoothed using the Feature Manipulation Engine (FME) with no flood depth filter applied.
- Manual manipulation was undertaken to ensure the delineation of the smoothed LSIO focused on flooding associated to the waterways and rural flow paths only. This manipulation was informed by velocity vectors, flood level contours and engineering judgement calls including:
 - a) Removal of isolated areas of flooding less than 100 m².
 - b) Filling in of small 'high' islands within the flood extent. Even though these areas are dry they still represent a flood hazard with the loss of safe access and egress.
 - c) Joining of flow paths particularly where flows overtop roads to capture very shallow sheet flows which were originally filtered out through results processing functions.
 - d) Judgement calls to remove portions of the LSIO extent which cover less than 2 % of a property parcel where appropriate.
- 4. Removal of designated FO extent from LSIO extent.

8.3.3 SBO Delineation

The following approach was adopted to define the draft SBO extent within the Birregurra township:

- 1. A 50 mm filter was applied to the raw 1 % AEP flood depth grid.
- 2. The filtered extent was smoothed using the Feature Manipulation Engine (FME).
- 3. The SBO flow paths were manually manipulated using velocity vectors and flood level contours to ensure continuous flow paths. This included:
 - a) Removal of isolated areas of flooding less than 100 m².
 - b) Filling in of small elevated dry islands within the flood extent.
 - c) Joining of flow paths particularly where flows overtop roads to capture very shallow sheet flows which were originally interpolated out through results processing functions.

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- d) Judgement call to remove portions of the LSIO extent which cover less than 2 % of a parcel where appropriate.
- 4. Connection of SBO flow paths into the associated waterway / LSIO extent.

8.3.4 Additional Adjustments to Overlays

Following a review by Council of the overlays produced in line with the above criteria, it was noted that there were numerous examples where small areas of land titles were partially impacted by the proposed FO, LSIO or SBO extents. Meetings between the CCMA and Council established a framework where these slivers of overlays could be removed. These included:

- where the overlays encroached into less than 20 m² of a property,
- where the overlay was located at the corner / edge of the front boundary of a property, and access to that property did not require access into a roadway that was abutting a Flood Overlay (to ensure safe escape routes and emergency response access).

The entire FO, LSIO and SBO mapping extents were examined in detail using these parameters, and a conservative approach was taken in reducing the overlay extent. Where land was removed from the FO mapping, it was replaced with the LSIO.

8.4 OVERLAY DOCUMENTATION

The following planning schedules are proposed as part of this study:

- Introduction of new SBO with schedule.
- Adoption of LSIO and FO schedules for Birregurra which are the same as the current C90 planning scheme amendment for Colac.

The defined 1 % AEP flood levels and other modelling outputs have also been provided to Council in order to inform development advice particularly the declaration of flood levels following the implementation of the proposed planning scheme amendment.

The draft overlays documentation is contained within Appendix L.

8.5 CLIMATE CHANGE CONSIDERATIONS

Following the 1 % AEP climate change mapping and discussion presented within Section 4.5.2, an assessment was undertaken to determine how the delineated planning overlays would differ if these climate change mapping outputs were utilised.

Figure 8.3 displays the planning overlays based on the 1 % AEP climate change outputs. Table 8.1 provides a comparison of the number of properties covered by each of the proposed overlays when current and future climate change conditions are considered. This identified that the key difference would be the delineation of the FO extent and the subsequent increase to the number of properties covered by both the LSIO and FO extents. Table 8.1 provides a comparison of the number of properties covered by each of the proposed overlays when current and future climate change conditions are considered. Given these differences were not considered significant and to maintain consistency with current State Government policy on riverine flooding and the recently produced Colac township overlays, the final Birregura overlays have been based on current climate conditions.

The table also highlights the number of properties captured by the existing overlays and how this insufficiently captures all properties affected by flooding due to the now outdated but previously best available data and modelling approaches.

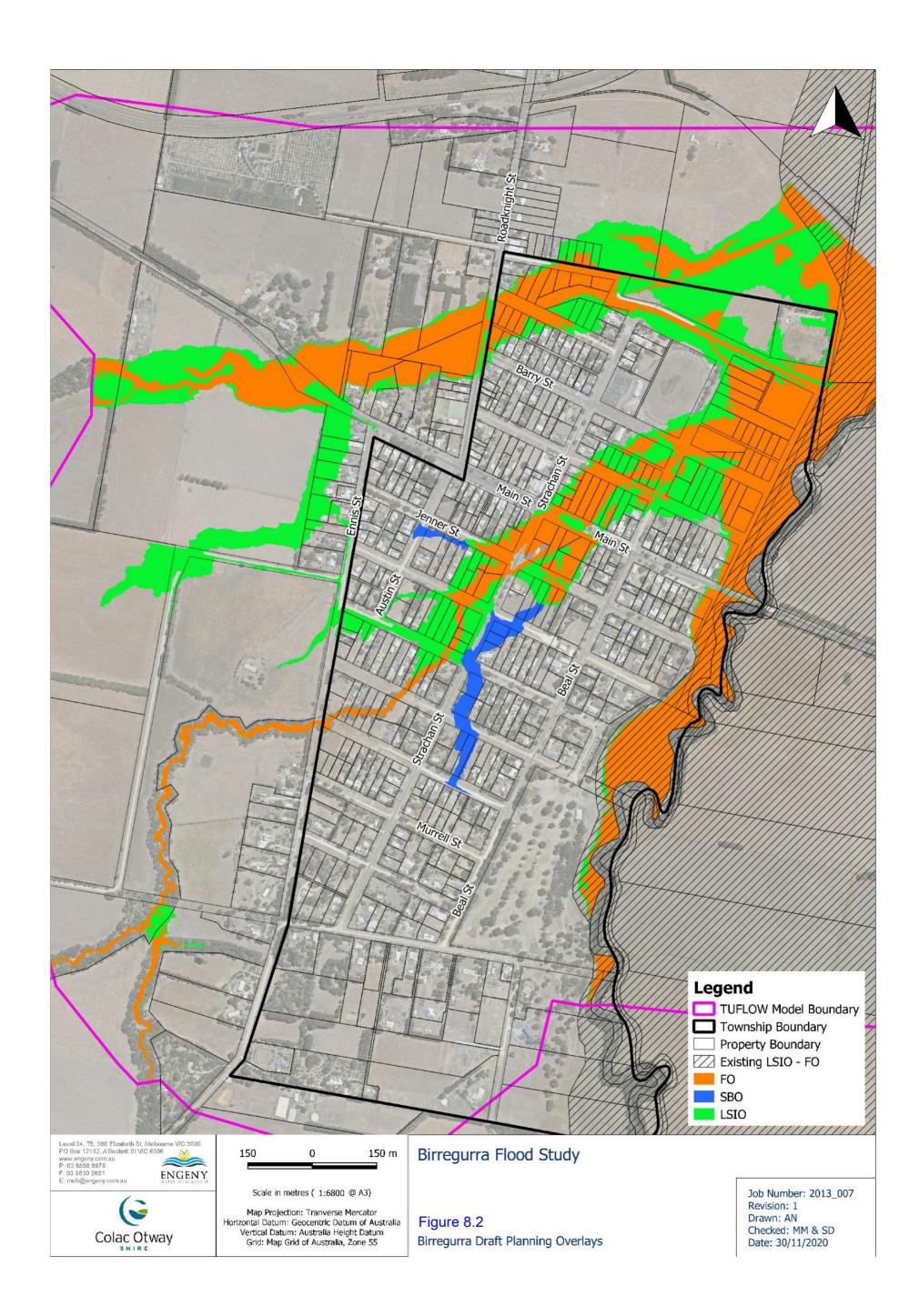
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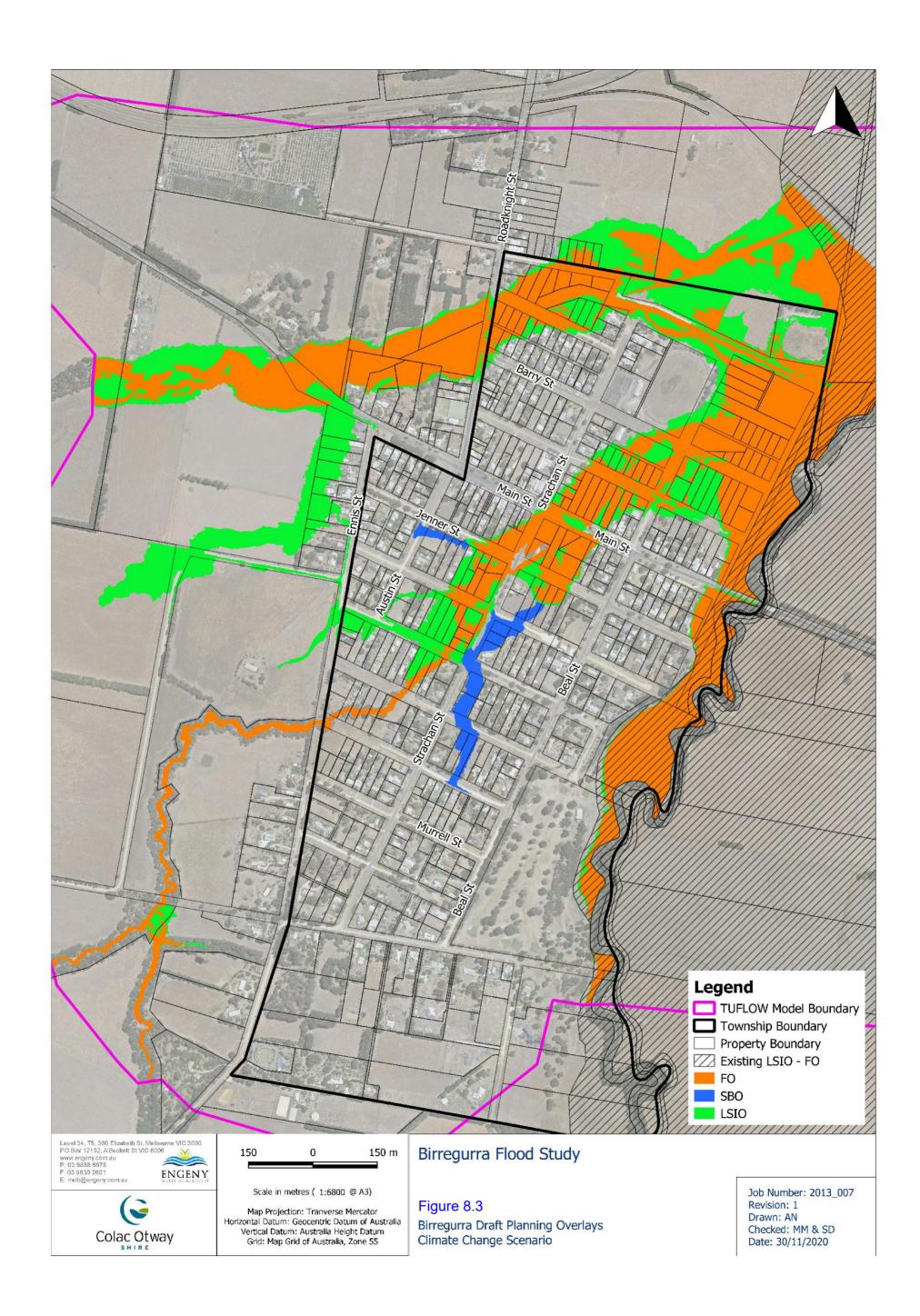


Table 8.1: Summary of property counts captured by existing and proposed planning overlays

Overlay	Existing Overlays	Proposed Overlays based on current climate conditions	Proposed Overlays based on climate change conditions
SBO only	-	12	12
LSIO only	45	35	20
FO only	-	9	4
LSIO & FO	-	60	84
SBO, LSIO & FO	-	1	1
Total	45	117	121

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9 FLOOD WARNING ASSESSMENT

9.1 OVERVIEW

A flood warning or alerting system does not currently exist for Birregurra. Essential building blocks (elements) of a Total Flood Warning System (TFWS) have, however, been delivered via other outputs from the Birregurra Flood and Drainage Strategy (i.e. this study). These include:

- Updated flood inundation and related mapping⁷.
- An updated Municipal Flood Emergency Plan (MFEP) with Birregurra-centric flood consequence information.
- An indicative flood guidance tool.
- Information suitable for inclusion in a Local Flood Guide (LFG).

This section of the report builds on other study outputs by documenting a flood warning feasibility assessment for Birregurra. It identifies feasible options for improving local capability to act in a timely manner and improving future response to impending floods in Atkin Creek and the Unnamed Tributary that both flow through Birregurra, thereby potentially reducing future impacts and costs. The identified options range from making better use of existing rainfall information in conjunction with deliverables from the Birregurra Flood and Drainage Strategy (i.e. no / low cost options) through to investment in a monitoring and messaging system with automated system elements, that if implemented, could lead to more reliable and substantive outcomes (i.e. an option requiring more substantial investment of time and money to set up and maintain). Guidance is provided as to how such a system may operate.

Where necessary this report draws on the earlier stages of the study. Reports on the work supporting those stages should therefore be read in conjunction with this section of the report.

9.2 ESTIMATED EFFECTIVE FLOOD WARNING TIME

Noting that in general floods develop quicker on wetter catchments (i.e. runoff is generated quicker and there is more of it), that big floods tend to travel faster than small floods (due to greater stream energy), and that a flood on a 'wet' watercourse will generally travel quicker than a flood on a 'dry' watercourse (e.g. the first flood after a dry period will travel more slowly than the second flood in a series of floods), the response time⁸ for a major flood through Birregurra is estimated at around 6 to 7 hours under wet antecedent conditions. Response time is estimated to be a little longer for smaller floods and somewhat longer again when the catchment is dry. This places Birregurra within the flash flood category as per Bureau of Meteorology definitions⁹ in BoM (1996) and as discussed in VFWCC (2001) and BoM (2020).

- ⁸ Time between start of heavy rain and the creeks beginning to rise at Birregurra.
- ⁹ Flooding within 6 hours of causal rain.

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⁷ While only key maps have been included in the MFEP, all mapping delivered by this study (together with the reports) is expected to be loaded to FloodZoom and also be available from both CCMA and Colac Otway Shire Council. It is further expected that during a flood, CMA and Council officers will have direct access to copies of the original model results in GIS format along with the corresponding reports through respective agency hosting arrangements.



Under severe flood conditions and having regard for the current consequences of flooding at Birregurra¹⁰, the effective flood warning time¹¹ for Atkin Creek and the Unnamed Tributary creek is currently (i.e. no flood warning system elements in place) estimated to be around 3 to 5 hours.

With the benefit of the indicative flood guidance tool provided in Appendix C2 of the Colac Otway Shire Council (COSC) Municipal Flood Emergency Plan (MFEP) in concert with the flood intelligence and mapping delivered by this study, it is estimated that effective flood warning time could be extended for the Unnamed Tributary and Atkin Creek by at least 3 hours. The indicative flood guidance tool is included herein as Figure 9.4.

In view of the estimated effective flood warning time, emergency services driven flood response actions within Birregurra in the lead up to flooding are currently likely to be severely limited. There is insufficient time available to mobilise emergency services and for them to prepare the dwellings most at risk of being flooded over-floor (e.g. relocate or lift valuables and household items, sandbag the dwelling, etc). Even with the benefit of the deliverables and additional available time that could result from this study, it is suggested that with due regard for other regional flooding issues and the need to prioritise calls for assistance, there would be limited opportunity to mobilise emergency services to assist local flood response (i.e. damage reducing) activities. Local residents however, armed with the indicative flood tool and with access to rain data from the gauge at Ricketts Marsh, may be able to lay sufficient sandbags during a small flood and raise / move valuable items in the event of a large flood, provided that a supply of sandbags was at hand and / or help was immediately available from neighbours to assist with valuable items. Key to this is awareness of the flood risk, recognition of the likelihood and scale of imminent flooding, and knowing what to do to reduce damage.

While not canvassed with VICSES, EMV or BoM, it is suggested that there may also be opportunities in the context of successful proof of concept trials at Natimuk (see Section 9.4.2) and following successful implementation of protocols and some adjustments to how data from the Ricketts Marsh gauge is managed, for a Vic Emergency warning of likely flooding to be issued for Birregurra during severe rain events. This could be augmented by an Emergency Alert if it was assessed that there was a risk to life.

9.3 FLOOD WARNING SYSTEMS

9.3.1 Introduction

Flood warning is an effective and credible non-structural flood mitigation or flood risk reduction measure. Successful system implementation requires attention to all system elements as well as the striking of a balance between each of those elements appropriate for the community it will serve. A "one size fits all" or standard approach is not appropriate. What works for one community may not necessarily be appropriate for another.

In relation to Birregura, any system established must meet the needs of the at-risk community with appropriate emphasis on the various system elements while also accounting for the constraints imposed by the effective flood warning time. Consideration of the benefit to cost ratio is also important. This is because in order to secure funding support at State and Commonwealth level, the benefits of establishing a flood warning system need to outweigh costs.

9.3.2 Aim and Function

Put simply, flood warning systems provide:

- A means of gathering information about impending floods.
- Communicating that information to those who need it (those at risk).

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¹⁰ Out of bank flows occur along Atkin Creek and the unnamed tributary through Birregurra for events more frequent than the 1 in 2 year ARI flood. There are 35 buildings (excluding sheds but including the CFA shed) identified as being inundated over-floor by the 20 % AEP (5-year ARI) flood. The number of floors wetted rises as flood severity increases.

¹¹ The time available after receiving advice of an impending flood before flood water prevents appropriate flood response action.



• Facilitating an effective and timely response.

Thus, flood warning systems aim to enable and persuade people and organisations to take timely action to increase personal safety and to reduce the damage caused by flooding¹². Key to this for those at risk is:

- The availability of information about flood risk.
- Easy access to relevant and timely real time rainfall and water level data / information.
- Knowing what needs to be done in the lead up to and during a flood event.

Flood warning systems (and investments in their implementation) that over-emphasise the collection of input data and / or the production of (highly accurate) flood forecasts relative to the attention given to other elements, often fail to fully meet the needs of the at-risk communities they have been set up to serve. Put another way, it is essential that those parts of the flood warning system that work to build resilience within a community while also increasing warning lead time are given due emphasis and attention.

9.3.3 The Total Flood Warning System Concept

In 1995 the Australian Emergency Management Institute published a best-practice manual entitled Flood Warning: an Australian Guide (AEMI, 1995), and in so doing, introduced the concept of the 'Total Flood Warning System' (TFWS). While the original manual has been updated and republished as Manual 21 of the Australian Disaster Resilience Handbook Collection (AIDR, 2009), the concepts, practices and key messages from the original manual endure.

The Victorian Floodplain Management Strategy (DELWP, 2016) also promotes the TFWS concept and provides clarification on roles and responsibilities for system development and operation in Victoria.

9.3.4 Total Flood Warning System Building Blocks

An effective flood warning system is made up of several building blocks. Each building block represents an element of the Total Flood Warning System (TFWS).



Figure 9.1: Elements of the Total Flood Warning System (source: VFMS)

¹² More generally, the objective of early warning is to empower individuals and communities, threatened by natural or similar hazards, to act in sufficient time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life and damage to property, or nearby and fragile environments (UN, 1997).



Experience shows that flood warning systems that are not designed in an integrated manner and that over-emphasise one element of the warning system at the expense of others inevitably fail to elicit appropriate responses within the at-risk community. An appropriately developed and integrated system considers not only the production of a timely and informative alert¹³ of a potential flood, but also the efficient dissemination of that alert to those who need to respond in an appropriate manner, most important of whom are the threatened community. A community that is informed, flood aware and prepared (i.e. flood resilient) is more likely to receive the full benefits of a warning system.

It follows that actions to improve flood response and community flood awareness using technically sound data (such as that produced by the Birregurra Flood and Drainage Strategy) will by themselves result in some reduction in flood losses.

9.3.5 FLARE

As identified in Section 9.2, Birregurra is subject to flash flooding. While BoM does not currently provide flash flood warning services, it has developed FLARE, the national flash flood warning advisory resource. It acts as a repository of technical information and guidance in relation to flash flood warning systems (FFWS). It provides:

- Historical information on flash flooding;
- An overview of some of the systems operating in Australia (i.e. case studies);
- Details of BoM services available to support flash flood warning systems;
- Some suggestions on flash flood warning system elements;
- Advice on relevant standards and guidelines (e.g. on data sensing and measurement, telemetry, data collection systems, metadata management, etc); and
- An office hour help line to respond to questions.

A guide to flash flood warning system considerations and design is also provided, as a supplement to jurisdictional approaches and methods. The guide steps the user through the use of the FLARE resources as part of system design (refer Figure 9.2).

Figure 9.2: Guide to FFWS Design (source: FLARE)





The Step by Step Guidance section of FLARE highlights important considerations for the initial planning and decision making of setting up a flash flood warning system (Flash Flood WS).

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¹³ An alert may take the form of access to real-time data, an SMS or message via social media from a credible source, a forecast of expected flood conditions, advice of indicative flood conditions, etc.



9.4 THE TASK FOR BIRREGURRA

9.4.1 Context

The Corangamite Regional Floodplain Management Strategy (RFMS) (CCMA, 2017) characterises Birregurra as a priority flood risk area and cites the September 2016 flooding as an indication that the then current flood data for the area was inaccurate. Consistent with that characterisation, the current study (Engeny, 2020) has shown that flood damages at Birregurra are quite high, with Average Annual Damage (AAD) calculated as being approximately \$747K. The study has also shown that out-of-bank flows, flooding of roads and over-floor flooding of dwellings commences during quite frequent floods (i.e. less than the 20 % AEP¹⁴ event). While depths and velocities within the creek channel do present an extreme hazard during those quite frequent events, flood depths and velocities within the overbank floodplain (including through the town) are in general, low hazard.

The Corangamite RFMS proposes a strategic direction that articulates the need for community and regional resilience as a key and sustainable response to flood risk. This is consistent with State and Federal Government policy. This report and the suggested approach to flood warning for the Birregurra community is similarly consistent. It is aimed at a system that will provide information to enable individuals to make informed decisions about risk and what they need to do. The emphasis is therefore on "what works best for Birregurra" with due regard for flood risk, available flood warning and response times, available rain and creek level data, and the funding and other responsibilities associated with implementing and maintaining elements of a (flash) flood warning system.

9.4.2 Policy and Strategy Considerations

The division of responsibilities associated with the establishment, maintenance and operation of flood warning systems as documented in VFWCC (2001) have been endorsed by the relevant Ministers at both State and Federal level. More recent developments have seen the BoM establish a Service Level Specification (SLS) that identifies the flood forecast and warning service it will provide for specific locations across the State (BoM, 2020). BoM is currently moving to establish a fee-for-service approach to the development (on a priority basis) of flood forecasting tools for locations not included in the SLS. In relation to flash flood warning services, BoM will continue to provide generalised warnings of weather conditions likely to lead to flash flooding but it will not currently provide flash flood warnings for specific creeks or locations.

The Victorian Floodplain Management Strategy (DELWP, 2016) provides clarification on roles and responsibilities for TFWS development and operation in Victoria. Policy 16a is directed at flood warning in general while Policy 16d is directed specifically at flash flooding (see below).

VFMS – Policies 16a and 16d

Policy 16a outlines the future arrangements for flood warnings in Victoria:

- The Bureau of Meteorology (BoM) will develop new flood prediction services using a cost-recovery model that involves DELWP covering the capital cost of initial model development and BoM the cost of operating, maintaining and continually improving those models.
- Existing flood prediction services will continue to be operated, maintained and improved by BoM.
- Where a flood study identifies the need for new rain or stream monitoring gauges to support a TFWS for a community within Melbourne Water's region, Melbourne Water will cover the capital and maintenance costs of those gauges.
- Where a flood study or regional floodplain management strategy outside Melbourne Water's region identifies the need for a TFWS and that service has community support, the capital costs for new rain or stream monitoring gauges will be shared between the Victorian and Australian Governments. The local community, through its LGA, will fund ongoing maintenance costs for the gauges.

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¹⁴ Annual exceedance probability (AEP) is the inverse of Average Recurrence Interval (ARI): the 20 % AEP event is equivalent to the 5-year ARI event.



- Where existing rain and stream monitoring gauges are providing flood warning services, the Victorian Government expects
 existing cost-sharing arrangements to continue until a regional floodplain management strategy or local flood study assesses
 the need for a TFWS service.
- Where existing gauges are assessed as being an essential component of a TFWS, the costs of maintaining those gauges will be shared between the LGA and the CMA if it is also used for water quality monitoring, or with a water corporation if it is also used for water resource assessments. In some cases, the costs may be shared between all three agencies.

Policy 16d

- The CMAs and Melbourne Water, with the support of VICSES and LGAs, will progressively identify areas with a history of flash flooding and include them in their Regional Floodplain Management Strategies and implementation plans.
- Cost-sharing arrangements for flash flood warnings will be the same as for riverine flooding (Policy 16a).

Local government has a more prominent role in flash flood warning than for other flood warning systems while the role of the BoM, as outlined above, is substantially diminished¹⁵.

Looking ahead and as an out-working from the Services Standardisation Project, BoM has been working in Victoria with Emergency Management Victoria (EMV) and VICSES on scoping and trialling an Automated Alerting Project. The project involves BoM systems automatically identifying exceedance of critical levels on data ingested from selected telemetered rain and river gauges and alerting of that exceedance to EMV. It is understood that those alerts then generate warnings of potential or actual river level rises as a push to the VicEmergency website and App and as more formal public issue warnings from VICSES. The work offers exciting potential to alert and warn at-risk communities of developing (flash) flood events. While it is not suggested that the project offers a ready-made solution for Birregurra, subject to further development and adoption following completion of proof of concept trials with the Natimuk community, the future potential for benefits to the Birregurra and similar communities is evident.

There are a number of decisions required in relation to how each of the TFWS elements can be developed and implemented for Birregurra. Regardless, the main messages from the 2005 Flood Warning Service Development Plan for Victoria (VFWCC, 2005) remain valid. Those applicable to Birregurra include:

- Making existing data and information / flood intelligence easily accessible to the at-risk community.
- Assisting at-risk communities use that data and intelligence (for example, personalised "what does it mean for me" letters, pamphlets and related information).
- Developing / providing tools that add value to or drag value from available data and intelligence (e.g. indicative flood guidance tools).
- Developing a (local) means of providing an indication of likely flooding with some lead time for the many communities for which the BoM does not currently provide a flood warning service.
- Driving maximum value from flood mapping and other study outputs for local community benefit.
- Focussing on delivering and / or making available those things that will achieve a reduction in damages (i.e. focussing on facilitating the availability of relevant information with some lead-time and a degree of accuracy and consistency).
- Providing the data, information and tools to enable at-risk communities build resilience.

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¹⁵ A flood warning system established for a stream or location considered to be subject to flash flooding is, in general terms, the responsibility of the local Council. This includes the installation, operation and maintenance of the technical elements. BoM will maintain delivery of existing severe weather and riverine flood warning related services. Delivery on other TFWS elements including alerting / warning, the development and application of flood response plans as well as (flash) flood education and awareness programs, is a shared state and local government responsibility.



9.4.3 The Challenge for Birregurra

In view of what TFWS elements have been delivered by the current study (see Section 9.1 above), the key issue for Birregurra (given the short effective flood warning time) is how a potential flood will be detected ahead of the onset of flooding within the town and how the at-risk community will be alerted, ideally with sufficient lead time to enable completion of effective response actions.

A range of systems, equipment and approaches are available. The dilemma is "which of these are appropriate and sufficient" given that with a wet catchment, the time between the beginning of heavy rain and the start of creek level rises is estimated (see Section 9.2) at around 6 to 7 hours, with the peak occurring at Birregurra in Atkin Creek and the Unnamed Tributary creek around 12 to 15 hours later. However, it should be noted that over-floor flooding of the first house affected begins well before the peak of a big flood is reached: around 8 hours after the start of rise. In this situation under current conditions as discussed in Section 9.2, the effective flood warning time for Atkin Creek and the Unnamed Tributary creek is estimated to be around 3 to 5 hours.

Allowing time for information to be made available to the community through a flood warning system and for event severity to become evident (say half way through a heavy rain event) plus time required by the community to confirm that information¹⁶, the time available to respond (i.e. lift furniture and other household goods off the floor, move vehicles and other assets to dry ground and relocate, noting that the first floor in town is flooded at a little below the 20 % AEP flood level) is estimated to increase from between 3 and 5 hours out to 8 hours or more during a large flood and a couple of hours longer for a small flood. With such a short effective warning time and the increase in time estimated to be achievable with a flood warning system, it is apparent that delivery of information to the local community as quickly as possible is paramount.

9.4.4 A TFWS for Birregurra

Having regard for first level achievements only, gives rise to the following functional requirements:

- Monitoring of rainfall (and perhaps also creek level), possibly for exceedance of triggers that indicate that flooding may occur.
- Ready public access to raw rainfall data¹⁷.
- Alerting the community, VICSES and the Colac Otway Shire Council (COSC) to potential flooding as quickly as possible.
- Ready public access to flood intelligence (i.e. mapping perhaps as soft copies or through an interactive GIS hosted by Council and / or CCMA, flood information card, etc) so that the community can determine likely impacts and individual consequences and initiate appropriate response actions.
- Low setup and operating costs with (ideally) a positive benefit-cost ratio.
- Acknowledgement and acceptance that a formal flood warning service is unlikely to be provided for Birregurra.

Most of the above can be achieved with minimal cost. Opportunities do exist for local government to seek and secure Commonwealth and State funding to assist with system set up. Operational and on-going costs remain a local government responsibility as outlined in Section 9.4.2.

¹⁶ The need for recipients of flood warnings or information that indicates they are in danger from flooding to verify the warning or information and assess it in their own context is discussed at length in the risk communication literature. The time taken for this part of the response process varies based to a large extent on prior experience. It is assumed for Birregurra to be of order 1 to 2 hours.

¹⁷ Easy and timely access to data is important for communities at risk from flash flooding. Data maps and tables available through the BoM website provide one such avenue. Commitment is required from BoM that rain data from existing sites will be available every 15 minutes (minimum) through the tables and maps (as appropriate). Three-hourly data is not ideal for Birregurra due to the short window between event identification and flood consequences.



9.5 FLASH FLOOD WARNING SYSTEM CONSIDERATIONS

9.5.1 Introduction

It is suggested that consideration of a flash flood warning system for Birregurra should have regard for the:

- Potential for rapid development and progress of floods within the Atkin Creek catchment and the limited lead time available between heavy rain and stream rises.
- Character of the flood risk (i.e. rapid onset, high likelihood of over-floor flooding from a little below the 20 % AEP flood level).
- The benefits achievable through the implementation of structural flood mitigation works aimed at reducing flood impacts within the town.
- Economic metrics (i.e. likely benefit-cost based on consideration of the contribution of avoidable damages to the value of average annual damages).

The following sections outline how each of the TFWS elements could be addressed in order to implement an effective, low maintenance, scalable flash flood warning system that has some utility to the Birregurra community, at minimal cost.

9.5.2 Data Collection and Collation

There is a wide range of equipment that will variously collect, collate and / or undertake assessments on rain and / or creek level data and make it available to a single entity or to a group of entities. Data can be pushed either directly from the equipment at site, through a post box or website, or following delivery to a predetermined digital address. The focus here is on what is best for Birregurra. Capital and on-going costs are therefore a consideration as (given Birregurra is subject to flash flooding) they are a local responsibility.

Both Atkin Creek and the Unnamed Tributary are ungauged - there are no formal stream or rain gauges in the catchment.

A permanent fully operational telemetered rain and stream gauge is in place on the Barwon River at Ricketts Marsh (Station No 233224: Barwon River @ Ricketts Marsh). Three-hourly data is publicly available from the BoM website.

A rain gauge is also in place at the CCMA's office in Colac. However, it is not telemetered. Data only becomes available around the end of each month for the previous month.

It is suggested that with near real-time access to rainfall data from the Ricketts Marsh gauge and an indicative flood guidance tool (see Section 9.5.3), a basis exists for a local community-based flash flood warning system. However, data from the Ricketts Marsh gauge would need to be made publicly available in near real-time (say updated every 15 minutes). The BoM website is an obvious choice to achieve this.

It is suggested that Council:

- Approach BoM (with support from VICSES, CCMA and DELWP) to request necessary changes to enable near real-time
 public access to rain data from the Ricketts Marsh gauge via the BoM website (e.g. 15 minute updates).
- Alternatively, approach CCMA to request that telemetry be added to the Colac rain gauge and that BoM be requested to enable near real-time public access to rain data from that gauge via the BoM website (e.g. 15 minute updates).
- Arrange for the installation of a set of staff gauges on the upstream side of the Warncoort-Birregurra Road Bridge (Atkin Creek) and on the upstream side of the Ennis Street crossing of the Unnamed Tributary. They should be installed such that the gauge boards can be read from the road for small and larger (i.e. 1 % AEP) floods so that Birregurra residents and emergency services can confirm water levels and rates of rise in the creeks (see Figure 9.3).
- Following a successful approach to the BoM regarding data accessibility, consider providing guidance to the local community (through a locally focussed flood awareness brochure or similar) on how to access and interpret data from the Ricketts Marsh gauge together with instruction on its use with the indicative flood guidance tool. Information about other elements of the flood warning system and how it will assist in reducing risk could also be included.
- Consider developing and maintaining a website (and potentially social media) presence for the FFWS. As a minimum, this
 website could contain the indicative flood guidance tool and the associated flood mapping and intelligence outputs from this
 study.

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Figure 9.3: Suggested Gauge Locations



If a greater degree of confidence in the likelihood of flooding is required, it is suggested that Council consider:

- As a first step, purchase of an ERTS rain gauge and its installation in the mid reaches of the Atkin Creek catchment close to the shared boundary with the Unnamed Tributary. At the same time, Council with support from VICSES, CCMA and DELWP, would need to approach BoM to provide near real-time public access to data from that gauge via its website.
- As a second step, purchase of two ERTS river (or rain-river) gauges and their installation on the upstream side of the Warncoort-Birregurra Road Bridge (Atkin Creek) and on the upstream side of the Ennis Street crossing of the Unnamed Tributary. As above, Council with support from VICSES, CCMA and DELWP, would need to approach BoM to provide near real-time public access to data from those gauges via its website.



- Alternatively and instead of ERTS equipment, arranging purchase and installation of different commercially available rain and / or rain-river monitoring equipment¹⁸ (e.g. such as DipStik¹⁹) in the locations described in the above two bullets and identified in Figure 9.3.
- The addition of "sirens and / or flashing lights" options (triggered by exceedance of pre-set rainfall rates and depths, and creek levels and rates of rise) for the automated gauges installed at the creek crossings as an alternative or additional means of alerting the community to imminent flooding.
- As appropriate and dependent on the monitoring and alerting equipment installed, invite Birregurra residents, along with VICSES, local CFA and Police, to opt-in to receive SMS alert messages direct from installed equipment.
- Provide guidance to the local community (through a locally focussed flood awareness brochure and website) on how to interpret and use available rain and creek level data and the indicative flood guidance tool, along with information about the flood warning system and how it will assist in reducing risk.

A decision would need to be made on whether to establish any proposed creek level gauges to local datum or to AHD.

While there is the possibility that the two sites identified in Figure 9.3 could be used as PALS²⁰ installation sites, catchment response times indicate that in most situations there would be insufficient time to install the equipment ahead of a likely flood. Further, while the PALS would provide useful data for post-event analyses, there are restrictions to public access to the real-time data they provide. Local access to data is key to effective flood warning for Birregurra. There is also no certainty that PALS would be available when needed as there are a limited number of the units available across the state.

9.5.3 Flood Detection & Prediction – Indicative Flood Guidance Tool

Capability Following Completion of this Study

The indicative flood guidance tool provided in Appendix C2 of the COSC MFEP (included here as Figure 9.4) provides some guidance on the likelihood and severity of expected flooding at Birregurra with an estimated lead time of 8 hours or more during a large flood on a wet catchment.

Rainfall data from the Ricketts Marsh gauge (or perhaps from the catchment of Atkin Creek and the Unnamed Tributary) should be used to drive the indicative flood guidance tool. However, the tool may not perform to expectations in severe thunderstorm situations, when there are locally heavy falls embedded in more general rain and when the catchment is dry.

¹⁹ DipStik will continually monitor rainfall and / or water level for potential flood conditions (i.e. exceedance of threshold rainfall amounts and intensities and / or rising water levels). When trigger conditions are met, DipStik sends an SMS alert message, via the mobile phone network, to opted-in recipients. It also sends messages as water levels fall. DipStik maintains a record of maximum flood heights and rate of rise of water levels to help with post-event analyses and future flood mitigation planning. Other functionality including a cloud enabled infrared camera is available. See http://tuftec.com.au/ and particularly the joint NRMA, IAG, LG project in NSW and the Cardinia Shire Council project in Victoria.

Note that cameras are increasingly being added to local gauges in the US in order to keep curious people out of harm's way. Looking at the creek through the cameras is much safer than going to the creek bank to look at it.

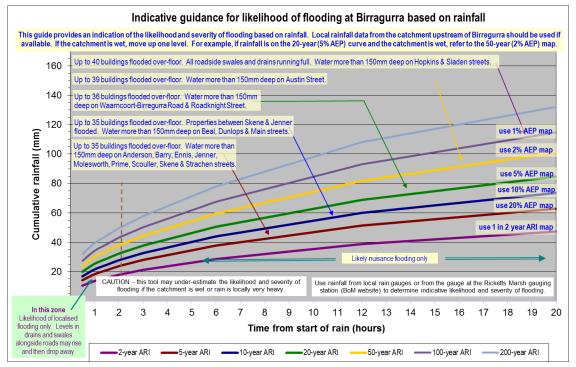
²⁰ PALS continually monitor rainfall and / or water level. Every 15 minutes, the unit transfers data via the mobile phone network to a server for display in near real-time. In addition, the unit can provide simple text alerts when pre-set water level alarm conditions (these are able to be adjusted dynamically by SMS) are triggered. The alerts can be sent to 5 mobile phone numbers (as an SMS) and to 2 email addresses. All data are logged to assist with post-event analyses and future flood mitigation planning.

¹⁸ A variety of rain and water level monitoring equipment and systems are available commercially. DipStik is one such example. It is not suggested that any one system is better than another and should be adopted by Council. Equipment or systems should be evaluated by Council and a choice made based on value (e.g. benefit-cost), functional capability and other relevant factors consistent with prevailing procurement and related guidelines and considerations.



It is suggested that the indicative flood guidance tool is adopted by VICSES, local CFA and Council for routine use. It is also suggested that the tool and instructions for its use could be shared with the Birregurra community and key community members instructed on use.

Figure 9.4: Indicative Flood Guidance Tool



Potential Capability Pending Investment in Improvements

It is suggested that in the context of State-wide and Regional priorities and the relative scale of flood damages at Birregurra, investment in a more sophisticated and technically demanding forecast tool that would need to be established, operated and maintained by Council (DELWP, 2016 and VFWCC, 2001) is probably not warranted.

With a view to the longer term and subject to the programming of alerts for exceedance of pre-determined rainfall rates and depths at the Ricketts Marsh gauge (and / or additional rain and / or water level monitoring equipment being installed within the creek catchments upstream of Birregurra), the Automated Alerting Project (see Section 9.4.2) appears to offer potential as the basis for a robust initial flood alerting and warning system²¹. It is suggested that Council maintain contact with VICSES on project progress with a view to implementation for Birregurra.

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²¹ Experience gained in establishing the Natimuk flash flood warning system and proof of concept trials should assist the setting of rainfall and creek level triggers for Birregurra. Warning actions could simply involve issue of a VicEmergency warning of likely flooding and / or in the event of a perceived risk to life, issue of an Emergency Alert.



Flood Class Levels

Flood class levels determined against standard definitions²², are used to establish a degree of consistency in the categorisation of floods. In order to assist the flood warning process and increase awareness of flooding within the community, it is suggested that Council give consideration to establishing flood class levels for Birregura at the Warncoort-Birregura Road Bridge (Atkin Creek) and at the Ennis Street crossing of the Unnamed Tributary. The process would involve coordination between Council, VICSES, CCMA and BoM and is relatively straight-forward. Note however that flood class levels can only be established for locations with a permanent water level gauge.

9.5.4 Interpretation

The flood inundation maps and COSC MFEP Appendices developed as part of the Birregurra Flood and Drainage Strategy provide the base information to enable the community and stakeholder agencies to determine the likely effects of a potential flood. This means however that the flood inundation maps and relevant Appendices of the MFEP, and more specifically the flood information card for Birregurra, would need to be readily available to the Birregurra community.

9.5.5 Message Construction and Dissemination

There are a number of alerting and notification tools, technologies and service providers available, some of which both alert (make people aware of an imminent hazard) and notify (provide a warning message). A summary of those that might be suitable for Birregurra has not been included herein as the approach proposed does not include the construction and / or dissemination of formal warning messages, other than as may occur as a result of the Automated Alerting Project (or similar) described in Section 9.4.2. This is because of the short effective flood warning time in combination with the dependencies between the alerting and notification functional requirements and decisions regarding the data collection network equipment and locations to be instrumented.

If a flood was to occur soon after delivery to the Birregurra community of the maps and indicative flood guidance tool arising from this study, it is likely that for most Birregurra residents, the initial alert of likely flooding will be personal (or perhaps from a neighbour within the community) and will come from a combination of environmental indicators (e.g. observance of heavy rain, local runoff, etc) and the resident's consideration of the flood inundation maps in conjunction with the MFEP. If an alternate commercial monitoring system such as DipStik was installed, the initial (or confirming) alert may come from the unit's SMS'ed message and / or siren, as rain and / or creek levels exceeded triggers with the above acting to reinforce and add value to resident's assessments and decision processes. Alternatively, and subject to resolution of VICSES and EMV roles in the initiation and dissemination of flash flood warnings, the initial alert may come via electronic and social media.

If a marginally more formal alerting system was deemed appropriate and viable for Birregurra, regardless of whether additional permanent rain and water level monitoring equipment (e.g. ERTS, DipStik, other) was installed, the Birregurra community could be encouraged to be more involved in the TFWS by sharing information about the (likely or actual) on-set of flooding and to then back this up with information about likely consequences (e.g. from the MFEP and local knowledge / observations). Social media provides a suitable vehicle. A Twitter and / or Facebook account could be established for the Birregurra TFWS. This would require Council (in conjunction with VICSES) to champion the formation of a Birregurra community flood action group (or similar).

Members of this group could play a key role in local flood warning operations and review. In particular, say via the social media group, they could share information initiated within the community and by VICSES (say, following their use of the indicative flood guidance tool) on likely flood severity, impacts and appropriate actions.

9.5.6 Response

The COSC MFEP Appendices have been populated for Atkin Creek and the Unnamed Tributary at Birregura as part of the Birregura Flood and Drainage Strategy. Information in the MFEP includes available intelligence relating to flooding from the upstream catchment along with the indicative flood guidance tool provided at Figure 9.4 of this report. Instructions for the tool's

²² Standard definitions for minor, moderate and major flood class level are available from the BoM website.



use have also been included in the MFEP. Flood inundation extent and depth maps have been added together with a list of areas and roads likely to be flooded. A table of properties and key infrastructure likely to be flooded along with the likelihood and depth of over-ground and over-floor flooding at each property is also included along with a flood information card for the town.

The availability of this flood intelligence will improve the situational awareness of the emergency service agencies and the Birregura community while also increasing their potential to respond in a more timely and appropriate manner.

Following (or perhaps in concert with) acceptance of the updated MFEP by Council and VICSES, a program to encourage and assist residents and businesses to develop individual flood response plans should be developed and delivered. A package that assists businesses and individuals is available from VICSES and provides an excellent model for community use.

9.5.7 Community Flood Awareness

As per the project brief, technical text for a Local Flood Guide (LFG) has been provided to Council separately from this report. The text should be forwarded to VICSES to enable production of a LFG for provision to the Birregurra community.

Looking further ahead, it is suggested that VICSES, in partnership with Council, develop activities and materials for the Birregurra community that emphasise personal safety, how available rain and, if available, creek level data can be used, what any warnings / alerts mean and what individuals can do to stay safe and protect their property including how to fill and lay sandbags. This should extend to also making relevant parts of the MFEP publicly available (e.g. Council offices, library, website, etc). Such investments will assist in maintaining and renewing flood awareness within the local community.

9.5.8 Funding Opportunities

Opportunities do exist for local government to seek and secure Commonwealth and State funding to assist with flash flood warning system set up. Generally, the benefits of establishing the system need to outweigh costs in order to secure funding support. Regardless of the support received, operational and on-going costs remain a local government responsibility as outlined in Section 9.4.2.

It is suggested that having determined the desired elements of the flash flood warning system to be established for Birregurra and a timetable for the establishment of each element, Council (with support from CCMA and VICSES) should scope and submit an application for funding under the Commonwealth-State National Partnership Agreement on National Disaster Resilience (i.e. the Natural Disaster Resilience Grants Scheme – NDRGS) or successor funding programs.

9.6 MAIN OUTCOMES FROM THE FEASIBILITY ASSESSMENT

Currently achievable response actions at Birregurra, as outlined above and without regard for time of day or night, are limited to what residents are able to achieve.

It is suggested that an "accurate" forecast is not the key to achieving an increase to personal safety and flood damage reduction in Birregurra. Rather it is timely alerting and access to relevant data and easy-to-use indicative tools that, coupled with robust communications systems supported by sound awareness of flooding consequences (i.e. community resilience), provide the information that triggers those at risk to take timely and appropriate actions: to improve local capability and deliver the benefits sought from a flood warning system.

Further to these specific requirements, this assessment identifies feasible options for improving local capability to act in a timely manner and improving future response to impending floods from the creek catchments upstream from Birregurra, thereby potentially reducing future impacts and costs. The identified options range from making better use of existing rainfall monitoring resources (i.e. no / low cost options) through to investment in improved rain and / or river monitoring in conjunction with automated messaging, that if implemented, could lead to more reliable and substantive outcomes (i.e. an option requiring more substantial investment of time and money to set up and maintain). Guidance is provided as to how such a system may operate.

Adopting and making best use of the immediate deliverables from this investigation (i.e. making the indicative flood tool, flood intelligence and flood mapping available to both the emergency agencies and the Birregurra community and being able to make better use of rainfall data that will (hopefully) soon be available in near real-time from BoM), will increase flood awareness and

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the opportunity for residents to recognise imminent flooding and initiate appropriate response actions. This has been assessed as being achievable in the near term with minimum investment.

With some investment, a telemetered rain gauge could be installed in the mid reaches of the Atkin Creek catchment close to the shared boundary with the Unnamed Tributary and additional measures implemented to increase flood awareness and community engagement. Together, these measures are estimated to give additional confidence in expected flood severity along with an increase in the time available for damage reducing actions by the town's residents (i.e. more reliable and substantive outcomes). This has been assessed as being achievable in the mid-term.

Further increased confidence in the expected severity of a developing flood, along with additional time to undertake damage reducing measures could be achieved if there was investment in additional and more sophisticated instrumentation to monitor rainfall, creek levels and the associated systems to alert emergency services and individuals to the exceedance of trigger values (i.e. improved monitoring and messaging system with automated elements). It is estimated that together these measures would achieve a further increase in effective flood warning time. This has been identified as the fully developed option for Birregurra and assessed as being achievable in the longer term. Implementation would require significant investment.

The above three paragraphs are presented in summary form against the TFWS building blocks as suggested actions aimed at securing a flash flood warning system for Birregurra in **Appendix M**. A reworked version of this table presented in terms of what is achievable now, with a greater level of investment and longer term is also provided in **Appendix M**.

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10 MUNICIPAL FLOOD EMERGENCY PLAN (MFEP)

Flood intelligence data was extracted from the study's deliverables. At VICSES's request, the intel has been collated into the updated MFEP template provided by VICSES rather than into the current version of Council's MFEP. The data included within Council's current version has been reviewed and no information relating to Birregurra was found to need correction. The collated intel have been delivered directly to VICSES and Council within the updated template.

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11 FLOOD SPATIAL DATA SPECIFICATION

11.1 OVERVIEW

As part of this study a number of outputs were generated compliant with the format outlined within the Flood Spatial Data Specifications (DELWP, 2020). These results were produced utilising the flood mapping results including extents and grid points for each simulated storm event.

The following sections provide details on the various data sets produced.

11.2 RASTER DATA

The following gridded data sets were provided as final deliverables for each modelled design event scenario:

- Maximum depth.
- Maximum velocity.
- Maximum water surface level.
- Maximum velocity x depth.
- Flood Hazard using the ARR 2019 Flood Hazard Curves Criteria.

11.3 VECTOR DATA

The following vector data was generated in a SDS compliant format:

- Study area (defined by the 1 % AEP flood extent).
- Flood extents (for all modelled scenarios/AEPs).
- Flood level contours (for all modelled scenarios/AEPs).
- Mapping limits.
- Proposed FO, LSIO and SBO extents.
- Flood affected properties.
- Surveyed Floor Levels.

11.4 MAPS

A map was produced for each design flood event which included the following vector and grid GIS layers:

- Flood extents.
- Flood level contours at 1 m intervals.
- Flood depths.
- Identification of essential services.
- Road labels.
- township cadastre.

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12 CONCLUSIONS AND RECOMMENDATIONS

12.1 CONCLUSIONS

The investigations undertaken as part of this study highlight the following key outcomes:

- Several dwellings within the 1 % AEP design event flood extent (approximately 78) of which 26 dwellings are affected by above floor level flooding.
- The key flooding hotspots are associated with:
 - Atkin Creek downstream of Roadknight Street due to the existing channel's limited capacity.
 - Unnamed Tributary downstream of Sladen Street due to the existing waterway's limited capacity.
 - Council's existing underground drainage capacity between Prime to Sladen Street and along Sladen Street from Ennis Street.
- The September 2016 flood event modelling and the resultant close match between the surveyed and modelled flood levels provide confidence in the selected input parameters.
- The mitigation assessment undertaken identified 4 key structural mitigation works which could be implemented to reduce flooding impacts to dwellings, subject to securing an appropriate funding source. The high-level multicriteria assessment considering both tangible (capital cost and average annual damage reduction) in addition to intangible factors (such as environmental and social impacts and constructability and risks) were assessed.
 - Detailed assessments have not been considered including in relation to flora and fauna (biodiversity), cultural heritage values, or geotechnical matters. These will need to be examined before any mitigation option is pursued in addition to approvals processes.
- The stormwater quality assessment identified the wetland footprint area which would be required to ensure the predicted
 future development / increase in impervious area meet the BPEMG targets. Although further investigations would be required
 to confirm its feasibility, the asset could be funded through developer contributions. The assessment also highlighted the
 benefits of rainwater tanks and sealing roads within Birregurra and the practicality of implementing bioretention assets to
 meet the targets.
- The strategy highlighted the importance of updating the existing overlays with the extents delineated and implementation of planning scheme amendments that include schedules for the developed FO, LSIO and SBO with the relevant planning controls.
- The flood warning assessment identified the effective food warning time relevant to Birregurra in addition to highlighting the essential building blocks of a Total Flood Warning System (TFWS) which have been delivered via the outputs of this study including:
 - Updated flood inundation and related mapping.
 - An updated Municipal Flood Emergency Plan (MFEP) with Birregurra-centric flood consequence information.
 - An indicative flood guidance tool.
 - Information suitable for inclusion in a Local Flood Guide (LFG).
- As part of the flood warning assessment a feasibility assessment was also undertaken into how the effective flood warning time could be further extended through improved alerting and warning systems. The identified options range from making better use of existing rainfall monitoring resources (i.e. minimum investment achievable in the near term) through to the improved rain and / or river monitoring with automated messaging (i.e. moderate to significant investment achievable in the mid to longer term).
- Flood intelligence data was extracted from the study deliverables and collated into the updated Municipal Flood Emergency Plan template. This separate working document has been delivered to Council and VicSES directly and aims to provide guidance on the approximate relationship between food magnitude and flood consequences so that appropriate actions can be taken.

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12.2 RECOMMENDATIONS

Based on the study's outcomes, the following recommendations relevant to each stakeholder were identified:

- 1. Colac Otway Shire Council:
 - a) Seek internal endorsement of the flood study and undertake public exhibition to ensure the Birregurra community has the opportunity to comment and provide feedback.
 - b) Update the planning scheme to incorporate the findings of this study.
 - c) Consider the outcomes of the high level multicriteria assessment and findings of additional investigations and consider options which may progress to further feasibility assessments, subject to funding requirements.
 - d) Reference the provided flood modelling outputs, in particular the flood level information, to provide advice on recommended minimum floor levels for new developments for which Council is the responsible authority.
 - e) Review the Municipal Flood Emergency Plan with input from VICSES and adopt revised document.
- 2. Corangamite CMA:
 - a) Seek internal endorsement of the flood study and use mapping outputs to manage floodplain risk and inform development advice to ensure risks are minimised.
 - b) Reference the provided flood modelling outputs, in particular the flood level information, to provide advice on recommended minimum floor levels for new developments for which CCMA is the responsible authority.
 - c) Add the produced Flood Spatial Data Specification (SDS) outputs and other relevant mapping outputs to FloodZoom.
- 3. Victorian State Emergency Services
 - a) Continue to engage with the community to increase their awareness of flood related risks.
 - b) Review and discuss the updated MFEP.

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13 QUALIFICATIONS

- In preparing this document, including all relevant calculation and modelling, Engeny Water Management (Engeny) has exercised the degree of skill, care and diligence normally exercised by members of the engineering profession and has acted in accordance with accepted practices of engineering principles.
- b) The strategy is based on best available information at the time and is subject to an exhibition period which may include minor updates.
- c) Engeny has used reasonable endeavours to inform itself of the parameters and requirements of the project and has taken reasonable steps to ensure that the works and document is as accurate and comprehensive as possible given the information upon which it has been based including information that may have been provided or obtained by any third party or external sources which has not been independently verified.
- d) During the exhibition period, Engeny reserves the right to review and amend any aspect of the works performed including any opinions and recommendations from the works included or referred to in the works if:
 - Additional sources of information not presently available (for whatever reason) are provided or become known to Engeny; or
 - ii) Engeny considers it prudent to revise any aspect of the works in light of any information which becomes known to it after the date of submission.

Once the document has been adopted and included in the planning scheme it can no longer be amended and a new version would need to be issued.

- e) Engeny does not give any warranty nor accept any liability in relation to the completeness or accuracy of the works, which may be inherently reliant upon the completeness and accuracy of the input data and the agreed scope of works. All limitations of liability shall apply for the benefit of the employees, agents and representatives of Engeny to the same extent that they apply for the benefit of Engeny.
- f) If any claim or demand is made by any person against Engeny on the basis of detriment sustained or alleged to have been sustained as a result of reliance upon the Report or information therein, Engeny will rely upon this provision as a defence to any such claim or demand.
- g) This Report does not provide legal advice.

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Appendix A: Site Visit Photos



Appendix Figure A. 1: Atkin Creek Bridge at Warncoort-Birregurra Road



Appendix Figure A. 2: Atkin Creek Bridge at Roadknight Street



1



Appendix Figure A. 3: Box culverts crossing Sladen Street at Unnamed Tributary



2



Appendix Figure A. 4: Unnamed Tributary east of Barry Street looking towards Barwon River Confluence

Appendix Figure A. 5: Barwon River Bridge crossing at Birregurra-Deans Marsh Road



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Appendix B: Summary of Findings from Community Engagement Sessions

Agenda - Council Meeting - 15 December 2021



Appendix Table B. 1: Summary of findings from Community Engagement Sessions

	Address	Resident Comment
1	17 Anderson Street	 Flood waters did not reach above floor level but were over garage floor in 2016 They were pumping water all day The flood data transfer 1 % extent looked about right for this property. Road drainage in Anderson Street is an issue. Drains at different levels / grades, water doesn't get away.
2	15 Anderson Street	The 2016 flood came half way up the front yard.
3	Football Oval	2016 flood reached the northern boundary of the football oval.
4	6 Anderson Street	2016 flood reached their western boundary.
5	18-24 Scouller Street	 Sewer line is creating a ditch where water is collecting Sewer line construction blocked off drain at end of Scouller Street Drain in Scouller Street needs maintenance Opening of extra drain Photos provided \$40,000 of flood damage Waters entered house and reached 300 mm above floor level
6	43 Roadknight Street	 House did not flood in 2016 Flood waters reached bearers Contends there are issues with reeds in Atkin Creek near its junction with Barwon River which are impeding the flow of flood waters Roadknight Street is acting as a levy bank Suggest contacting Barwon Water about the depression created from sewer line construction Suggest that Atkin Creek should be inspected for obstructions Many noted obstructions in waterway at the Atkin Ck bridge on Birregurra Warncoort Road down to Roadknight Street and from Anderson Street to the Barwon River. Resident suggests creek should be cleared with machinery
7	2 Ennis Street	 Atkin Creek does not flood upstream of this property. The only flood waters on the property come from water backing up at the main road bridge. Resident suggests creek would benefit from clearing of vegetation 8 inches deep at Colac / western entrance in 2016 Channel dug around property Channel was full in 2016, before that, yearly Hasn't been full since 2016
8	42 Sladen Street	 Didn't flood above floor level in 2016 Water reached the bottom of the weepholes in the brick work Considers that the water is backing up the swale because the cross over pipes are not big enough Also thinks the farming practices on nearby farmland have changed and there is more run-off coming off the land Shed floods regularly Skene Street and Strachan Street provide overspill point in 2016 near the creek bend Swales need to be cleaned out because of sediment build up in Sladen Street Austin Street has no swale at the moment Suggest diverting some water down Austin Street and building swale to split some of the runoff load Area also to be inspected by council officers
9	36 Sladen Street	House didn't flood in 2016
10	71 Jenner Street and 19 Ennis Street	Didn't flood in 2016Saturated subsoil
11	40 Sladen Street	 Farmland overflow water draining to north side of Sladen Street Could be split down Sladen and Skene Street In 2016 neighbours were pumping water all day



Location	Address	Resident Comment
		In 2011? – came up to the bridge
13	14 Anderson Street	 Different levels in the swale drains, no constant flow in Anderson Street Survey height checks required in Atkin Creek between Barwon River and Roadknight Street Always water at the back of their properties Doesn't look like the creek is flowing potentially due to lack of grade Swale on west side of skate park always full of water

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C.1 INTENSITY-FREQUENCY-DURATION (IFD) DATA

C.1.1 Base Conditions

Intensity-Frequency-Duration (IFD) data for each sub-catchment's geographic centroid was sourced from the Bureau of Meteorology. The data was assessed as part of the spatial variation analysis discussed in Section B.2 where a representative subarea (Subarea X) was selected and weighted IFD depths specifically re-defined for the 1 % AEP. The input IFD data is shown in Appendix Table C. 1. This data was used as the basis for the application of Areal Reduction Factor (ARF) where required.

Duration	Average rainfall depth (mm)										
	39.35 %	20 %	10 %	5 %	2 %	1 %	1 in 200	1 in 500			
10 min	7.6	9.2	11.0	12.9	15.6	17.8	20.5	24.0			
15 min	9.1	11.1	13.3	15.5	18.9	21.6	24.8	29.1			
30 min	12.1	14.7	17.5	20.5	24.8	28.3	32.4	38.0			
1 hour	15.8	19.1	22.8	26.6	32.0	36.3	41.4	48.5			
2 hour	21.0	25.6	30.4	35.4	42.3	47.9	54.7	64.1			
3 hour	25.2	30.9	36.7	42.7	51.0	57.7	65.9	77.4			
6 hour	35.2	43.6	52.1	60.6	72.7	82.4	94.5	111.0			
12 hour	48.9	61.7	74.2	86.9	105.0	120.0	137.0	162.0			
24 hour	65.1	83.5	102.0	120.0	146.0	167.0	191.0	224.0			
48 hour	80.7	104.0	128.0	153.0	185.0	210.0	239.0	278.0			
72 hour	88.7	114.0	139.0	167.0	200.0	227.0	253.0	291.0			

C.1.2 Climate Change Conditions

Appendix Table C. 2 displays the IFD data which was used for the climate change modelling of the 1 % AEP and 10 % AEP storm events.

Appendix Table C. 2: Climate Change IFD Table for Barwon River RORB Model

Duration	Average rainfall depth (mm)										
	39.35 %	20 %	10 %	5 %	2 %	1 %	1 in 200	1 in 500			
10 min	6.8	9.2	11	12.9	15.6	17.6	20.5	24			
15 min	8.21	11.1	13.3	15.5	18.9	21.3	24.8	29.1			
30 min	10.9	14.7	17.5	20.5	24.8	28	32.4	38			
1 hour	14.2	19.1	22.8	26.6	32	36.2	41.4	48.5			
2 hour	18.9	25.6	30.4	35.4	42.3	48.2	54.7	64.1			
3 hour	22.7	30.9	36.7	42.7	51	58.2	65.9	77.4			
6 hour	31.7	43.6	52.1	60.6	72.7	83	94.5	111			



Duration	Average rainfall depth (mm)										
	39.35 %	20 %	10 %	5 %	2 %	1 %	1 in 200	1 in 500			
12 hour	44	61.7	74.2	86.9	105	120	137	162			
24 hour	58.6	83.5	102	120	146	164	191	224			
48 hour	72.7	104	128	153	185	203	239	278			
72 hour	79.9	114	139	167	200	218	253	291			

C.2 SPATIAL RAINFALL PATTERNS

The modelled Barwon River catchment exceeds 20 km², and as such a single non-uniform spatial pattern was applied to all modelled design storm events for each of the given storm durations.

As a key objective of the flood study is to produce planning scheme overlays based on the 1 % AEP storm event, the single nonspatial pattern was derived from the 1 % AEP IFD data. The resultant pattern was then compared to the resultant pattern derived from the 20 % AEP IFD data as a sensitivity check to confirm minimal variability. The following provides further details on the creation of the single non-uniform spatial pattern:

- 1. Download IFD data for the centroid of each Barwon River RORB model sub-catchment.
- 2. Calculate the volume of rainfall for each sub-catchment for the given duration utilising the design rainfall depth and area.
- 3. Calculate the weighted rainfall depth average for each duration by dividing the sum of sub-catchment rainfall volumes for each duration (calculated in Step 2) by the total catchment area.
- 4. Calculate the percentage of rainfall variation for the given duration and sub-catchment by multiplying the weighted average (calculated in Step 3) by the IFD rainfall depth obtained for each sub-catchment and duration (Step 1).
- 5. Undertake the above steps for the 20 % AEP to compare and confirm the minimal variability between the generated 1 % AEP pattern.
- 6. Apply the 1 % AEP non-uniform pattern as an input to the Barwon River RORB model.
- 7. Adopt the weighted rainfall depths (calculated as part of Step 3) to represent the 1 % AEP IFD input with the other AEP design rainfall depths defined by the depths identified as the catchment's representative subarea (Subarea X).

C.3 PRE-BURST RAINFALL DEPTHS

The rural initial losses obtained from the ARR Data Hub corresponds to complete storms (abbreviated as IL_s), however the IFD data provided by the Bureau of Meteorology is associated to rainfall bursts only. To account for this difference, ARR 2019 recommends reducing the rural initial loss (storm) to represent the initial burst loss (IL_b).

• $IL_{Burst} = IL_{STORM} - Preburst rainfall depth (mm)$

Whilst undertaking the Monte Carlo calibration of the Barwon River RORB model to the FFA curves, the initial burst losses were applied in RORB utilising the in-built default pre-burst distribution patterns for each storm duration and the median pre-burst depths sourced from the ARR Data Hub and displayed within Appendix Table C. 3. As the Data Hub does not provide pre-burst depths for durations less than 60 minutes, these durations have adopted the 60-minute pre-burst depths in line with current industry recommendations.

1.7

				-		
min	hr	20 % AEP	10 % AEP	5 % AEP	2 % AEP	1 % AEP
10	-	1.8	1.7	1.7	1.9	2.1

1.7

Appendix Table C. 3: Barwon River ARR Data Hub Median Pre-burst Depths

1.8

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2.1

1.9

2 % AEP

1.9

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hr

-

min 30

60	1	1.8	1.7	1.7	1.9	2.1
120	2	2.1	2.4	2.8	2.6	2.4
180	3	1.7	2.4	3	2.4	2
360	6	2.9	2.6	2.3	1.8	1.5
720	12	2.3	3.4	4.5	4	3.7
1440	24	0.9	1.4	2	3	3.8
2880	48	0	0	0	0.9	1.6
4320	72	0	0	0	0	0.1
For the simulati	ions which define	d the Barwon Rive	r inflows to the by	draulic TLIELOW	model (at Node II	R4) initial burst losses

10 % AEP

1.7

5 % AEP

1.7

For the simulations which defined the Barwon River inflows to the hydraulic TUFLOW model (at Node ID R4), initial burst losses were considered with the application of duration factors for each given storm event. This duration factor was calculated by subtracting the median pre-burst depth of each storm duration from the rural storm initial loss (IL_{storm}) divided by the rural storm initial loss. The duration factors applied to the rural initial loss are summarised in Appendix Table C. 4.

min	hr	20 % AEP	10 % AEP	5 % AEP	2 % AEP	1 % AEP
10	-	0.88	0.89	0.89	0.87	0.86
15	-	0.88	0.89	0.89	0.87	0.86
30	-	0.88	0.89	0.89	0.87	0.86
60	1	0.88	0.89	0.89	0.87	0.86
120	2	0.89	0.84	0.80	0.84	0.87
180	3	0.81	0.83	0.85	0.88	0.90
360	6	0.85	0.77	0.70	0.73	0.75
720	12	0.91	0.87	0.83	0.59	0.41
1440	24	1.00	1.00	1.00	1.00	0.99
2880	48	0.88	0.89	0.89	0.87	0.86
4320	72	0.88	0.89	0.89	0.87	0.86

Appendix Table C. 4: Barwon River ARR Initial Loss Duration Factors

20 % AEP

1.8

The ARR Data Hub does not provide median pre-burst depths for events greater than the 1 % AEP. A study undertaken by Jordan et al. (2005) has estimated the pre-burst depth to be 3.2 % of the total burst depth. Given the total burst depths are quite large for these rarer events where the pre-burst would not have a significant influence on the peak runoff volume or flow rate, this approach was considered appropriate and adopted for the 0.5 % AEP, 0.2 % AEP and the PMF storm events.

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1 % AEP

2.1



C.4 TEMPORAL PATTERNS

Temporal patterns were obtained from the ARR Data Hub for the modelled Barwon River's catchment centroid. As the catchment is greater than 75 km², areal temporal patterns were adopted. Temporal patterns were derived from the Southern Slopes Mainland Increment data set.

C.5 AREAL REDUCTION FACTOR

The IFD data provided by the BoM is applicable for rainfall in small catchments. As catchment size increases, the chance of that average intensity of rainfall occurring over the entire catchment decreases. To address this issue an Areal Reduction Factor (ARF) can be applied to account for the larger catchment area.

ARR 2019 provides procedures for the calculation of ARFs for catchments up to 30,000 km² and durations up to and including 7 days. The ARF to be applied to the design rainfall is a function of the total area of the catchment, the duration of the design rainfall event and its AEP.

During the assessment of modelled flows at the gauging station / model outlet, the ARF was applied through the RORB interface allowing the consideration of the total catchment area for the given AEP and storm duration.

In contrast for the generation of inflow hydrographs (at Node ID 'R4') for application into the hydraulic TUFLOW model, the ARF was applied to the IFD input data. The relevant procedure and equations described within ARR 2019 for a catchment area between 10 to 1000 km² were utilised. As an example, for the Barwon inflow location (Node ID 'R4') which consists of an upstream catchment area of approximately 432 km² and for a storm duration of 12 hours and 1 % AEP event, an ARF of 0.865 was applied to the relevant IFD rainfall depth. Appendix Table C. 5 provides a summary of the ARF factors applied to generate the Barwon River flows at location 'R4' for the various storm events modelled to date.

Appendix Table C. 5: ARF Factors applied to the Barwon River 'R4' Inflow Location

Duration	20 % AEP	1 % AEP
720 min (12 hr)	0.891	0.865
1440 min (24 hr)	0.936	0.943
2880 min (48 hr)	0.950	0.958

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Appendix D: Atkin Creek & Unnamed Tributary Hydrological Modelling Details



D.1 INTENSITY-FREQUENCY-DURATION (IFD) DATA

D.1.1 Base Case / Existing Conditions

Intensity-Frequency-Duration (IFD) data for each sub-catchment's geographic centroid was sourced from the Bureau of Meteorology. The data was assessed as part of the spatial variation analysis discussed below in Section D.2 where a representative subarea (Subarea AK) was selected and weighted IFD depths specifically re-defined for the 1 % AEP. The input IFD data is shown in Appendix Table D. 1. This data was used as the basis for the application of Areal Reduction Factor (ARF) where required.

Appendix Table D. 1: IFD Table for Atkin Creek and Unnamed Tributary RORB Model

Duration	Average rainfall depth (mm)										
	39.35 %	20 %	10 %	5 %	2 %	1 %	1 in 200	1 in 500			
10 min	7.1	8.8	10.6	12.4	15.1	17.2	20.2	23.8			
15 min	8.6	10.6	12.8	15.0	18.3	20.9	24.5	29.0			
30 min	11.4	14.0	16.8	19.7	23.8	27.2	31.7	37.4			
1 hour	14.8	18.0	21.4	25.0	29.8	33.9	39.2	46.0			
2 hour	19.2	23.2	27.4	31.7	37.6	42.6	49.0	57.6			
3 hour	22.6	27.2	32.0	36.9	43.6	49.4	57.0	67.1			
6 hour	30.0	36.2	42.6	49.0	58.0	66.0	76.4	90.5			
12 hour	39.6	48.3	57.1	65.8	78.8	90.0	105.0	124.0			
24 hour	50.5	62.5	74.5	86.7	105.0	119.6	138.0	163.0			
48 hour	61.1	76.1	91.5	107.0	129.0	146.9	167.0	195.0			
72 hour	66.9	82.7	99.3	117.0	140.0	157.7	176.0	202.0			

D.1.2 Climate Change Conditions

Appendix Table D. 2 displays the IFD data which was used for the climate change modelling of the 1 % AEP and 10 % AEP storm events. This data was also used as the basis for the application of ARFs where relevant.

Appendix Table D. 2: IFD Table for Barwon River RORB Model

Duration	Average rainfall depth (mm)										
	39.35 %	20 %	10 %	5 %	2 %	1 %	1 in 200	1 in 500			
10 min	8.4	10.4	12.6	14.7	17.9	20.4	23.9	28.2			
15 min	10.2	12.6	15.2	17.8	21.7	24.8	29.0	34.4			
30 min	13.5	16.6	19.9	23.3	28.2	32.2	37.6	44.3			
1 hour	17.5	21.3	25.4	29.6	35.3	40.2	46.5	54.5			
2 hour	22.8	27.5	32.5	37.6	44.6	50.4	58.1	68.3			
3 hour	26.8	32.2	37.9	43.7	51.7	58.6	67.5	79.5			



Duration	Average rainfall depth (mm)												
	39.35 %	20 %	10 %	5 %	2 %	1 %	1 in 200	1 in 500					
6 hour	35.6	42.9	50.5	58.1	68.7	78.2	90.5	107.2					
12 hour	46.9	57.2	67.7	78.0	93.4	106.6	124.4	146.9					
24 hour	59.8	74.1	88.3	102.7	124.4	141.8	163.5	193.2					
48 hour	72.4	90.2	108.4	126.8	152.9	174.1	197.9	231.1					
72 hour	79.3	98.0	117.7	138.6	165.9	186.9	208.6	239.4					

D.2 SPATIAL RAINFALL PATTERNS

The modelled Atkin Creek and Unnamed Tributary catchment exceeds 20 km², and as such a single non-uniform spatial pattern was applied to all modelled design storm events for each of the given storm durations.

As a key objective of the flood study is to produce planning scheme overlays based on the 1 % AEP storm event, the single nonspatial pattern was derived from the 1 % AEP IFD data. The resultant pattern was then compared to the resultant pattern derived from the 20 % AEP IFD data as a sensitivity check to confirm minimal variability. The creation of a single non-uniform spatial pattern was undertaken using the same approach documented in Section 3.4.6.

D.3 PRE-BURST RAINFALL DEPTHS

The rural initial losses obtained from the ARR Data Hub corresponds to complete storms (abbreviated as ILs), however the IFD data provided by the Bureau of Meteorology is associated to rainfall bursts only. To account for this difference, ARR 2019 recommends reducing the rural initial loss (storm) to represent the initial burst loss (IL_b).

• $IL_{Burst} = IL_{STORM} - Preburst rainfall depth (mm)$

The ensemble and Monte Carlo simulations for the Atkin Creek and Unnamed Tributary RORB model accounted for pre-burst losses by applying loss duration factors for each given storm event. This duration factor was calculated by subtracting the median pre-burst depth of each storm duration from the rural storm initial loss (IL storm) divided by the rural storm initial loss.

Appendix Table D. 3 displays the median pre-burst depths obtained from the ARR Data Hub for the Atkin Creek and Unnamed Tributary catchment centroid with

Appendix Table D. 4 displaying the resultant pre-burst duration factors applied to the rural initial loss for each storm event and duration.

Duration	20 % AEP	10 % AEP	5 % AEP	2 % AEP	1 % AEP
10 min	1.7	1.6	1.5	1.8	1.9
15 min	1.7	1.6	1.5	1.8	1.9
30 min	1.7	1.6	1.5	1.8	1.9
1 hour	1.7	1.6	1.5	1.8	1.9
2 hour	2.8	3	3.2	2.6	2.2
3 hour	2.7	2.8	2.8	2.7	2.7

Appendix Table D. 3: Atkin Creek and Unnamed Tributary ARR Data Hub Median Pre-burst Depths



Duration	20 % AEP	10 % AEP	5 % AEP	2 % AEP	1 % AEP
6 hour	1.7	2.1	2.5	2.9	3.3
12 hour	0.8	1.4	1.9	3.9	5.4
24 hour	0	0	0	0.4	0.6
48 hour	0	0	0	0	0
72 hour	0	0	0	0	0

Appendix Table D. 4: Atkin Creek and Unnamed Tributary ARR Data Hub Initial Loss Depth Duration Factors

Duration	20 % AEP	10 % AEP	5 % AEP	2 % AEP	1 % AEP
10 min	0.89	0.89	0.90	0.88	0.87
15 min	0.89	0.89	0.90	0.88	0.87
30 min	0.89	0.89	0.90	0.88	0.87
1 hour	0.89	0.89	0.90	0.88	0.87
2 hour	0.81	0.80	0.79	0.83	0.85
3 hour	0.82	0.81	0.81	0.82	0.82
6 hour	0.89	0.86	0.83	0.81	0.78
12 hour	0.95	0.91	0.87	0.74	0.64
24 hour	1.00	1.00	1.00	0.97	0.96
48 hour	1.00	1.00	1.00	1.00	1.00
72 hour	1.00	1.00	1.00	1.00	1.00

The ARR Data Hub does not provide median pre-burst depths for events greater than the 1 % AEP. A study undertaken by Jordan et al. (2005) has estimated the pre-burst depth to be 3.2 % of the total burst depth. Given the total burst depths are quite large for these rarer events where the pre-burst would not have a significant influence on the peak runoff volume or flow rate, this approach was considered appropriate and adopted for the 0.5 % AEP, 0.2 % AEP and the PMF storm events.

D.4 TEMPORAL PATTERNS

Temporal patterns were obtained from the ARR Data Hub for the modelled Atkin Creek and Unnamed Tributary RORB model catchment centroid. As the catchment is less than 75 km² point temporal patterns were adopted. Temporal patterns were derived from the Southern Slopes Mainland Increment data set.

D.5 AREAL REDUCTION FACTOR

The IFD data provided by the BoM is applicable for rainfall in small catchments. As catchment size increases, the chance of that average intensity of rainfall occurring over the entire catchment decreases. To address this issue an Areal Reduction Factor (ARF) can be applied to the IFD data to account for the larger catchment area.

ARR 2019 provides procedures for the calculation of ARFs for catchments up to 30,000 km² and durations up to and including 7 days. The ARF to be applied to the design rainfall is a function of the total area of the catchment, the duration of the design rainfall event and its AEP.



The ARF was computed using the relevant procedure described in ARR 2019 for the Monte Carlo simulations focussing on the township's watercourses utilising the short duration ARF equation. Due to the small area of the local township catchment, an ARF of 1 was applied to the ensemble simulations.

Appendix Table D. 5 displays the ARF applied to the Atkin Creek and Unnamed Tributary inflow locations for the AEP events and durations simulated to date. These ARF's were calculated based on the following catchment areas upstream of the relevant node locations:

- 'CA2' on Atkin Creek 22.7 km²
- 'CV2' on the Unnamed Tributary 4.6 km²

These node locations and associated upstream catchment areas were mid-way along the waterways within the township to allow for the averaged effects of the ARF between the inflow locations and downstream Barwon River confluence of both the Atkin Creek and Unnamed Tributary.

Duration	20 % AEP		1 % AEP								
	Inflows to Atkin Creek (BP1 & BS2)	Inflows to Unnamed Tributary (CM2 & CR2)	Inflows to Atkin Creek (BP1 & BS2)	Inflows to Unnamed Tributary (CM2 & CR2)							
720 min	0.968	0.991	0.955	0.981							
(12 hr)											
1440 min (24 hr)	0.985	0.999	0.998	1							
2880 min (48 hr)	0.990	1	1	1							

Appendix Table D. 5: ARF Factors applied to the Atkin Creek and Unnamed Tributary inflow locations

D.6 PMF MODELLING APPROACH

The Probable Maximum Flood (PMF) is the flow generated from the theoretical peak maximum precipitation (PMP) for a given duration under current climate conditions. Procedures for estimating PMP rainfall depths have been developed by the Bureau of Meteorology (BoM) for different locations and durations. For durations up to 6 hours and areas up to 1000 km² the Generalised Short Duration Method (GSDM) is applicable for all of Australia.

The following provides a summary of the approach undertaken and assumptions adopted for calculating the PMF for the Unnamed Tributary and Atkin Creek waterways.

Key Assumptions (used as inputs to the GSDM calculation)

- Elevation Adjustment Factor = 1
- Moisture Adjustment Factor = 0.53
- Proportion of Catchment Rough = 100 %
- Proportion of Catchment Smooth = 0 %

GSDM Methodology

- Estimate the PMP depth (nearest 10 mm) using the GSDM inputs (above) and the PMP value equation and depth-durationarea curves presented in *The Estimation of Probable Maximum Precipitation in Australia: Generalised Short-Duration Method* (BoM, 2003)
- 2. Manually adjust the 4-12 hour PMP estimates to achieve a better fit to the rainfall-duration curve
- 3. Finalise estimates of the PMP (Appendix Table D. 6)
- 4. Calculate the depth per time increment for each event duration using the design temporal distribution pattern derived by the BoM (Appendix Table D. 7).



- 5. Calculate the design spatial distribution of the PMP for each event duration up to the 6 hour event over the catchment using the methodology recommended within the BoM guidelines which includes the use of ellipses (BoM, 2003):
- 6. Calculate the proportion of each RORB subarea inside each ellipse
- 7. Calculate the PMP depth applied to each subarea by summing the product of the proportion of each RORB subarea inside each ellipse (calculated in Step 6) by the mean rainfall depth for the ellipse (calculated in Step 5)
- 8. Generate RORB storm files using the subarea spatial distribution calculated in Step 7 for each event duration to represent the PMF
- 9. Output the required RORB hydrographs for application to the TUFLOW hydraulic model.

Appendix Table D. 6: Total PMP for Event Duration for the Unnamed Tributary and Atkin Creek Waterways

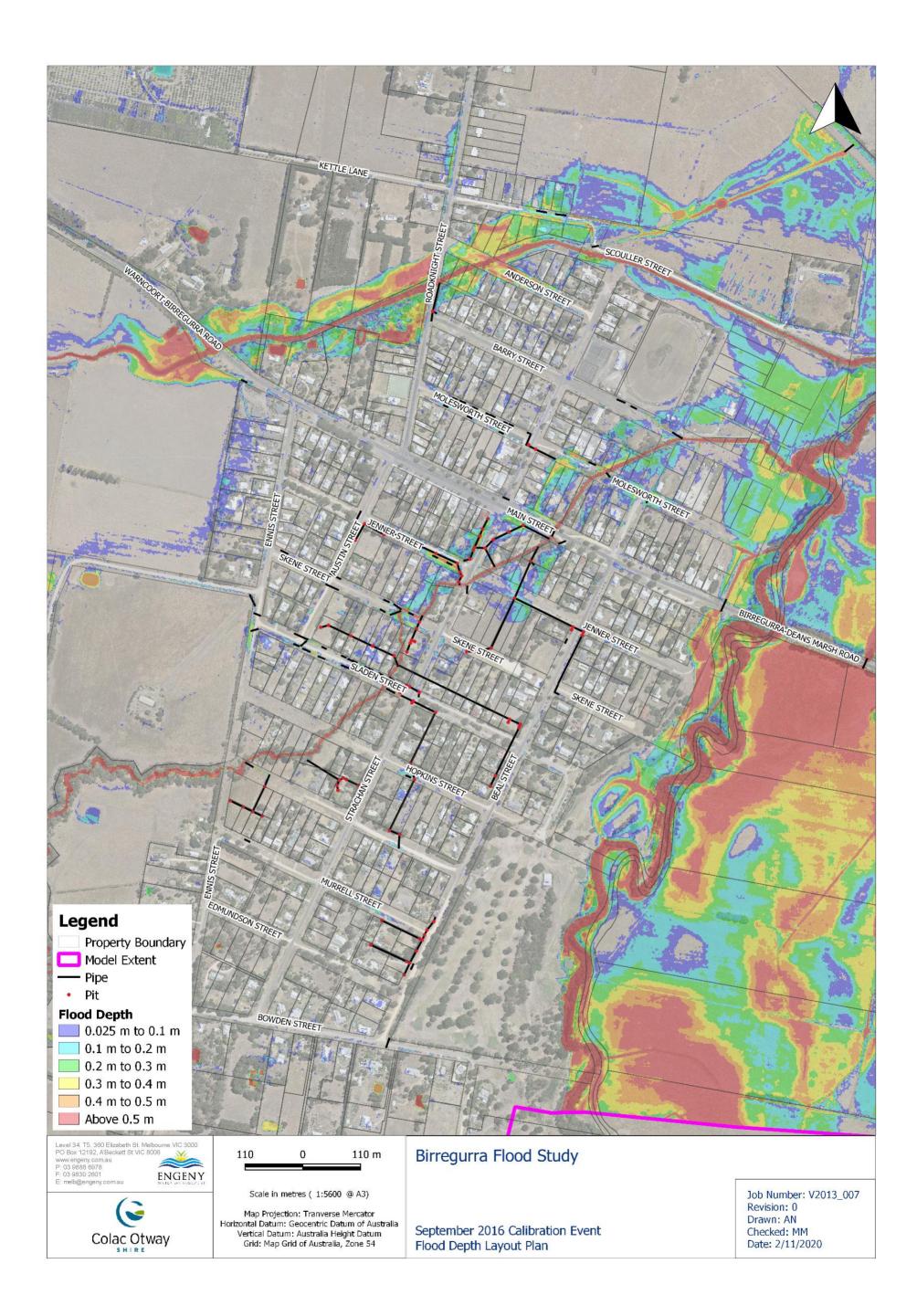
Event Duration	Unnamed Tributary (mm)	Atkin Creek (mm)
15 minute	120	110
30 minute	170	160
1 hour	260	230
2 hour	390	350
3 hour	470	420
4 hour	560	510
6 hour	565	560

Appendix Table D. 7: Design Temporal Distribution of Short Duration PMP (taken from BoM, 2003)

% of time	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	5
% of PMP	4	10	18	25	32	39	46	52	59	64	70	75	80	85	89	92	95	97	99	100	4



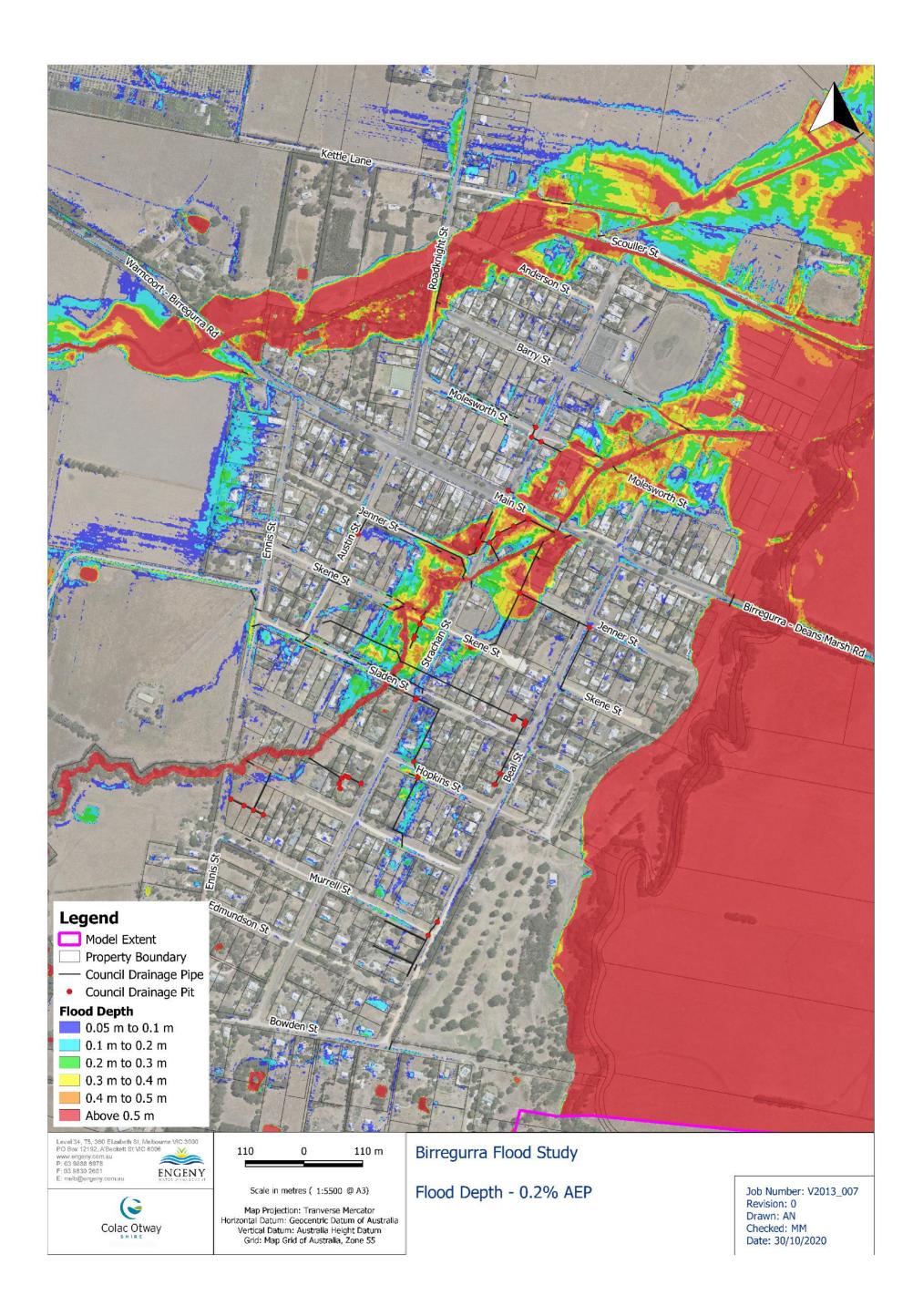
Appendix E: September 2016 Calibration Flood Depth Layout Plan

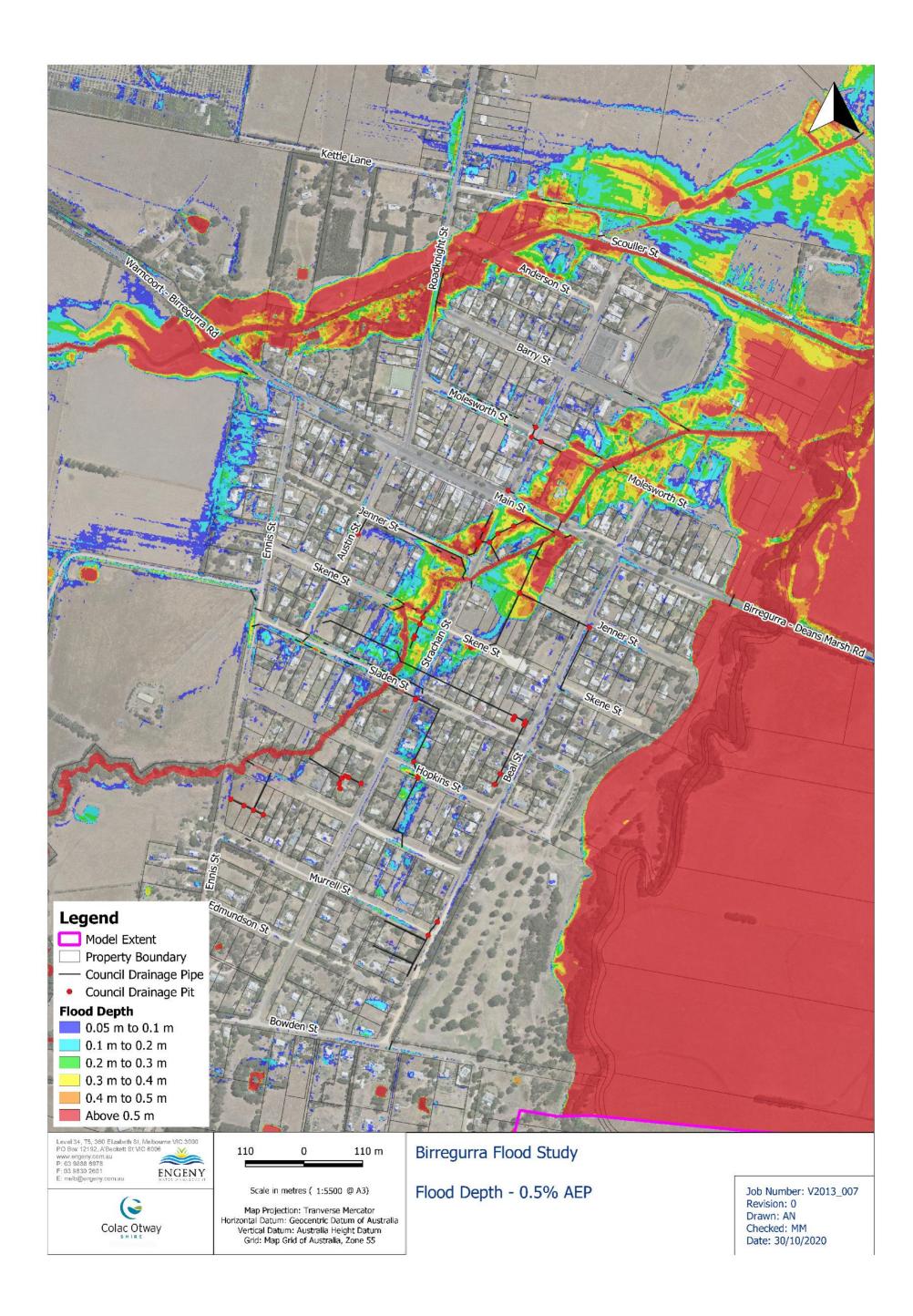


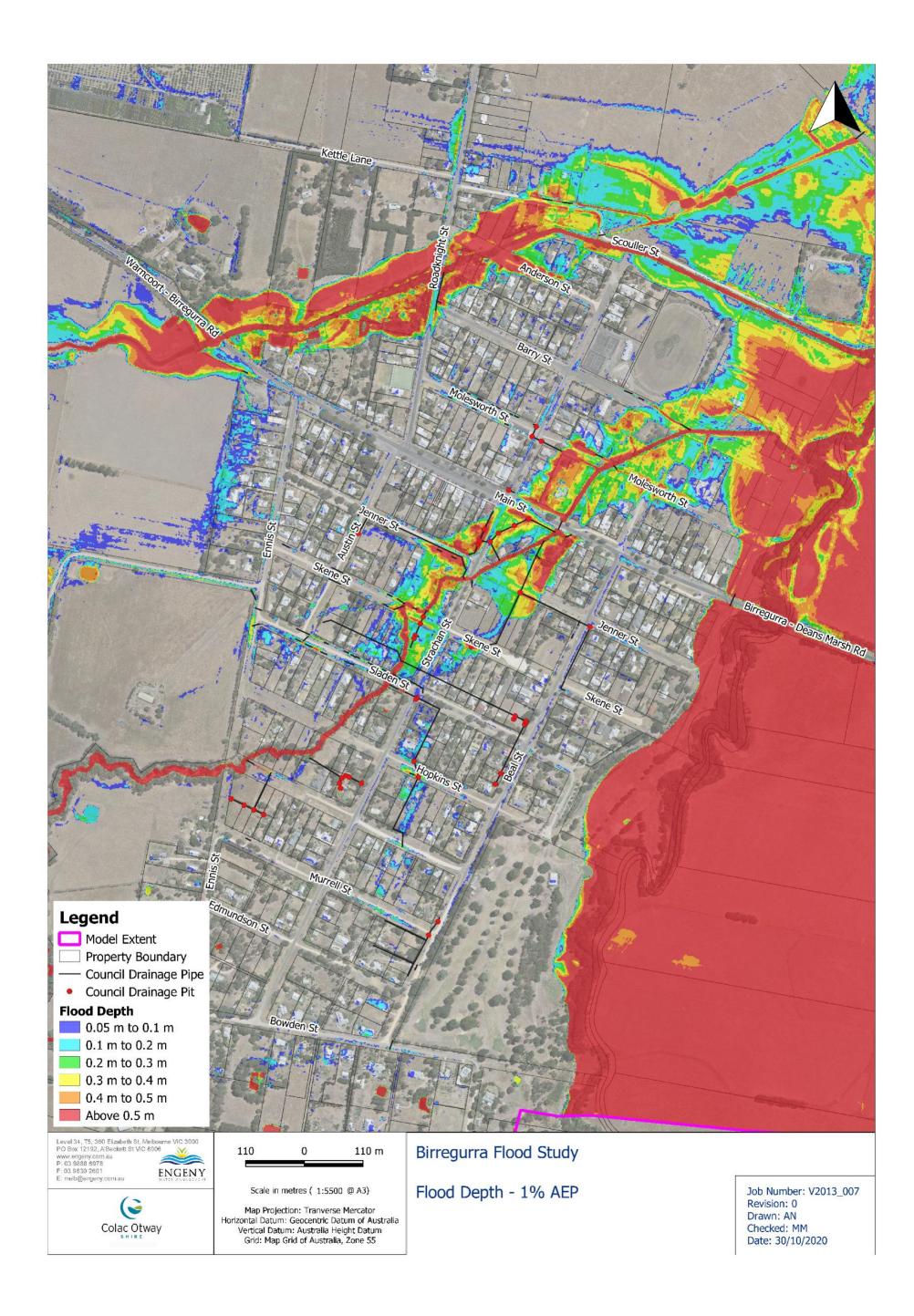


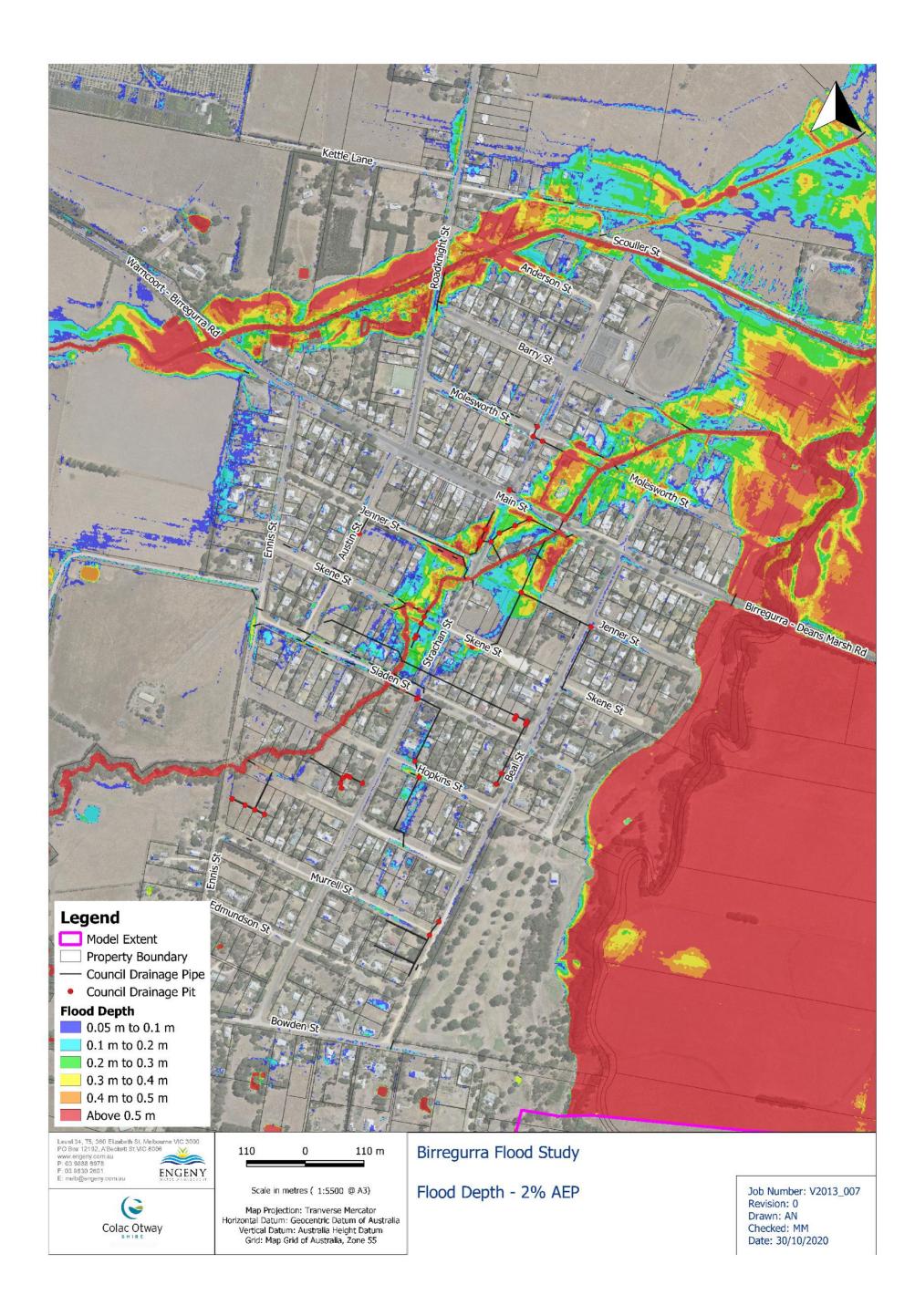
Appendix F: Design Flood Depth Layout Plans

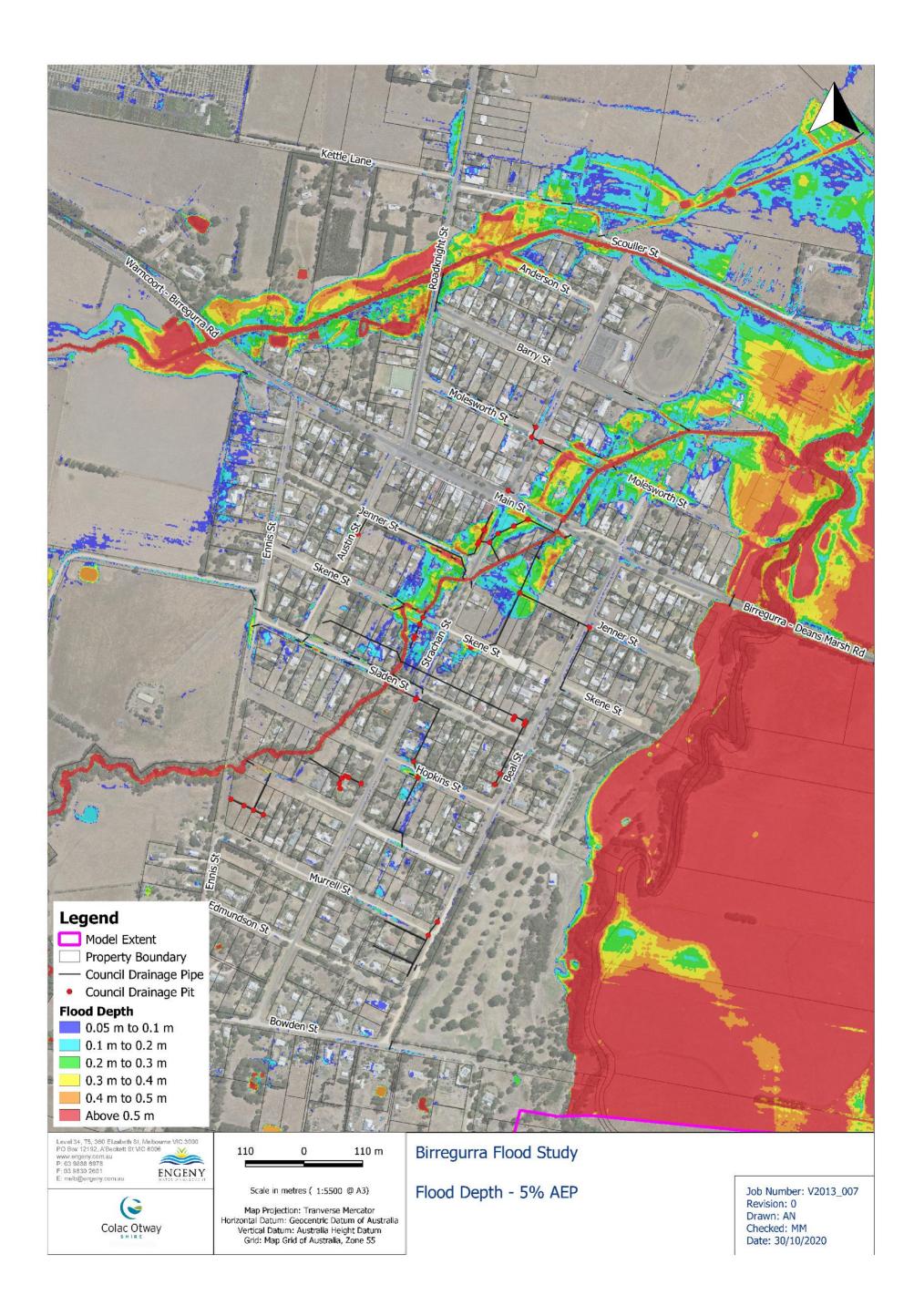


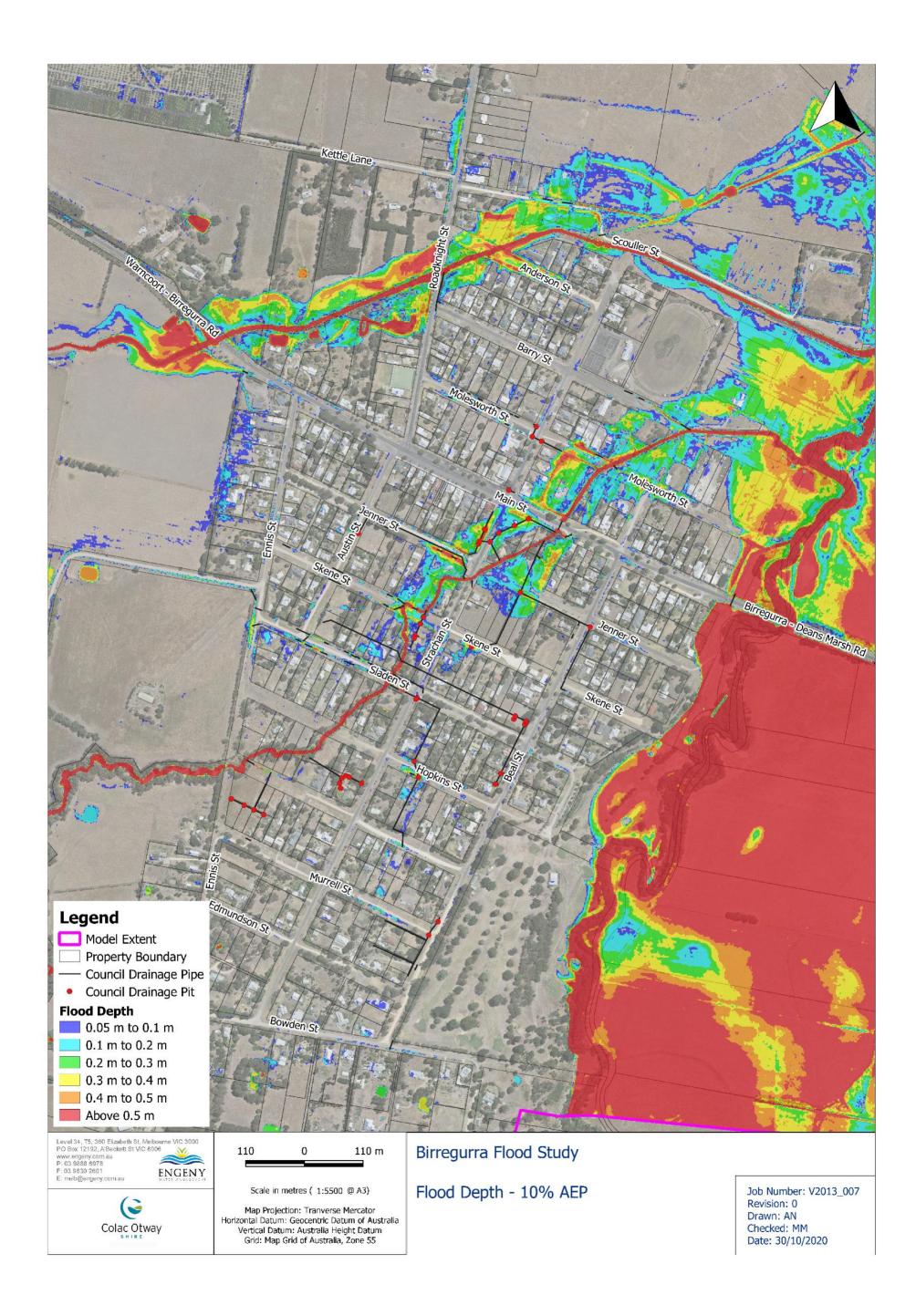


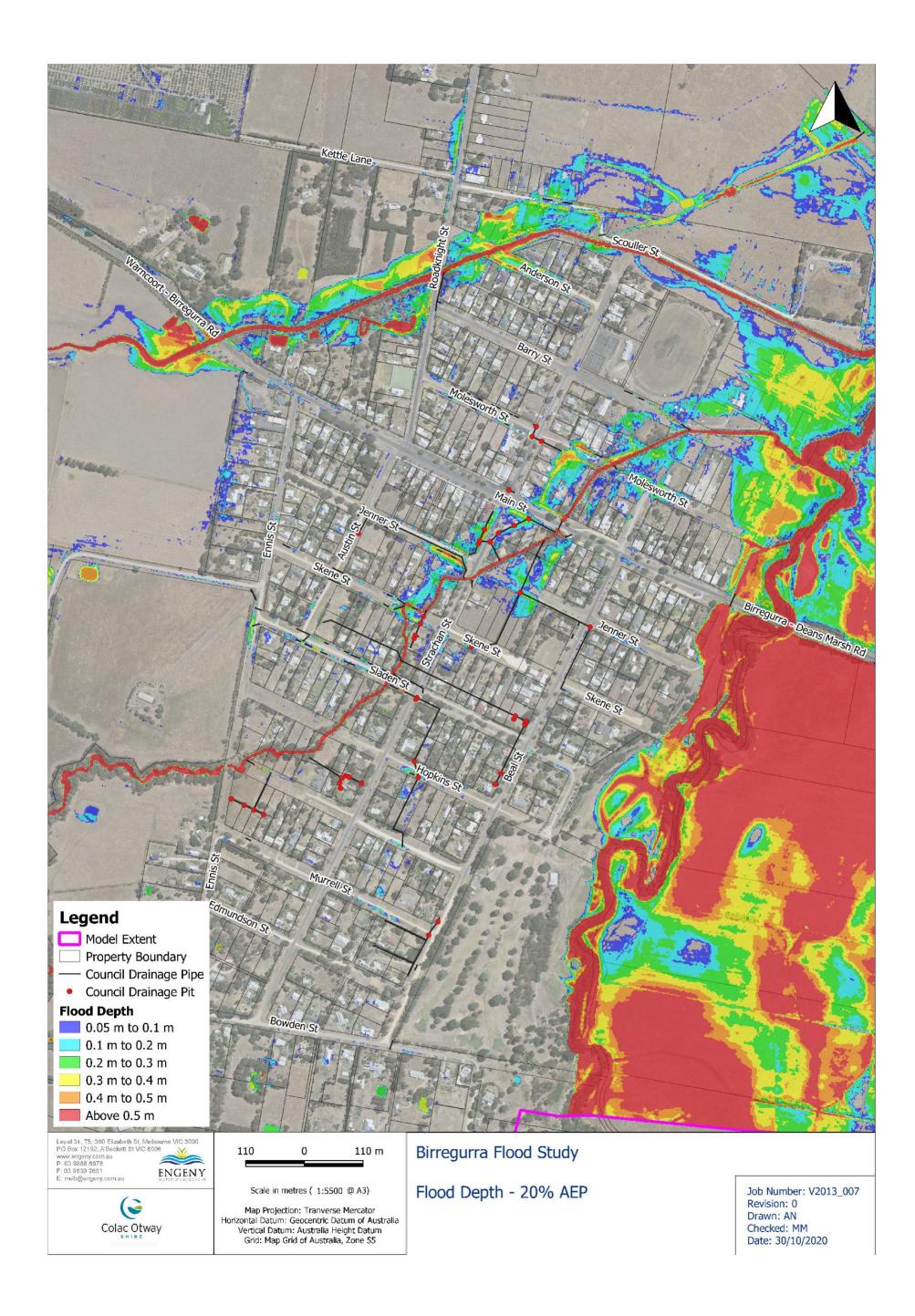


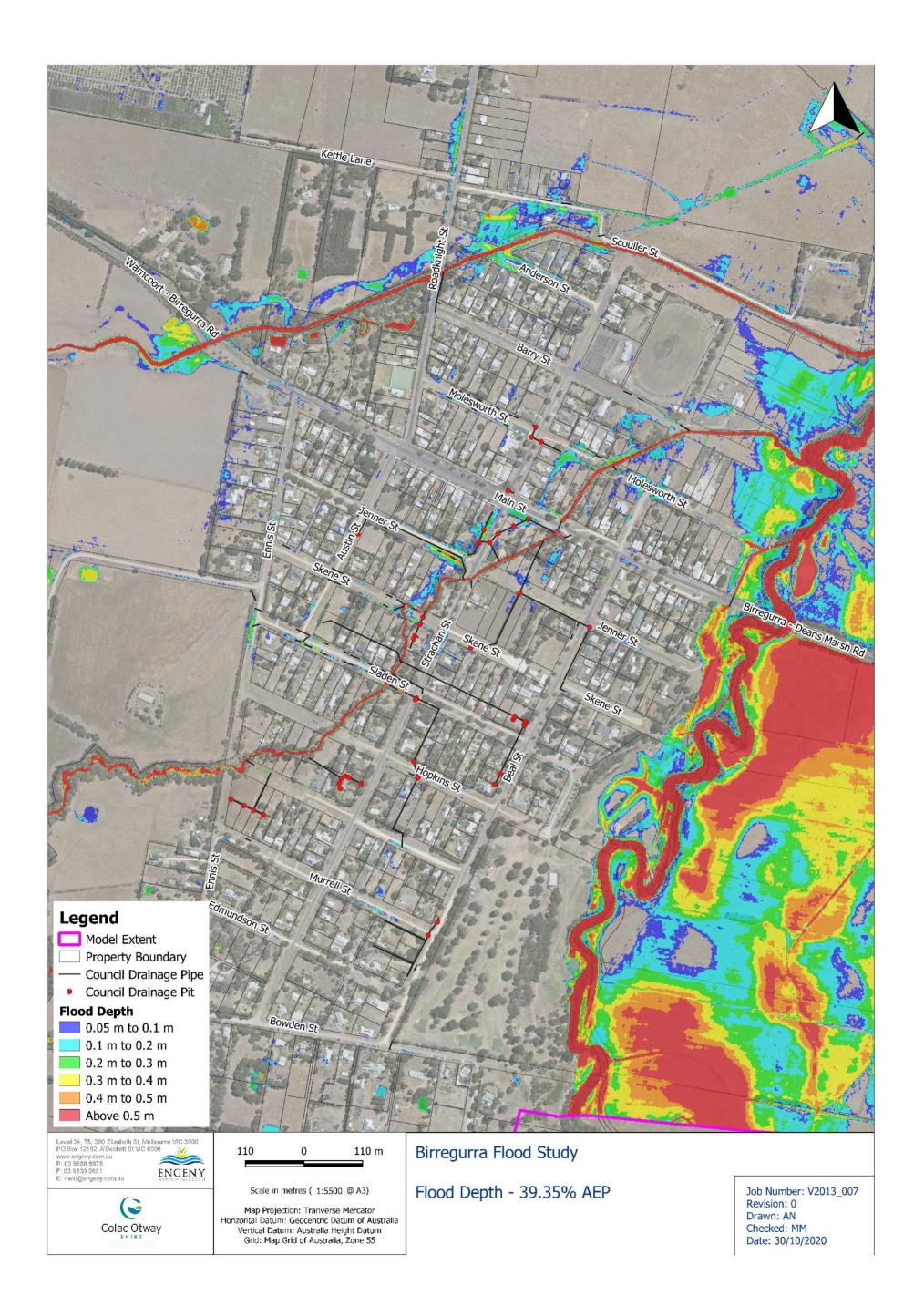






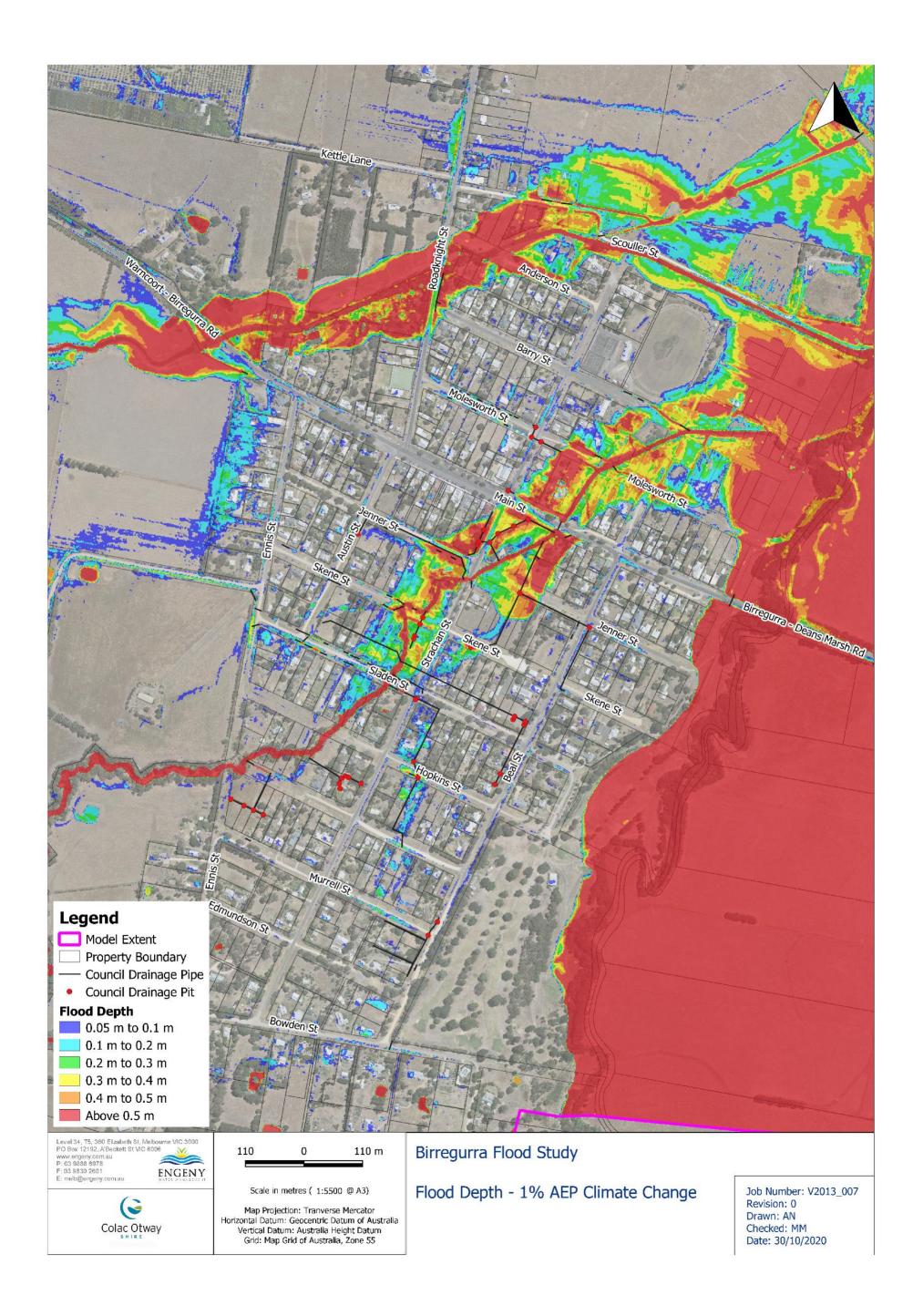


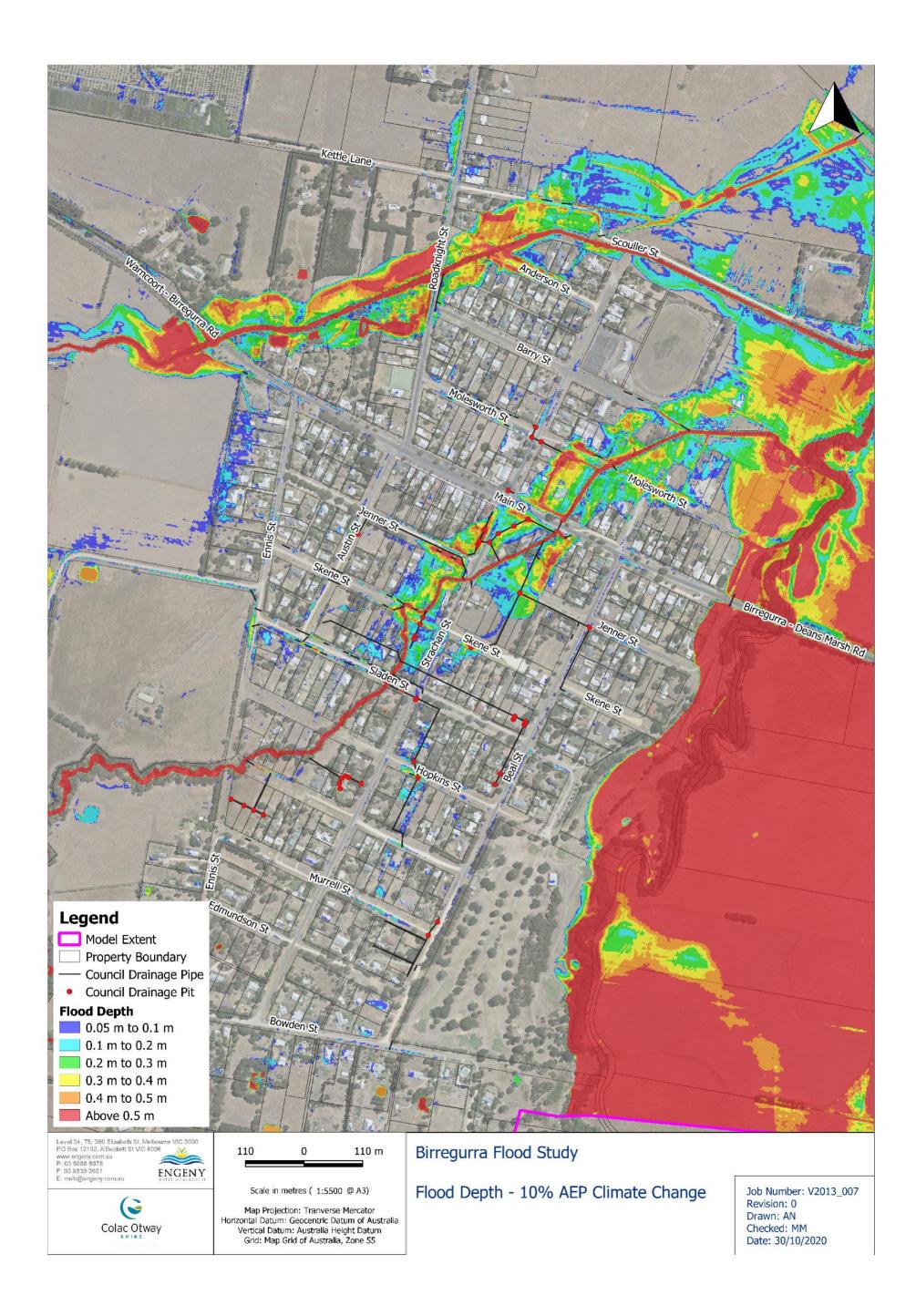






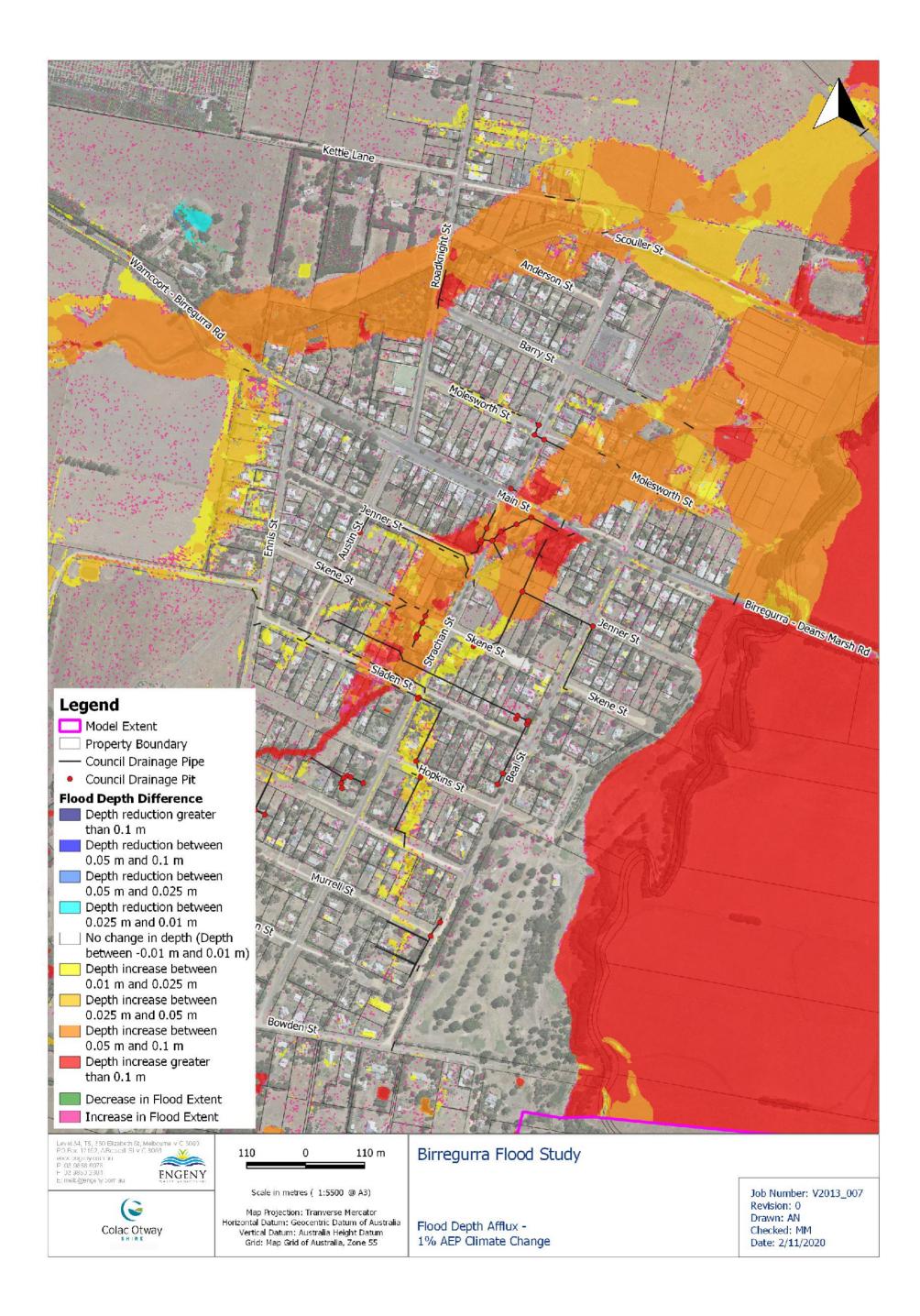
Appendix G: Climate Change Flood Depth Layout Plans

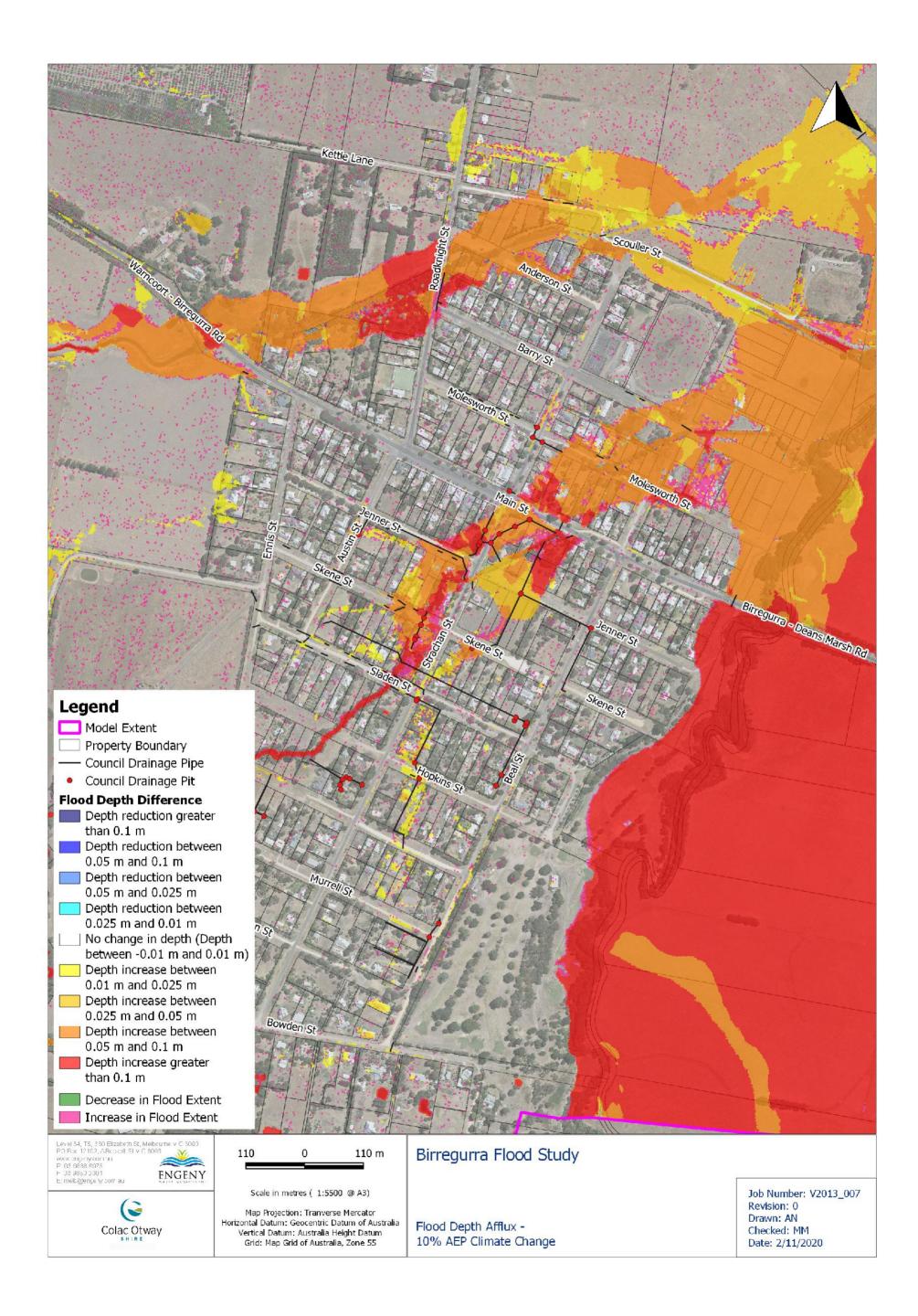






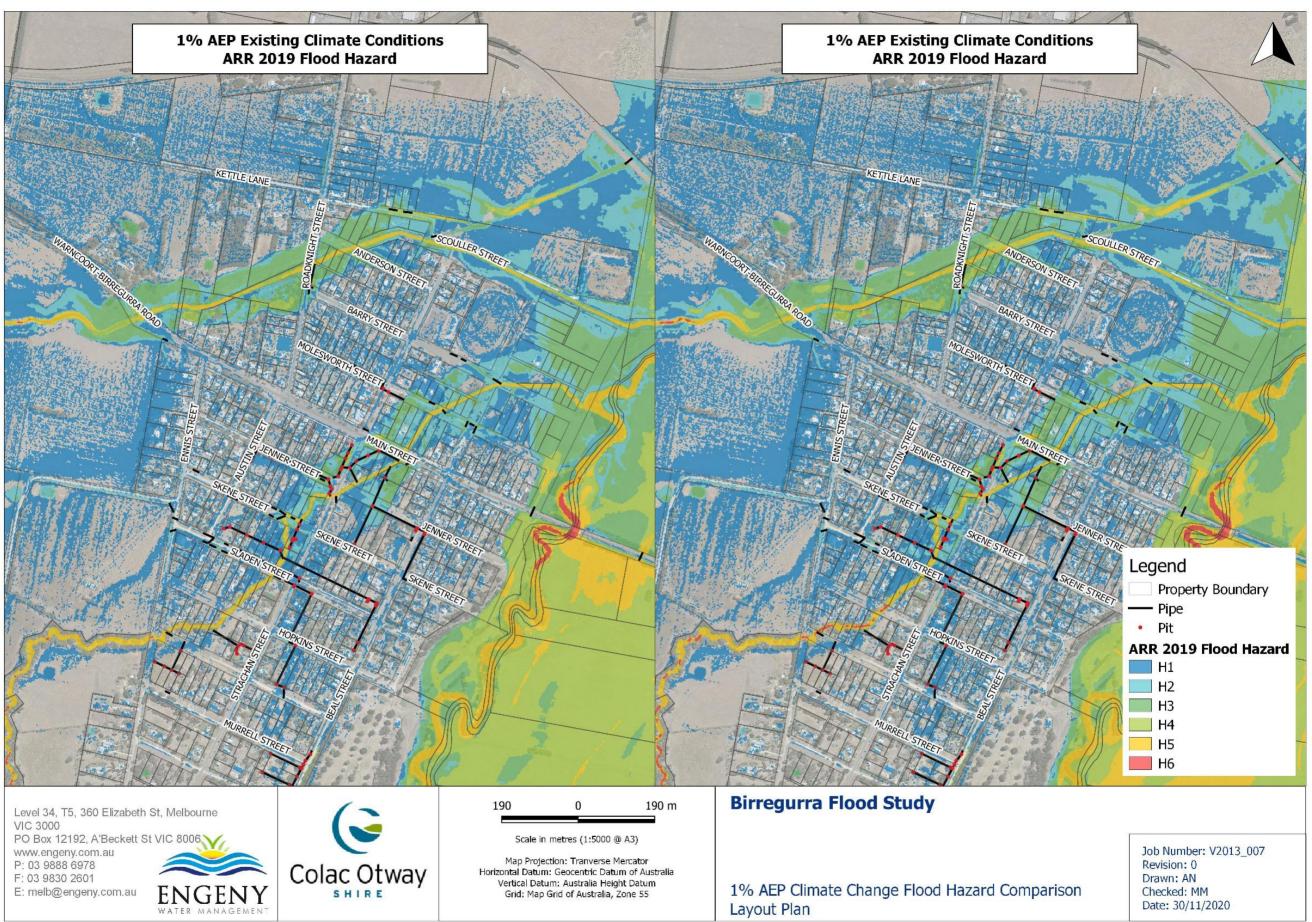
Appendix H: Climate Change Flood Depth Afflux Layout Plans







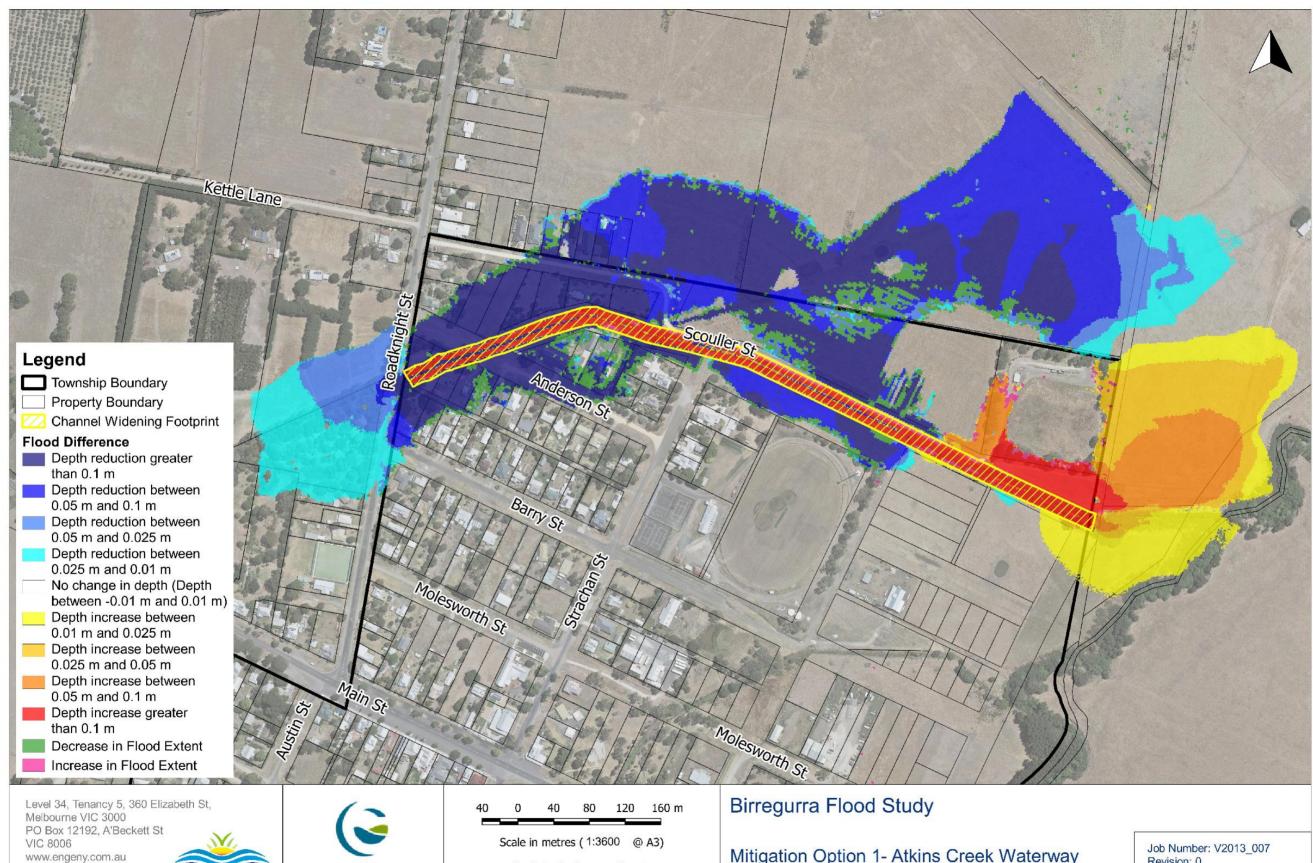
Appendix I: Climate Change Flood Hazard Comparison Layout Plan



Attachment 10.6.4 Draft Birregurra Flood Study Report



Appendix J: Mitigation Modelling Flood Depth Afflux Layout Plans



Map Projection: Tranverse Mercator Horizontal Datum: Geocentric Datum of Australia Colac Otway Vertical Datum: Australia Height Datum Grid: Map Grid of Australia, Zone 55

Mitigation Option 1- Atkins Creek Waterway Widening 1 % AEP Flood Depth Afflux

E: melb@engeny.com.au

ENGENY

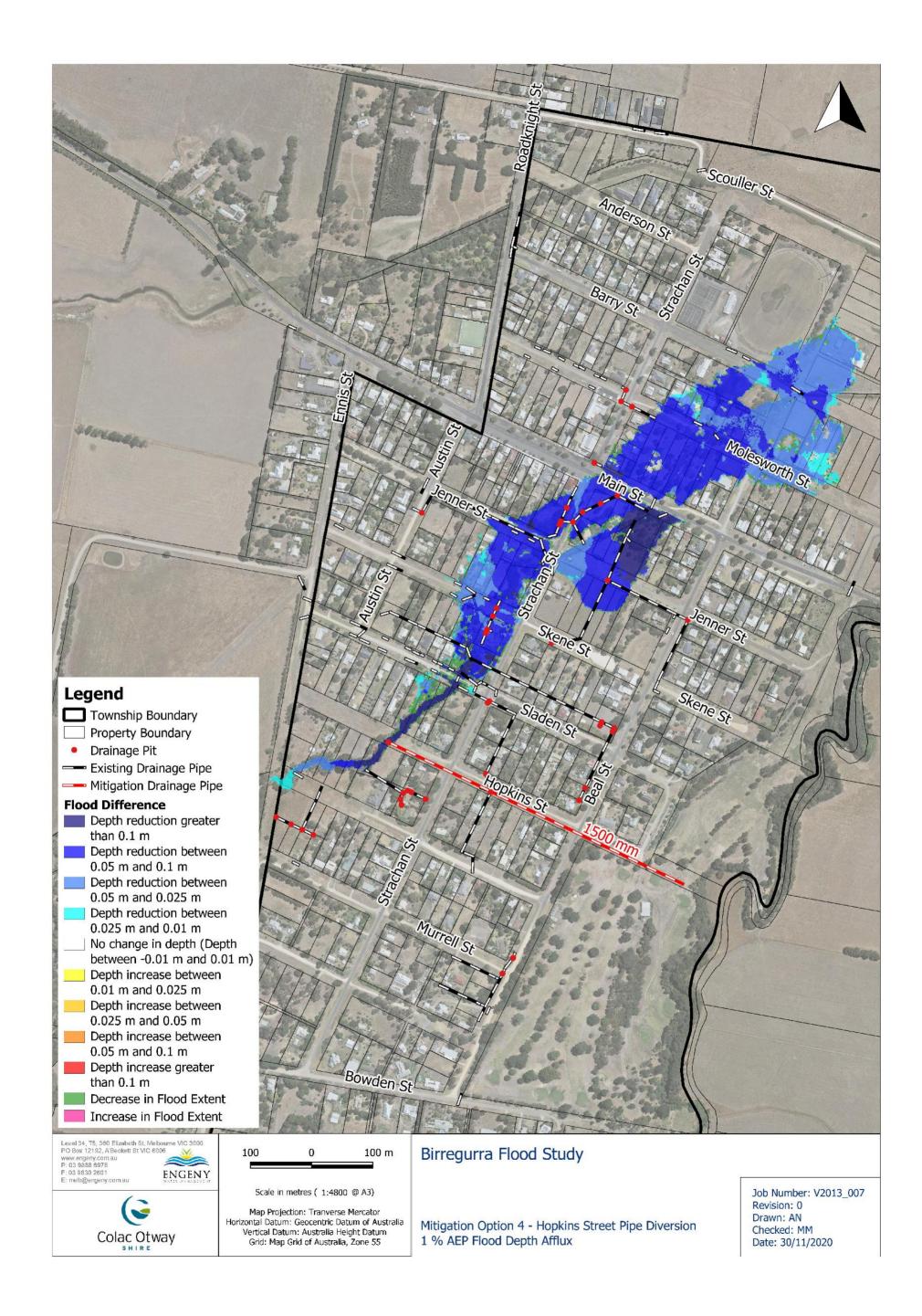
SHIRE

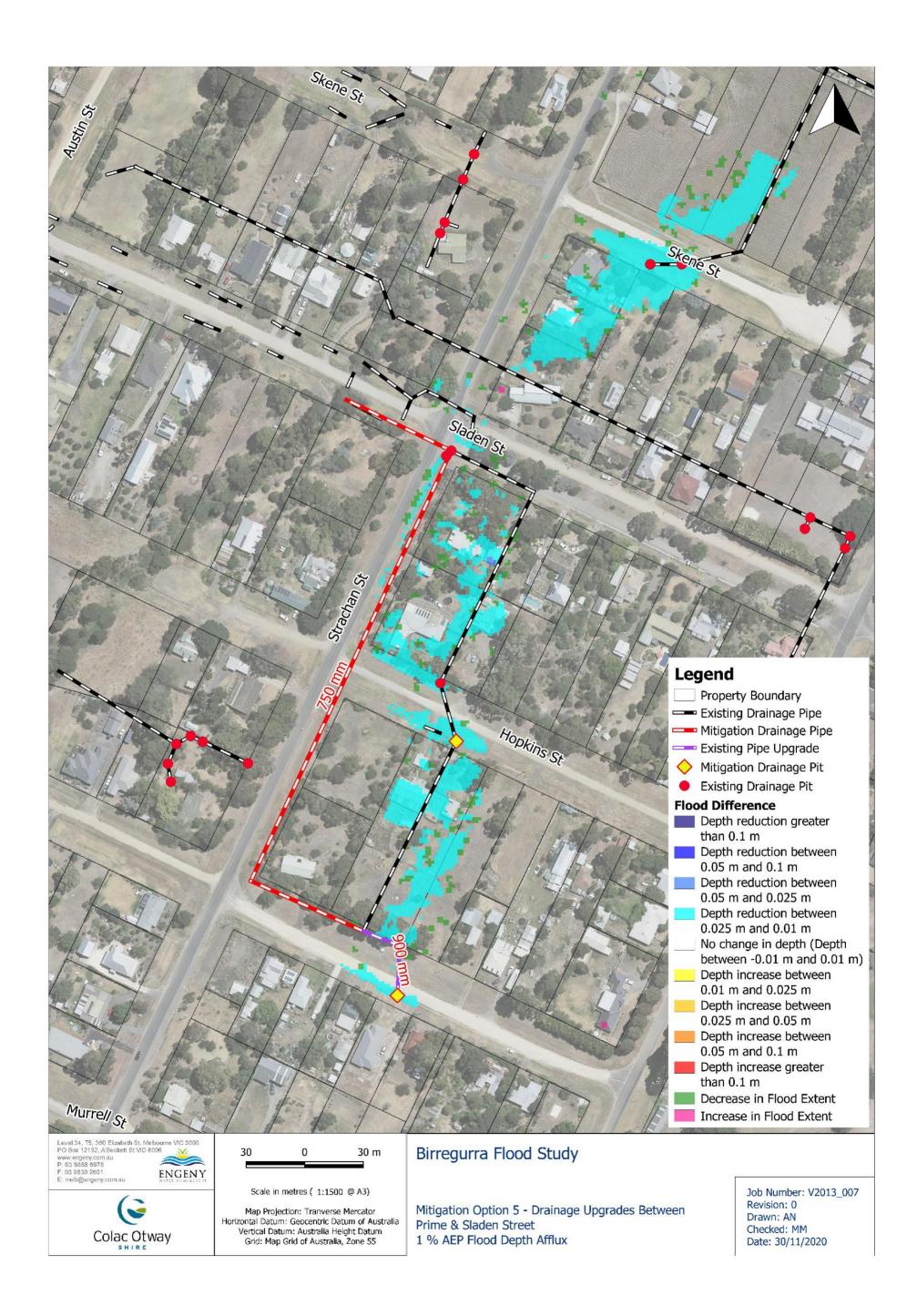
P: 03 9888 6978

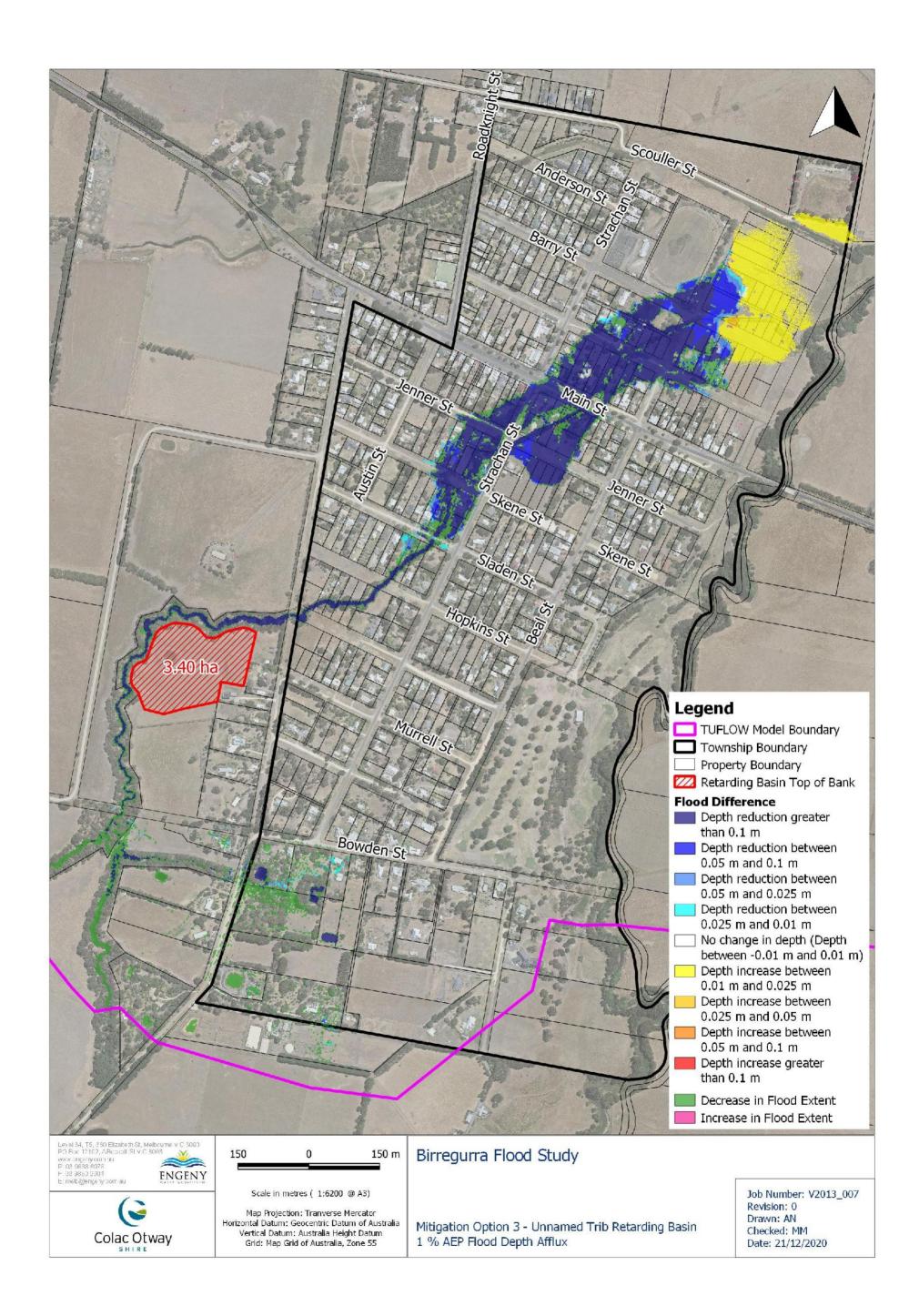
F: 03 9830 2601

Attachment 10.6.4 Draft Birregurra Flood Study Report

Job Number: V2013_007 Revision: 0 Drawn: AN Checked: MM Date: 30/11/2020









Appendix K: Planning Overlays Parent Clauses

FLOODWAY OVERLAY 44.03

31/07/2018 VC148

Shown on the planning scheme map as FO or RFO with a number (if shown).

Purpose

To implement the Municipal Planning Strategy and the Planning Policy Framework.

To identify waterways, major floodpaths, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding.

To ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting.

To reflect any declarations under Division 4 of Part 10 of the Water Act, 1989 if a declaration has been made.

To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

To ensure that development maintains or improves river and wetland health, waterway protection and flood plain health.

44.03-1 Floodway objectives and statement of risk

31/07/2018 VC148

A schedule to this overlay may contain:

- Floodway management objectives to be achieved.
- A statement of risk. .

44.03-2

24/01/2020 VC160

Buildings and works

A permit is required to construct a building or to construct or carry out works, including:

- A fence. .
- Roadworks, if the water flow path is redirected or obstructed.
- Bicycle pathways and trails. ÷
- Public toilets.
- A domestic swimming pool or spa and associated mechanical and safety equipment if associated . with one dwelling on a lot.
- Rainwater tank with a capacity of not more than 10,000 litres.
- A pergola or verandah, including an open-sided pergola or verandah to a dwelling with a finished . floor level not more than 800mm above ground level and a maximum building height of 3 metres above ground level.
- A deck, including a deck to a dwelling with a finished floor level not more than 800mm above ground level.
- A non-domestic disabled access ramp.
- A dependent person's unit.

This does not apply:

- If a schedule to this overlay specifically states that a permit is not required.
- To flood mitigation works carried out by the responsible authority or floodplain management authority.

Page 1 of 3

- To the following works in accordance with plans prepared to the satisfaction of the responsible authority:
 - The laying of underground sewerage, water and gas mains, oil pipelines, underground telephone lines and underground power lines provided they do not alter the topography of the land.
 - The erection of telephone or power lines provided they do not involve the construction of towers or poles.
- To post and wire and post and rail fencing.

44.03-3 Subdivision

31/07/2018 VC148

A permit is required to subdivide land. A permit may only be granted to subdivide land if the following apply:

- The subdivision does not create any new lots, which are entirely within this overlay. This does not apply if the subdivision creates a lot, which by agreement between the owner and the relevant floodplain management authority, is to be transferred to an authority for a public purpose.
- The subdivision is the resubdivision of existing lots and the number of lots is not increased, unless a local floodplain development plan incorporated into this scheme specifically provides otherwise.

44.03-4 Application requirements

31/07/2018 VC148

Local floodplain development plan

If a local floodplain development plan has been developed for the area and has been incorporated into this scheme, an application must be consistent with the plan.

Flood risk report

If a local floodplain development plan for the area has not been incorporated into this scheme, an application must be accompanied by a flood risk report to the satisfaction of the responsible authority, which must consider the following, where applicable:

- The Municipal Planning Strategy and the Planning Policy Framework.
- The existing use and development of the land.
- Whether the proposed use or development could be located on flood-free land or land with a lesser flood hazard outside this overlay.
- The susceptibility of the development to flooding and flood damage.
- The potential flood risk to life, health and safety associated with the development. Flood risk factors to consider include:
 - The frequency, duration, extent, depth and velocity of flooding of the site and accessway.
 - The flood warning time available.
 - The danger to the occupants of the development, other floodplain residents and emergency personnel if the site or accessway is flooded.
- The effect of the development on redirecting or obstructing floodwater, stormwater or drainage water and the effect of the development on reducing flood storage and increasing flood levels and flow velocities.
- The effects of the development on river health values including wetlands, natural habitat, stream stability, erosion, environmental flows, water quality and sites of scientific significance.

Page 2 of 3

An application must be accompanied by any information specified in a schedule to this overlay.

44.03-5 Exemption from notice and review

31/07/2018 VC148

An application under this overlay is exempt from the notice requirements of section 52(1)(a), (b) and (d), the decision requirements of section 64(1), (2) and (3) and the review rights of section 82(1) of the Act.

44.03-6 Referral of applications

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31/07/2018
VC148
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An application must be referred to the relevant floodplain management authority under Section 55 of the Act unless in the opinion of the responsible authority the proposal satisfies requirements or conditions previously agreed in writing between the responsible authority and the floodplain management authority.

44.03-7 Decision guidelines

31/07/2018 VC148

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The Municipal Planning Strategy and the Planning Policy Framework.
- The local floodplain development plan or flood risk report.
- Any comments of the relevant floodplain management authority.
- The Victorian River Health Strategy (2002) and any relevant regional river health strategy and associated wetland plan.
- Any other matters specified in a schedule to this overlay.

LAND SUBJECT TO INUNDATION OVERLAY 44.04

31/07/2018 VC148

Shown on the planning scheme map as LSIO with a number (if shown).

Purpose

To implement the Municipal Planning Strategy and the Planning Policy Framework.

To identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority.

To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.

To reflect any declaration under Division 4 of Part 10 of the Water Act, 1989 where a declaration has been made.

To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

To ensure that development maintains or improves river and wetland health, waterway protection and flood plain health.

44.04-1 Land subject to inundation objectives and statement of risk

A schedule to this overlay may contain:

24/01/2020 VC160

- Land subject to inundation management objectives to be achieved.
- A statement of risk.

44.04-2

31/07/2018 VC148

Buildings and works

A permit is required to construct a building or to construct or carry out works, including:

- A fence. .
- Roadworks, if the water flow path is redirected or obstructed.
- Bicycle pathways and trails. ÷
- Public toilets.
- A domestic swimming pool or spa and associated mechanical and safety equipment if associated . with one dwelling on a lot.
- Rainwater tank with a capacity of not more than 10,000 litres.
- A pergola or verandah, including an open-sided pergola or verandah to a dwelling with a finished . floor level not more than 800mm above ground level and a maximum building height of 3 metres above ground level.
- A deck, including a deck to a dwelling with a finished floor level not more than 800mm above ground level.
- A non-domestic disabled access ramp.
- A dependent person's unit.

This does not apply:

- If a schedule to this overlay specifically states that a permit is not required.
- To flood mitigation works carried out by the responsible authority or floodplain management authority.

Page 1 of 3

- To the following works in accordance with plans prepared to the satisfaction of the responsible authority:
 - The laying of underground sewerage, water and gas mains, oil pipelines, underground telephone lines and underground power lines provided they do not alter the topography of the land.
 - The erection of telephone or power lines provided they do not involve the construction of towers or poles.
- To post and wire and post and rail fencing.

44.04-3 Subdivision

31/07/2018 VC148

A permit is required to subdivide land.

44.04-4 Application requirements

An application must be accompanied by any information specified in a schedule to this overlay.

44.04-5 Local floodplain development plan

31/07/2018 VC148

If a local floodplain development plan has been developed for the area and has been incorporated into this scheme, an application must be consistent with the plan.

44.04-6 Exemption from notice and review

31/07/2018 VC148

An application under this overlay is exempt from the notice requirements of section 52(1)(a), (b) and (d), the decision requirements of section 64(1), (2) and (3) and the review rights of section 82(1) of the Act.

44.04-7 Referral of applications

31/07/2018 VC148

An application must be referred to the relevant floodplain management authority under Section 55 of the Act unless in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed in writing between the responsible authority and the floodplain management authority.

44.04-8 Decision guidelines

24/01/2020 VC160

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The Municipal Planning Strategy and the Planning Policy Framework.
- Any local floodplain development plan.
- Any comments from the relevant floodplain management authority.
- The existing use and development of the land.
- Whether the proposed use or development could be located on flood-free land or land with a lesser flood hazard outside this overlay.
- The susceptibility of the development to flooding and flood damage.
- The potential flood risk to life, health and safety associated with the development. Flood risk factors to consider include:
 - The frequency, duration, extent, depth and velocity of flooding of the site and accessway.

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- The flood warning time available.
- The danger to the occupants of the development, other floodplain residents and emergency personnel if the site or accessway is flooded.
- The effect of the development on redirecting or obstructing floodwater, stormwater or drainage water and the effect of the development on reducing flood storage and increasing flood levels and flow velocities.
- The effect of the development on river health values including wetlands, natural habitat, stream stability, erosion, environmental flows, water quality and sites of scientific significance.
- Any other matters specified in a schedule to this overlay.

44.05 SPECIAL BUILDING OVERLAY

Shown on the planning scheme map as **SBO** with a number (if shown).

Purpose

To implement the Municipal Planning Strategy and the Planning Policy Framework.

To identify land in urban areas liable to inundation by overland flows from the urban drainage system as determined by, or in consultation with, the floodplain management authority.

To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.

To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

44.05-1 Flooding management objectives and statement of risk

A schedule to this overlay may contain:

- Flooding management objectives to be achieved.
- A statement of risk.

44.05-2 Buildings and works

31/07/2018 VC148

31/07/2018 VC148

A permit is required to construct a building or to construct or carry out works, including:

- A fence.
- Roadworks, if the water flow path is redirected or obstructed.
- Bicycle pathways and trails.
- Public toilets.
- A domestic swimming pool or spa and associated mechanical and safety equipment if associated with one dwelling on a lot.
- A rainwater tank with a capacity of not more than 10,000 litres.
- A pergola or verandah, including an open-sided pergola or verandah to a dwelling with a finished floor level not more than 800mm above ground level and a maximum building height of 3 metres above ground level.
- A deck, including a deck to a dwelling with a finished floor level not more than 800mm above ground level.
- A non-domestic disabled access ramp.
- A dependent person's unit.

This does not apply:

- If a schedule to this overlay specifically states that a permit is not required.
- To flood mitigation works carried out by the responsible authority or floodplain management authority.
- To the following works in accordance with plans prepared to the satisfaction of the responsible authority:
 - The laying of underground sewerage, water and gas mains, oil pipelines, underground telephone lines and underground power lines provided they do not alter the topography of the land.

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- The erection of telephone or power lines provided they do not involve the construction of towers or poles designed to operate at more than 66,000 volts.
- To landscaping, driveways, vehicle cross overs, footpaths or bicycle paths if there is no significant change to existing surface levels, or if the relevant floodplain management authority has agreed in writing that the flowpath is not obstructed.
- To an extension of less than 20 square metres in floor area to an existing building (not including an out-building), where the floor levels are constructed to at least 300mm above the flood level or if the relevant floodplain management authority has agreed in writing that the flowpath is not obstructed.
- To an upper storey extension to an existing building.
- To an alteration to an existing building where the original building footprint remains the same and floor levels are constructed to at least 300mm above flood level.
- To an out-building (including replacement of an existing building) if the out-building is less than 10 square metres in floor area and constructed to at least 150mm above the flood level or the relevant floodplain management authority has agreed in writing that the flowpath is not obstructed.
- To a replacement building (not including an out-building) if it is constructed to at least 300mm above the flood level and the original building footprint remains the same. The responsible authority may require evidence of the existing building envelope.
- To fencing with at least 25% openings and with the plinth at least 300mm above the flood level.
- To a replacement fence in the same location and of the same type and materials as the existing fence.
- To a pergola or an open deck area with unenclosed foundations.
- To a carport constructed over an existing carspace.
- To an in-ground swimming pool and associated security fencing, where the perimeter edging of the pool is constructed at natural surface levels and excavated material is removed from the flowpath.
- To a tennis court at existing surface level with fencing designed to minimise obstruction to flows.
- To an aviary or other enclosure for a domestic animal if it is less than 10 square metres in floor area at ground level.
- To open sided verandahs, open sided picnic shelters, barbeques and park furniture (excluding playground equipment) if there is less than 30mm change to existing surface levels.
- To radio masts, light poles or signs on posts or attached to buildings.

VicSmart applications

Subject to Clause 71.06, an application under this clause for a development specified in Column 1 is a class of VicSmart application and must be assessed against the provision specified in Column 2.

Class of application	Information requirements and decision guidelines
Construct a building or construct or carry out works.	Clause 59.08

Subdivision

44.05-3 31/07/2018 VC148

A permit is required to subdivide land.

Page 2 of 4

VicSmart applications

Subject to Clause 71.06, an application under this clause for a development specified in Column 1 is a class of VicSmart application and must be assessed against the provision specified in Column 2.

Class of application	Information requirements and decision guidelines
Any of the following classes of subdivision:	Clause 59.08
 Subdivide land to realign the common boundary between 2 lots where the are of either lot is reduced by less than 15 percent and the general direction of the common boundary does not change. 	
 Subdivide land into lots each containing an existing building or car parking spa where: 	се
 The buildings or car parking spaces have been constructed in accordance with the provisions of this scheme or a permit issued under this scheme. 	9
 An occupancy permit or a certificate of final inspection has been issued unc the Building Regulations in relation to the buildings within 5 years prior to t application for a permit for subdivision. 	
Subdivide land into 2 lots if:	
 The construction of a building or the construction or carrying out of works the land is approved under this scheme or by a permit issued under this scheme and the permit has not expired. 	on
 The construction or carrying out of the approved building or works on the la has started lawfully. 	nd

- The subdivision does not create a vacant lot.

44.05-4 Application requirements

Unless otherwise agreed in writing by the relevant floodplain management authority, an application to construct a building or construct or carry out works must be accompanied by a site plan which shows, as appropriate:

- The boundaries and dimensions of the site.
- Relevant existing and proposed ground levels, to Australian Height Datum, taken by or under the direction or supervision of a licensed land surveyor.
- The layout, size and use of existing and proposed buildings and works, including vehicle parking areas.
- Floor levels of any existing and proposed buildings to Australian Height Datum.
- Cross sectional details of any basement entry ramps and other basement entries to Australian Height Datum, showing floor levels of entry and exit areas and drainage details.
- Any other application requirements specified in a schedule to this overlay.

Local floodplain development plan

If a local floodplain development plan has been developed for the area and has been incorporated into this scheme, an application must be consistent with the plan.

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44.05-5 Exemption from notice and review

An application under this overlay is exempt from the notice requirements of section 52(1)(a), (b) and (d), the decision requirements of section 64(1), (2) and (3) and the review rights of section 82(1) of the Act.

44.05-6 Referral of applications

An application must be referred to the relevant floodplain management authority under Section 55 of the Act unless in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed to in writing between the responsible authority and the floodplain management authority.

44.05-7 Decision guidelines

31/07/2018 VC148

31/07/2018 VC148

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The Municipal Planning Strategy and the Planning Policy Framework.
- Any local floodplain development plan.
- Any comments from the relevant floodplain management authority.
- The existing use and development of the land.
- Whether the proposed use or development could be located on flood-free land or land with a lesser flood hazard outside this overlay.
- The susceptibility of the development to flooding and flood damage.
- Flood risk factors to consider include:
 - The frequency, duration, extent, depth and velocity of flooding of the site and accessway.
 - The flood warning time available.
 - The danger to the occupants of the development, other floodplain residents and emergency personnel if the site or accessway is flooded.
- The effect of the development on redirecting or obstructing floodwater, stormwater or drainage water and the effect of the development on reducing flood storage and increasing flood levels and flow velocities.
- Any other matters specified in a schedule to this overlay.

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Appendix L: Draft Birregurra Planning Schedules

DRAFT SCHEDULE 1 TO CLAUSE 44.04 LAND SUBJECT TO INUNDATION OVERLAY

Shown on the planning scheme map as LSIO1.

LAND SUBJECT TO INUNDATION OVERLAY SCHEDULE 1

1.0 Land subject to inundation objectives to be achieved

None specified.

2.0 Statement of risk

3.0

None specified.

Permit requirement

A permit is not required for the following:

New buildings, including extensions

- If the floor level of the building is finished at least 300mm above the 100 year ARI flood level and meets the safety hazard of FMA, and
- If the new building is constructed on stumps (or piers) and bearers, and
- Cladding to the sub floor structure of the extension has openings or is of an open style (such as spaced timber boards) to allow automatic entry and exit of flood water for all floods up to the 1 per cent AEP event, and
- Earthworks including any driveways, paths or services that do not alter the natural ground level.

External alterations to existing buildings

- If the original building footprint remains the same
- Repairs and routine maintenance of existing fences
- If the fence design and material remains the same.

New or replacement fence

- A post and wire fence with:
 - Post spacing no less than three metres apart
 - Single wires spaced no more than one horizontal strand per 200mm.
- A post and rail fence with:
 - Post spacing no less than three metres apart
 - o Rails no more than 150mm wide
 - o Rails spaced no less than 200mm apart
 - o Bottom rail no less than 150mm off the ground.
- Tubular steel/pool fencing.

Other buildings and works

- A building which is open on all sides including a pergola, carport, domestic shed, animal enclosure outbuildings, stockyard or agricultural sheds with unenclosed foundations.
- A ramp, verandah or decking and similar structures with a floor raised on stumps or piers and with unenclosed foundations

OVERLAYS - CLAUSE 44.04 - SCHEDULE 1

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- Road works or works including footpath/shared paths, bicycle path, car parks, access ways, pathways or driveways (public or private) that do not change the natural ground level
- A mast, antenna, satellite dish, power pole, light pole, or telecommunication tower
- An outdoor advertising sign/structure provided it does not alter flood flows or floodplain storage capacity
- Repairs and routine maintenance that do not affect the height, length, width or location of a levee or embankment
- A rainwater tank with a capacity of not more than 5000 litres
- A shed of 20sqm or less gross floor area
- An in-ground domestic swimming pool or spa, and associated mechanical and safety equipment, providing that:
 - The excavated spoil is removed from within the 100 year ARI floodplain; and
 - \circ The perimeter edging of the pool is finished at natural ground level; and
 - Security pool fencing is of an open style.
- A sportsground, racecourse or recreation area, pathways and trails constructed at general natural surface elevation, playground, open picnic shelter, picnic table, drinking tap, rubbish bin, barbecue and or similar works associated with a park, recreation area and or public places.

4.0 Application requirements

None specified.

5.0 Decision guidelines

None specified.

OVERLAYS - CLAUSE 44.04 - SCHEDULE 1

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DRAFT SCHEDULE 1 TO CLAUSE 44.05 SPECIAL BUILDING OVERLAY

Shown on the planning scheme map as **SBO1.**

SPECIAL BUILDING OVERLAY SCHEDULE 1

1.0 Flooding management objectives to be achieved

None specified.

2.0 Statement of risk

None specified.

3.0 Permit requirement

A permit is not required for the following:

New buildings, including extensions

- If the floor level of the building is finished at least 300mm above the 100 year ARI flood level and meets the safety hazard of FMA, and
- If the new building is constructed on stumps (or piers) and bearers, and
- Cladding to the sub floor structure of the extension has openings or is of an open style (such as spaced timber boards) to allow automatic entry and exit of flood water for all floods up to the 1 per cent AEP event, and
- Earthworks including any driveways, paths or services that do not alter the natural ground level.

Other buildings and works

- A building which is open on all sides including a domestic shed, stockyard or agricultural sheds with unenclosed foundations.
- A ramp, verandah or decking and similar structures with a floor raised on stumps or piers and with unenclosed foundations
- An antenna, satellite dish, power pole, or telecommunication tower
- Repairs and routine maintenance that do not affect the height, length, width or location of a levee or embankment
- A rainwater tank with a capacity of not more than 5000 litres
- A shed of 20sqm or less gross floor area
- An in-ground domestic swimming pool or spa, and associated mechanical and safety equipment, providing that:
 - The excavated spoil is removed from within the 100 year ARI floodplain; and
 - The perimeter edging of the pool is finished at natural ground level; and
 - Security pool fencing is of an open style.
- A sportsground, racecourse or recreation area, pathways and trails constructed at general natural surface elevation, playground, picnic table, drinking tap, rubbish bin, and or similar works associated with a park, recreation area or public places.

4.0 Application requirements

None specified.

o.v Decision guidelines

None specified.

OVERLAYS - CLAUSE 44.05 - SCHEDULE 1

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DRAFT SCHEDULE 1 TO CLAUSE 44.03 FLOODWAY OVERLAY

Shown on the planning scheme map as FO1.

FLOODWAY OVERLAY SCHEDULE 1

1.0 Floodway objectives to be achieved

None specified.

2.0 Statement of risk

None specified

3.0 Permit requirement

A permit is not required for the following:

Replacement buildings

- If the footprint of the replacement building(s) is the same or less than the original building(s), and
- If the floor level of the building is finished at least 300 mm above the 100 year ARI flood level, and
- If the replacement building is constructed on stumps (or piers) and bearers, and
- Cladding to the subfloor structure of the extension has openings or is of an open style (such as spaced timber boards) to allow automatic entry and exit of flood water for all floods up to the 1 per cent AEP event.

External alterations to existing buildings

If the original building footprint remains the same

Ground level extensions to existing buildings

- If the floor level of the extension is at least 300mm above the applicable 100 year ARI flood level, and
- The extension of the building is constructed on stumps (or piers) and bearers, and
- Cladding to the subfloor structure of the extension has openings or is of an open style (such as spaced timber boards) to allow automatic entry and exit of flood water for all floods up to the 1 per cent AEP event.
- If the floor level of the extension is not lower than the existing floor level and the combined ground floor area of extensions since 31 December 2018 is no greater than 20sqm.

Upper level extensions to existing buildings

 If there is no increase in the ground floor building footprint other than the floor area exempted above and except for any additions or alterations to the footings to support the extensions to the upper level.

Repairs and routine maintenance of existing fences

• If the fence design and material remains the same.

New or replacement fence

- A post and wire fence with:
 - o Post spacing no less than three metres apart
 - \circ Single wires spaced no more than one horizontal strand per 200mm.

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OVERLAYS - CLAUSE 44.03 - SCHEDULE 1

- A post and rail fence with:
 - o Post spacing no less than three metres apart
 - o Rails no more than 150mm wide
 - o Rails spaced no less than 200mm apart
 - Bottom rail no less than 150mm off the ground.
- Tubular steel/pool fencing.

Other buildings and works

- A building which is open on all sides including a pergola, carport, domestic shed, animal enclosure outbuildings, stockyard or agricultural sheds with unenclosed foundations.
- A ramp, verandah or decking and similar structures with a floor raised on stumps or piers and with unenclosed foundations
- Road works or works including footpath/shared paths, bicycle path, car parks, access ways or driveways (public or private) that do not change the natural ground level
- A mast, antenna, satellite dish, power pole, light pole, or telecommunication tower
- An outdoor advertising sign/structure provided it does not alter flood flows or floodplain storage capacity
- Repairs and routine maintenance that do not affect the height, length, width or location of a levee or embankment
- A rainwater tank with a capacity of not more than 5000 litres
- A shed of 20sqm or less gross floor area
- An in-ground domestic swimming pool or spa, and associated mechanical and safety equipment, providing that:
 - The excavated spoil is removed from within the 100 year ARI floodplain; and
 - The perimeter edging of the pool is finished at natural ground level; and
 - Security pool fencing is of an open style.
- A sportsground, racecourse or recreation area, pathways and trails constructed at general natural surface elevation, playground, open picnic shelter, picnic table, drinking tap, rubbish bin, barbecue and or similar works associated with a park, recreation area and or public places.

4.0 Application requirements

0

0

None specified.

5.0 Decision guidelines

None specified.

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OVERLAYS - CLAUSE 44.03 - SCHEDULE 1



Appendix M: Summary of TFWS Building Blocks and Suggested Actions



Appendix Table M. 1: TFWS Building Blocks and Suggested Actions for Birregurra with due regard for the EMMV, Commonwealth-State arrangements for flood warning service provision VFWCC (2001), AIDR (2009) and DELWP (2016)

FFWS Building Blocks	Potential Improvement Actions for Birregurra
DATA COLLECTION COLLATION	& COSC to approach BoM (with support from VICSES, CCMA and DELWP) to request necessary changes to enable near real-time public access to rain data from the Ricketts Marsh gauge via the BoM website (e.g. 15 minute updates).
	Alternatively, COSC to approach CCMA to request that telemetry be added to the Colac rain gauge and that BoM be requested to enable near real-time publi access to rai data from that gauge via the BoM website (e.g. 15 minute updates).
	COSC to arrange for the installation of a set of staff gauges on the upstream side of the Warncoort-Birregurra Road Bridge (Atkin Creek) and on the upstrear side of the Ennis Street crossing of the unnamed creek. They should be installed such that the gauge boards can be read from the road for small and large (i.e. 1 % AEP) floods.
	If a greater degree of confidence in the likelihood of flooding is required, it is suggested that COSC:
	 As a first step, arrange installation of an ERTS rain gauge in the mid reaches of the Atkin Creek catchment close to the shared boundary with the unname creek. At the same time, COSC with support from VICSES, CCMA and DELWP, to approach BoM to provide near real-time public access to data from the gauge via its website. As a second step, arrange installation of two ERTS rain (or rain-river) gauges on the upstream side of the Warncoort-Birregurra Road Bridge (Atkin Creek and on the upstream side of the Ennis Street crossing of the unnamed creek. As above, COSC with support from VICSES, CCMA and DELWP, to approach BoM to provide near real-time public access to data from those gauges via its website. Alternatively and instead of ERTS equipment, arrange installation of different commercially available equipment (e.g. DipStik) to monitor (and alert on) rainfa and / or water level in the creeks at the locations described in the above two bullets and identified in Figure 9.3. As appropriate and depending on the monitoring and alerting equipment installed, invite Birregurra residents, along with VICSES, local CFA and Police, to opt-in to receive SMS alert messages direct from installed equipment. Consider the addition of "sirens and / or flashing lights" options (triggered by exceedance of pre-set rainfall rates and depths, and creek levels and rates or rise) for the automated gauge installed at the creek crossings as an alternative or additional means of alerting the community to imminent flooding. As part of all of the above: Provide guidance to the local community (through a locally focussed flood awareness brochure and website) on how to interpret and use available rain an creek level data and the indicative flood guidance tool, along with information about the flood warring system and how it will assist in reducing risk; and a part of a propriate provide guidance tool, along with information about the flood warring system and how it will assist in reduc
	 Develop and maintain a website (and social media?) presence for the FFWS that includes the above guidance along with (a link to) flood mapping an intelligence outputs from the Birregurra Flood and Drainage Strategy.
	COSC in consultation with CCMA to decide on the datum to be used for any new creek level gauges: AHD or local.
DETECTION & PREDICTIO	ON COSC to provide the indicative flood guidance tool and instructions for its use to COSC staff, VICSES and local CFA for routine use. Provide training in use a appropriate.
	COSC and VICSES to agree who will maintain the tool and how.
	COSC to lead the determination of flood class levels for Birregurra. Will involve coordination between Council, VICSES, CCMA and BoM and is a relativel straight-forward process.
	COSC to maintain contact with VICSES on progress with the Automated Alerting Project with a view to implementation for Birregurra.



FFWS Building Blocks **Potential Improvement Actions for Birregurra** INTERPRETATION (i.e. an ability Mapping and intelligence from the Birregurra Flood and Drainage Strategy has been captured to the MFEP. The indicative flood guidance tool together with the to answer the question "what MFEP enable those at risk to determine the likely effects of a potential flood with some lead time. does this mean for me - will I be COSC to ensure flood inundation maps and relevant Appendices of the MFEP along with the flood information card for Birregurra are readily available to the flooded and to what depth". Birregurra community. If local datum has been chosen for water level gauges, COSC to lead update of the MFEP and indicative flood guidance tool. This will assist local interpretation and the determination of likely flood impacts during future events. MESSAGE CONSTRUCTION The initial alert of likely flooding is likely to come from a combination of environmental indicators (e.g. observance of heavy rain) and from consideration of rain data, the flood inundation maps, the indicative flood guidance tool and the flood intelligence in the MFEP and / or from observing a rise in the level of the creeks. If monitoring equipment with SMS capability is installed, the initial (or confirming) alert may come from the unit's SMS'ed message as rain and / or creek levels exceed triggers with the above acting to reinforce and add value to resident's assessments and decision processes. Alternatively, and subject to resolution of VICSES and EMV roles in the initiation and dissemination of flash flood warnings, the initial alert may come via electronic and social media. If a marginally more formal alerting system is deemed appropriate for Birregurra. COSC in conjunction with VICSES to: Champion formation of a Birregurra community flood action group (or similar); and • Lead establishment of a Twitter and / or Facebook account for the Birregurra TFWS so that information can be shared within the community and by VICSES (say, following use of the indicative flood guidance tool) on likely flood severity, impacts and appropriate actions, MESSAGE DISSEMINATION Establish a COSC championed community flash flood action group. (i.e. Communication and Alerting) Use social media. A role remains for the Emergency Alert (EA) during a severe flood event. If an SMS enabled gauge is active, COSC to identify / nominate key community members (in addition to VICSES and perhaps CFA) to receive SMS or email alerts on exceedance of alarm trigger values. If alternate commercially available water level (and rain) monitoring equipment is installed, COSC to establish and maintain an opt-in system that must be heavily community driven. RESPONSE Initiate a community engagement program to communicate how the FFWS will work. Following (or perhaps in concert with) acceptance of the MFEP by COSC and VICSES, encourage and assist residents to develop individual flood response plans. A package that assists businesses and individuals is available from VICSES and provides an excellent model for community use. REVIEW Review and update of local flood intelligence (i.e. flood characteristics, impacts, etc), local alerting arrangements, response plans, local flood awareness material, etc (initially) after every flood that triggers a response. Best driven by COSC with input from VICSES, CCMA, CFA and the Council championed community flash flood action group. COSC to develop review and update protocols => who does what when and process to be followed to update material consistently across all parts of the flash flood warning and response system, including the MFEP.



FFWS Building Blocks	Potential Improvement Actions for Birregurra
AWARENESS	VICSES to complete the draft LFG then print and make it available to the Birregurra community.
	Make relevant parts of the MFEP publicly available (e.g. Council offices, library, website).
	Develop, maintain and renew flood awareness through activities and materials that emphasise personal safety, where data is available, how that data can be used, what any warnings / alerts mean and what individuals should do to stay safe and protect their property including filling and laying sandbags.
	COSC and VICSES to:
	 Load and maintain material including the MFEP to the COSC and VICSES websites with appropriate links to relevant useful sites; Routinely revisit and update awareness material to accommodate lessons learnt, additional or improved material and to reflect advances in good practice; and
	Routinely repeat distribution of awareness material and consider other measures.

Appendix Table M. 2: TFWS Building Blocks and Staged Suggested Actions for Birregurra with due regard for Appendix Table M. 1

Potential Improvement Actions for Birregurra

Achievable in the near term with minimum investment		
DATA COLLECTION & COLLATION	COSC to approach BoM (with support from VICSES, CCMA and DELWP) to request necessary changes to enable near real-time public access to rain data from the Ricketts Marsh gauge via the BoM website (e.g. 15 minute updates).	
	Alternatively, COSC to approach CCMA to request that telemetry be added to the Colac rain gauge and that BoM be requested to enable near real-time publi access to rai data from that gauge via the BoM website (e.g. 15 minute updates).	
	Provide guidance to the local community (through a locally focussed flood awareness brochure and website) on how to interpret and use available rain data and the indicative flood guidance tool, along with information about the flood warning system and how it will assist in reducing risk.	
DETECTION & PREDICTION (i.e. Forecasting)	COSC to provide the indicative flood guidance tool and instructions for its use to COSC staff, VICSES and local CFA for routine use. Provide training in use a appropriate.	
	COSC and VICSES to agree who will maintain the tool and how.	
to answer the question "what	Mapping and intelligence from the Birregurra Flood and Drainage Strategy has been captured in the MFEP. The indicative flood guidance tool together with the MFEP enable those at risk to determine the likely effects of a potential flood with some lead time.	
does this mean for me - will I be flooded and to what depth".	COSC to ensure flood inundation maps and relevant Appendices of the MFEP along with the flood information card for Birregurra are readily available to the Birregurra community.	
MESSAGE CONSTRUCTION	The initial alert of likely flooding is likely to come from a combination of environmental indicators (e.g. observance of heavy rain) and from consideration of rai data, the flood inundation maps, the indicative flood guidance tool and the flood intelligence in the MFEP and / or from observing a rise in the level of the creeks	

V2013_007-REP-001-4 / 25 March 2021

FWS Building Blocks



FWS Building Blocks	Potential Improvement Actions for Birregurra
	Establish a COSC championed community flash flood action group.
(i.e. Communication and Alerting)	Use social media.
	A role remains for the Emergency Alert (EA) during a severe flood event.
RESPONSE	Following (or perhaps in concert with) acceptance of the MFEP by COSC and VICSES, encourage and assist residents to develop individual flood response plans. A package that assists businesses and individuals is available from VICSES and provides an excellent model for community use.
REVIEW	Review and update of local flood intelligence (i.e. flood characteristics, impacts, etc), local alerting arrangements, response plans, local flood awareness material, etc (initially) after every flood that triggers a response. Best driven by COSC with input from VICSES, CCMA, CFA and the Council championed community flash flood action group.
	COSC to develop review and update protocols => who does what when and process to be followed to update material consistently across all parts of the flash flood warning and response system, including the MFEP.
AWARENESS	VICSES to complete the draft LFG then print and make it available to the Birregurra community.
	Make relevant parts of the MFEP publicly available (e.g. Council offices, library, website).
	COSC and VICSES to:
	 Load and maintain material including the MFEP to the COSC and VICSES websites with appropriate links to relevant useful sites; Routinely revisit and update awareness material to accommodate lessons learnt, additional or improved material and to reflect advances in good practice; and Routinely repeat distribution of awareness material and consider other measures.
Achievable in the mid-term with	n a greater level of investment
	In addition to the above:
COLLATION	 COSC to arrange for the installation of a set of staff gauges on the upstream side of the Warncoort-Birregurra Road Bridge (Atkin Creek) and on the upstream side of the Ennis Street crossing of the unnamed creek. They should be installed such that the gauge boards can be read from the road for small and larger (i.e. 1 % AEP) floods.
	 Develop and maintain a website (and social media?) presence for the FFWS that includes guidance from the previously prepared locally focussed flood awareness brochure (see above) along with (a link to) flood mapping outputs from the Birregurra Flood and Drainage Strategy.
	COSC in consultation with CCMA to decide on the datum to be used for any new creek level gauges: AHD or local.
DETECTION & PREDICTION	In addition to the above:
(i.e. Forecasting)	 COSC to lead the determination of flood class levels for Birregurra. Will involve coordination between Council, VICSES, CCMA and BoM and is a relatively straight-forward process.

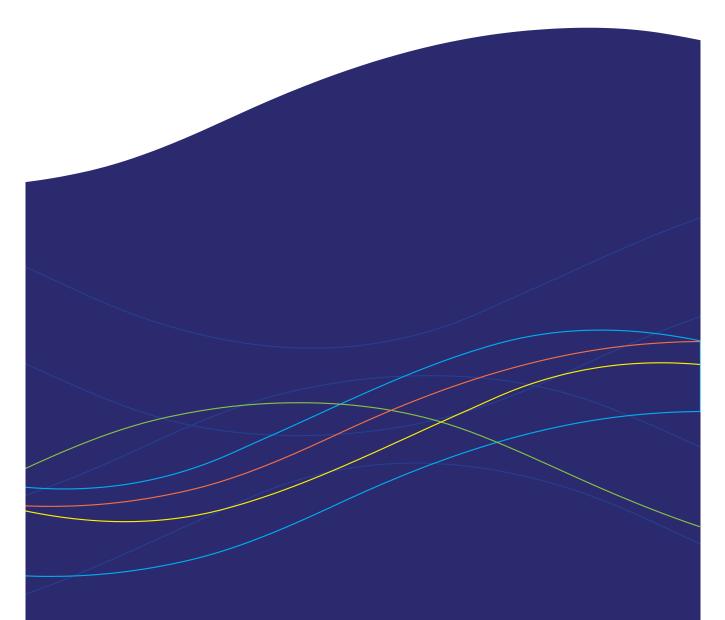


FWS Building Blocks	Potential Improvement Actions for Birregurra	
INTERPRETATION (i.e. an In addition to the above: ability to answer the question "what does this mean for me - If local datum has been chosen for water level gauges, COSC to lead update of the MFEP and indicative flood guidance tool. This will assist local interpret will I be flooded and to what depth".		
MESSAGE CONSTRUCTION	In addition to the above:	
	 If monitoring equipment with SMS capability is installed, the initial (or confirming) alert may come from the unit's SMS'ed message as rain and / or creek levels exceed triggers with the above acting to reinforce and add value to resident's assessments and decision processes. Alternatively and subject to resolution of VICSES and EMV roles in the initiation and dissemination of flash flood warnings, the initial alert may come via electronic and social media. If a marginally more formal alerting system is deemed appropriate for Birregurra, COSC in conjunction with VICSES to: 	
	 Champion formation of a Birregurra community flood action group (or similar); and Lead establishment of a Twitter and / or Facebook account for the Birregurra TFWS so that information can be shared within the community and by VICSES (say, following use of the indicative flood guidance tool) on likely flood severity, impacts and appropriate actions. 	
	 In addition to the above: and If an SMS enabled gauge is active, COSC to identify / nominate key community members (in addition to VICSES and perhaps CFA) to receive SMS or emain alerts on exceedance of alarm trigger values. 	
RESPONSE	In addition to the above:	
	Initiate a community engagement program to communicate how the FFWS will work.	
REVIEW	As above:	
AWARENESS	In addition to the above:	
	• Develop, maintain and renew flood awareness through activities and materials that emphasise personal safety, where data is available, how that data can be used, what any warnings / alerts mean and what individuals should do to stay safe and protect their property including filling and laying sandbags.	
Achievable longer term – fu	Ily developed option requiring significant investment	
DATA COLLECTION	& In addition to the above:	
COLLATION	 COSC to arrange installation of an ERTS rain gauge in the mid reaches of the Atkin Creek catchment close to the shared boundary with the unnamed creek At the same time, COSC with support from VICSES, CCMA and DELWP, to approach BoM to provide near real-time public access to data from that gauge via its website. COSC to arrange installation of two ERTS rain (or rain-river) gauges on the upstream side of the Warncoort-Birregurra Road Bridge (Atkin Creek) and on the upstream side of the Ennis Street crossing of the unnamed creek. As above, COSC with support from VICSES, CCMA and DELWP, to approach BoM to provide near real-time public access to data from those gauges via its website. 	



FWS Building Blocks	Potential Improvement Actions for Birregurra	
	 Alternatively and instead of the ERTS equipment, COSC to arrange installation of different commercially available equipment (e.g. DipStik) to monitor (and alert on) rainfall and / or water level in the creeks at the locations described in the above two bullets and identified in Figure 9.3. As appropriate and depending on the monitoring and alerting equipment installed, COSC to invite Birregurra residents, along with VICSES, local CFA and Police, to opt-in to receive SMS or other alert messages direct from the installed equipment. COSC to consider the addition of "sirens and / or flashing lights" options (triggered by exceedance of pre-set rainfall rates and depths, and creek levels and rates of rise) for the automated gauge installed at the creek crossings as an alternative or additional means of alerting the community to imminent flooding. 	
DETECTION & PREDICTION (i.e. Forecasting)	As above:	
INTERPRETATION (i.e. an ability to answer the question "what does this mean for me - will I be flooded and to what depth".		
MESSAGE CONSTRUCTION	As above:	
MESSAGE DISSEMINATION (i.e. Communication and Alerting)	 In addition to the above: If alternate commercially available water level (and rain) monitoring equipment is installed, COSC to establish and maintain an opt-in system that must be heavily community driven. 	
RESPONSE	As above:	
REVIEW	As above:	
AWARENESS	As above:	





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Item: 10.7 Colac Otway Shire Annual Report 2020-21

OFFICER	Melanie Duve	
GENERAL MANAGER	Anne Howard	
DIVISION	Executive	
ATTACHMENTS	 Colac Otway Shire Annual Report 2020-21 - Final [10.7.1 - 168 pages] 	
PURPOSE	For Council to note it has considered the 2020-21 Annual Report as submitted to the Minister for Local Government.	

1. EXECUTIVE SUMMARY

The preparation of the Annual Report is a statutory requirement of Council. It is a key performance report to the community against the actions in the 2017-2021 Council Plan and Budget for 2020-21. It includes a report on the financial operations for the period, supported by the audited financial statements and the performance statement.

This is the fourth and final year of the Council's progress against the 2017-2021 Council Plan.

2. RECOMMENDATION

That Council notes it has considered the Colac Otway Shire 2020-21 Annual Report (as at Attachment 1), in accordance with the requirements of section 134 of the Local Government Act 1989.

3. KEY INFORMATION

The 2020-21 Annual Report (as at Attachment 1) was prepared to reflect the governance, operations and achievements of the Colac Otway Shire Council for the reporting period. The report is structured in several sections as follows.

The report of operations section includes:

• Council's vision, mission, values and strategic direction, the Shire profile, the message from the Mayor and Chief Executive Officer, Councillor details, the Chief Financial Officer's report,

major projects report, details of the Executive Management Team, the organisational structure and staff overview.

- The Performance section provides a final report against the Key Result Activities detailed in the Council Plan 2017-2021 plus additional core activities. From the Council Plan 2017-2021, there are 21 actions fully completed, a further 35 that have been completed as per the Council Plan Action, however, have been identified as more work needed. There are 20 actions that have not been completed and have been carried over into the Council Plan 2021-2025.
- The annual report also contains a description of the services to the community and the Local Government Performance Reporting Framework (LGPRF) indicators in the prescribed format. The performance section is structured on the four Themes of the Council Plan:
 - Our Prosperity
 - Our Places
 - Our Community
 - Our Leadership and Management.
- The Democratic and Corporate Governance sections note the separation of roles and reports on Council's statutory compliance requirements. It also includes the LGPRF Governance and Management Checklist in the prescribed format.
 - The Financial Reporting section provides performance details for 2020-21 and comparisons of key indicators over a five-year period. A guide to understanding the financial statements precedes the audited Financial Statements and Performance Statement.
 - The report ends with a list of Acronyms and Definitions.

On 14 September 2021 the Acting Minister for Local Government, The Hon. Mary-Anne Thomas MP, approved a two-month extension of the period for Victorian councils to submit their 2020-21 Annual Report, extending the due date to until 30 November 2021.

The draft Financial Statements and Performance Statement were considered by the Audit and Risk Committee on 8 September 2021 and certified by Council at its meeting held on 27 October 2021. The Auditor General has issued a clear audit opinion on the Financial Statements and the Performance Statement.

The Annual Report was submitted to the Minister for Local Government on 18 November 2021, as required by the *Local Government Act 1989*, and the public notice was advertised on Friday 19 November 2021 (well within the minimum 14 days' notice of the Council meeting on 15 December 2021, at which the report is to be considered).

4. COMMUNITY CONSULTATION & ENGAGEMENT

In accordance with the requirements of the *Local Government Act 1989,* public notice of the Council meeting to consider the 2020-21 Annual Report was advertised in the Colac Herald on Friday 19 November 2021.

The public notice also informed the community that copies of the 2020-21 Annual Report were available to inspect at the Customer Services Centres in Colac and Apollo Bay, Library Centres in Colac and Apollo Bay and on Council's website.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2017-2021:

Theme 4 - Our Leadership & Management

3. Organisational development and legislative compliance.

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

In consideration of the environmental and sustainability principles of Council, the Annual Report is available primarily via Council's website, with limited hardcopies available to satisfy legal obligations (section 133(3) of the *Local Government Act 1989*).

LEGAL & RISK

Section 329(7)(b) of the *Local Government Act 2020* provides that the *Local Government Act 1989* applies to the preparation of the Annual Report for the financial year ending 30 June 2021.

Clause 16 of the Local Government (Planning and Reporting) Regulations 2020 provides that:

• Despite the revocation of the *Local Government (Planning and Reporting) Regulations 2014,* those Regulations as in force immediately before 24 October 2020 continue to apply in relation to the financial year which commenced on 1 July 2020.

The report accurately identifies the statutory requirements in respect to the Annual Report.

FINANCIAL & BUDGETARY

Both the financial and performance statements for 2020-21 and the Auditor General's audit opinion, were included in the Annual Report submitted to the Minister for Local Government (as at Attachment 1).

7. IMPLEMENTATION STRATEGY

COMMUNICATION

Public notice of the Council meeting to consider the 2020-21 Annual Report was advertised in the Colac Herald on Friday 19 November 2021. The public notice also specified the locations at which copies of the 2020-21 Annual Report could be inspected and details of where it could be viewed on Council's website.

TIMELINE

The Annual Report was submitted to the Minister for Local Government on Thursday 18 November 2021. Regulation 22(1) of the *Local Government (Planning and Reporting) Regulations 2014* requires the Council hold a meeting to consider the Annual Report within one month after submitting it to the Minister for Local Government.

The Annual report is the final step in the statutory annual reporting process.

8. OFFICER DIRECT OR INDIRECT INTEREST

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

Colac Otway Shire Council Annual Report 2020-21





Acknowledgement of Traditional Custodians

The Colac Otway Shire Council respectfully acknowledges the Gulidjan and Gadubanud peoples of the Marr Nation as the traditional owners of the Colac Otway region, the land upon which the activities of the Colac Otway Shire Council is conducted on.

We pay our respects to their ancestors and elders, past, present and emerging. We recognise and respect their unique cultural heritage, beliefs and uphold their continuing relationship to this land.

Meeting

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Mayor's Message

ON BEHALF OF MY FELLOW COUNCILLORS, I AM PLEASED TO PRESENT THE COLAC OTWAY SHIRE COUNCIL ANNUAL REPORT FOR THE YEAR ENDING 30 JUNE 2021, THE FIRST FOR THIS COUNCIL.

The year started with the services and operations of Council significantly impacted by the COVID-19 pandemic; 12 months later we continue to navigate through the challenges and complexities associated with living with the coronavirus on a local, state, national and global level.

Through this unprecedented time, I'm pleased to report the organisation worked for our community to deliver the support needed while continuing to provide high quality service in day to day operations along with key projects that were the focus of Council.

Projects completed included the Central Reserve Netball Courts and Lighting upgrade, Forest Street Bridge replacement and widening in Colac, the shared path upgrade in Forrest and delivery of federally funded Local Roads and Community Infrastructure (LRCI) Projects.

The LRCI funding enabled Council to deliver a variety of works including improving the quality, accessibility and safety of footpaths within the shire. Footpaths constructed under the LRCI program included Tulloh Street, Colac; Corangamite Lake Road, Cororooke; College Drive, Lavers Hill; Thompson Street, Apollo Bay; and Main Street, Gellibrand.

After several years of Council planning and advocacy, work commenced on the Forrest Mountain Bike Trail Revitalisation project. The revitalised trails will bring mountain bikers and visitors to Forrest and the wider Colac Otway region, adding to the local nature-based attractions and supporting our tourism and hospitality industry. The project is a significant investment toward the future of Colac Otway and will enhance Forrest's reputation as one of Australia's premier mountain-biking destinations.

A collaborative effort between Council, the Colac Aero Club and volunteers resulted in successfully advocating for Federal Government funding for important safety upgrades to the Colac Municipal Aerodrome. Works will greatly improve the aerodrome's operational capability and will provide a significant boost to the aerodrome's effectiveness to support agencies to respond to emergencies. This was a great result for this important asset for our local community and industries which has flowon benefits for the whole region.

A Key and Essential Worker Housing crisis was declared by this Council at the June 2021 meeting. It remains a clear priority for Council to draw attention to this issue and the shortage of affordable worker housing in Colac and Apollo Bay. Council are working on actions we can take to address the housing shortage at a local level, while noting that this is a bigger issue which we need to continue to address by working with regional advocacy bodies and at a State and Federal level.

Council adopted a new Community Engagement Policy in February 2021 which provides a framework for how we work with the community and involve our community in Council decisions including the development of strategic plans. A significant piece of engagement through 2021 was the development of the Council Plan and Community Vision – we thank all the community members who participated by providing their thoughts, ideas and feedback toward these important strategic documents which will set Council's direction into the future.

In March Peter Brown advised Councillors he would resign as Chief Executive of Colac Otway Shire Council. I thank Peter for the experience and knowledge he brought to Colac Otway Shire and for the stable, considered leadership he provided to the organisation, this was particularly valuable over the last 12 months.

In August 2021, we welcomed Anne Howard as CEO. We congratulate Anne on her appointment and look forward to working together into the future.

Thank you to all sections of our community, our Councillors and Colac Otway Shire Council staff for all you contribute to make Colac Otway a wonderful place to live, work and visit. Colac Otway is a resilient and strong community that I am immensely proud to be a part of.

Cr Kate Hanson Mayor Colac Otway Shire



Chief Executive Report

I AM PLEASED TO INTRODUCE THE COLAC OTWAY SHIRE COUNCIL'S ANNUAL REPORT 2020-21 AND TO PRESENT THE ACHIEVEMENTS OF COUNCIL OVER THE LAST FINANCIAL YEAR.

I acknowledge that these achievements, of which there are many, were delivered under the leadership of Peter Brown who in July 2021 retired, after three years in the role of Chief Executive Officer. I congratulate Peter for having delivered so much for the Councillors, the organisation and community.

I am proud to have been appointed to the role of Chief Executive Officer and commenced in the role in August, I look forward to continuing to work with Councillors, staff and our community to help shape and strengthen the region. We have many opportunities to ensure the shire grows as a great place to live, where people can have full and successful lives.

The 2020-21 year was dominated by the Colac Otway Shire Council's management of COVID-19, the impact on community and services and operations of the organisation. The first outbreak of COVID-19 in the shire occurred in mid-July forcing the closure of major employer Australian Lamb Company and prompting the State Government establishment of an Incident Control Centre in COPACC to lead a localised pandemic management plan with the support of Council, agencies and the Australian Defence Force.

As one of the first regional municipalities to have positive COVID-19 cases within the local community, Colac Otway's COVID-19 relief program included on-the-ground community support and increased communications after it was identified that Council needed to lead and initiate relief at a local level.

Colac Otway responded by providing relief services such as distribution of food and emergency supplies to people isolating or quarantining and a dedicated COVID-19 support hotline staffed seven days a week. Council also applied a no-interest period on unpaid rates to support ratepayers whose income had been impacted by the COVID-19 situation.

Council worked in partnership with local business and support organisations to deliver clear COVID-19 messaging in various languages and supported Colac Area Health with the promotion and establishment of a drive-through COVID-19 testing site at Colac's Central Reserve.

State-wide COVID-19 lockdown restrictions forced

closure of Council's Customer Service Centres, Visitor Information Centres, Bluewater Leisure Centre, COPACC and school crossing services.

During lockdown closures, impacted staff were offered leave options or redeployment, with the State Government's Working for Victoria program enabling the extended redeployment of staff into cleaning, and service and operations roles which delivered key maintenance across the shire, with a focus on small town improvement.

The Working for Victoria program also enabled Council to employ local people from outside the organisation into diverse roles including the rollout of Council's Business and Community Support Package and other initiatives to support our community adapt to life with COVID-19.

Building on strong relationships with our local businesses and business networks has been vital through the pandemic, with business leaders playing a key role in a community-led COVID campaign and prevention approach.

Community partnership continues to be a focus in developing projects and initiatives to support the community to implement COVID-19 safe measures.

Council continues to navigate the global uncertainty of the COVID-19 situation and the financial challenges associated, while recognising the balance needed to respond to immediate issues and plan for Colac Otway's future.

Local Government Victoria elections took place toward the end of 2020; fourteen candidates, including four Councillors seeking re-election, nominated for October election and conducted noncontact campaigns during challenging times.

Colac Otway Shire welcomed a new Council, with Councillors Kate Hanson, Stephen Hart, Chris Potter and Joe McCracken re-elected, along with new Councillors Jamie Bell, Graham Costin and Marg White.

The new Council elected Cr Hanson as Mayor and Cr Costin as Deputy Mayor, with Councillors attending a comprehensive induction program familiarising themselves with the new Local Government Act and Council operations.

Development of the 2021-22 Budget; advocacy to address housing shortages, particularly key worker and affordable housing; implementation of the newly adopted Waste Management Strategy and the development of a Community Vision and four year Council Plan have been among the priorities addressed by the new Council.

The 2021-22 Budget was adopted in June and aims to provide a strong, strategic base for growth and pandemic recovery in Colac Otway with a focus on delivery of services, meeting community expectations and focussing on sustainability and infrastructure.

The Council Plan 2021-2025 provides strategic direction and priorities for Council and sits alongside the new 2050 Community Vision, which sets out aspirations for the shire for the next 30 years. This Council Plan will incorporate the Municipal Health and Wellbeing Plan.

A comprehensive engagement process to assist the development of the Council Plan commenced in early 2021 with the community participating in drop-in sessions at 12 locations across the Shire, an online survey, stakeholder interviews with community business and agency partners and youth summit of 49 students.

A randomly selected panel of 24 community members came together over three days to refine the information Council had gathered through the community engagement process and presented their findings to Council.

The draft Council Plan and Community Vision will be open to the community for comment, before the final documents come before Council for adopting in October.

This Council declared a Key and Essential Housing Crisis at the June Council meeting to increase awareness of the affordable worker housing shortage in Colac and Apollo Bay and for Council to respond to an escalating level of community concern.

Progress has been made in addressing the shire's housing shortage and the closely linked worker shortage with Council agreeing to develop a preferred residential development model for Council owned land in Bruce Street, Colac so it can be sold with the intent to provide a number of blocks for key worker and social housing.

Council also has developed a Draft Social Housing Strategy and is working with other G21 councils to seek State funding from the Big Build campaign to be guided on advocating for investment in social housing.

A draft plan for Colac West Development to facilitate rezoning and release of further residential land in this growth area of the shire is also being developed by Council.

Council has also applied for funding through the

Federal Government's Building Better Regions Program to undertake stage one of the Elliminyt Wetlands Project, which would assist in the development of about 300 housing lots, improve stormwater quality and provide water for nearby sporting facilities.

Council was successful in attracting a total of \$3.4million across two rounds of Federal Government's Local Roads and Community Infrastructure Program, delivering a range of projects including new and upgraded footpaths shire wide and netball/tennis court resurfacing.

Despite challenges created by the pandemic, Council successfully delivered a number of key infrastructure projects across the Shire, including the Colac Velodrome upgrade, Central Reserve Netball Court redevelopment, Forest Street Bridge replacement and work commencing to expand the Forrest Mountain Bike Trails.

At the end of the final quarter, Council has about 60 infrastructure projects nearing completion or underway, including those funded by the Local Roads and Community Infrastructure Program.

HIGHLIGHTS

- Securing of almost 4.5 hectares of the former Colac High School site land for community use.
- Work commenced on the Forrest Mountain Bike Trail Revitalisation Project, which was identified as a key tourism asset within the region.
- Completion of the Elliminyt Recreation Reserve Velodrome resurfacing and Central Reserve Oval Lighting and Netball Courts Redevelopment.
- Success in securing State and Federal Government regional funding. Council has received funding for: the Birregurra Recreation Reserve Lighting Upgrade, Lake Oval Colac Electronic Scoreboard, Digital Transformation Project, Colac Otway Sports Lighting Upgrades (across six sites in the shire), Community Vibrancy Event Fund, Transfer Station Upgrade and an upgrade to the Colac Municipal Aerodrome.
- Colac Otway Shire Council is set to become Victoria's first regional municipality to reach Carbon Neutral target.
- Transition from Corangamite Regional Library Corporation to Geelong Regional Library Corporation is complete with the community having access to the expanded range of library services.

PROSPERITY

• Council released an economic stimulus package to help the Colac Otway community face challenges associated with COVID-19.

The Business and Community Support Fund of \$950,000 included a Business Diversification Grants program, Small Arts Projects Grants Program and implementation of a Buy Local campaign in January to support local business in adapting and recovering from impacts of the COVID-19 pandemic.

- Council worked with the Apollo Bay community to develop a 'parklets' initiative to respond to COVID-19 safe requirements and expand outdoor dining capacity in the town.
- Online auction initiative successfully trialled at the Colac Regional Saleyards.
- A diverse range of apprenticeships and traineeships across several Council departments from Economic Development to Services and Operations were filled, continuing Council's efforts to offer career opportunities for young people in the shire.
- Progression of work on the City Deal projects has continued through 2020-21.
- The State Government Planning Minister approved the Colac 2050 Growth Plan; the plan will open doors for strategic development to accommodate long-term projected population growth.

PLACES

- Development of an advocacy plan to raise awareness of the impact of noxious weeds across the shire and raise these concerns with State Government.
- Installation of touchless taps at Colac's Memorial Square bathroom facilities to minimise contact with surfaces to improve community health and safety and reduce water waste. Touchless taps will be installed at other Council public bathroom facilities throughout the shire.
- BBQs removed from Colac's former Lions Park during the Barongarook Creek upgrade and indigenous revegetation project and relocated to a new picnic area further up the creek.
- Completion of solar street lighting in Queen Street, Colac.
- With DELWP approval, Council worked with local stakeholders to develop a solution to the Grey Headed Flying Fox (GHFF) issue in Colac's Botanic Gardens. GHFFs are important to the eco-system however they have caused damage to heritage trees in the Gardens. A model was created and carried out in an attempt to move the GHFF to other, more robust trees, closer to the lake foreshore for long term cohabitation.
- Tulloh Street, Colac footpath construction, funded by Local Roads and Community Infrastructure Program.

COMMUNITY

- Results from the 2021 Colac Otway annual community satisfaction survey indicated overall performance ratings are at the highest level in 10 years.
- Installation of 30kW solar PV system on the Colac Community Library and Learning Centre and 746 fluorescent tubes and other lights retrofitted to LED.
- Colac Otway Shire again recorded above average rates for childhood immunisation, a strong achievement with this important service being safely delivered during the pandemic.
- Ceiling maintenance work completed at Bluewater Leisure Centre.

LEADERSHIP AND MANAGEMENT

- Comprehensive community engagement to assist in the development of Council's long-term strategic documents, the Council Plan 2021-2025 and the Community Vision 2050.
- Adoption of the Waste Management Strategy to reduce waste to landfill, increase recycling and composting and improve efficiencies of current waste processes. The strategy includes roll-out of a fourth purple glass-only recycling bin and a hard waste collection.
- Council received a positive response to skips provided in Kennett River and Wye River for greenwaste collections to assist communities in preparation for fire season. A total of 19 tonnes of greenwaste was collected between October and December with no contamination of waste received.

FINANCIAL PERFORMANCE

At 30 June 2021, Council's financial position has improved in an uncertain environment as the COVID-19 pandemic continues to impact delivery of a significant capital works program and operating projects carried forward to 2021-22. The financial results reflect Council's efforts to maintain essential services and existing assets with improvement in some critical financial indicators in 2020-21, although these indicators continue an underlying trend downward. The key results include:

- Net surplus of \$6.4 million
- Capital works program of \$9.9 million (94% asset renewal projects and \$5.5 million carried forward to 2021-22)
- Operating projects and programs of \$1.2 million carried forward to 2021-22
- Cash balance of \$21.96 million
- Statutory and non-statutory reserve

commitments totalling \$20.0 million (excluding long service leave included in current liabilities)

- Working capital (current assets less current liabilities) of \$12.9 million, including \$5.5 million grant revenue received in advance)
- Provision liaibilities of \$10.8 million (landfill restoration provision reduced by \$3.3 million due to an independent expert assessment of Council's obligations for future restoration of ten closed landfill sites reducing the expected cost of works required)
- Borrowings of \$0.7 million (reduced by \$0.4 million)

After removing non-recurrent capital grants and contributions, the 2020-21 underlying result achieved was \$4.5 million. This result was impacted by a significant one-off reduction in the landfill restoration provision movement by \$3.3 million (recognised as revenue) and a \$0.58 million impairment expense for right of use assets. The 2020-21 underlying result would have been \$1.8 million if this provision movement had not been recognised. The result excludes the impact of timing of expenditure associated with operating initiatives carried forward to 2021-22 of \$1.2 million, due to the uncertainty of the COVID-19 pandemic.

The impact of lost revenue and additional costs associated with managing the COVID-19 pandemic was provided for in the 2020-21 budget. The COVID-19 pandemic required the continued closure of Council facilities in 2020-21 and resulted in a decrease in Council user fee revenue and associated expenses. Additional costs from closed facilities were offset in 2020-21 by redeployment of Council staff to activities funded by the Working for Victoria program in response to the pandemic.

Colac Otway's four-year budget through to 30 June 2025 identifies several performance indicators in decline. The full impact of the COVID-19 pandemic, average rate increases below the rate cap, and Council's ability to cover annual increases in operating costs associated with delivering the current level of services remains uncertain. Financial sustainability indicators also highlight Council's concerns about the effectiveness of Council's revenue strategies, and Council's capacity to meet its long term financial needs. Council is reviewing its revenue and rating plan in 2021-22 and has been developing a long term financial plan to meet this challenge.

The cost of funding existing service levels continues to increase at a greater rate than Council's revenue despite efforts to reduce costs. Adoption of a sustainable long term financial plan and revenue and rating plan in 2021-22 will be essential for Council to effectively fund the services and expectations of our community into the future.

Anne Howard Chief Executive Officer

Welcome

WELCOME TO COLAC OTWAY SHIRE COUNCIL'S ANNUAL REPORT FOR 2020-21.

Our report documents Council's performance during 2020-21 against the Council Plan 2017-2021 and the 2020-21 Budget.

This is the final year of reporting against the Council Plan 2017-2021.

Council is committed to transparent reporting and accountability to the community. This report is the primary means of advising the Colac Otway community about Council's operations and performance during the year.

The report serves as an important document that will provide 'point in time' information about Council and the community for readers of the future. This document also provides the opportunity to celebrate the achievements of Council, Council staff and the community over the course of the year.

The content of the Annual Report is reviewed each year and is guided by best practice in reporting and local government.

An online version of this report is available on www. colacotway.vic.gov.au

This Annual Report states progress against the 2020-21 achievements in realising the strategic objectives of the Council Plan 2017-2021. That important plan established the following framework for the term of the Council elected in 2016.

Strategic Vision Towards a Prosperous Future

VALUES

Council will achieve its Vision by acting with: Respect; Integrity; Goodwill; Honesty; Trust

STRATEGIC DIRECTION

The Councillors of Colac Otway Shire commit to plan growth in business and employment for our towns and settlements; the delivery of high quality services that meet community needs and demonstrate value for money; and to be leaders and work together as a team with the community and the organisation to achieve our goals for the Shire. THE FOUR THEMES OF OUR COUNCIL PLAN INFORM OUR KEY STRATEGIC DIRECTION FOR 2017-2021:

THEME 1 – OUR PROSPERITY

THEME 2 – OUR PLACES

THEME 3 – OUR COMMUNITY

THEME 4 - OUR LEADERSHIP AND MANAGEMENT

Contacting Council

COLAC OTWAY SHIRE

PO Box 283, Colac Vic 3250 E: inq@colacotway.vic.gov.au T: 03 5232 9400 W: www.colacotway.vic.gov.au For callers who have a hearing, speech or communication impairment, and for text telephone or modem callers, use our National Relay Service on 133 677

COUNCIL CENTRES

Colac Service Centre 2-6 Rae Street, Colac Vic 3250 Open: Monday – Friday, 8.30am – 5.00pm

Apollo Bay Service Centre (GORVIC)

100 Great Ocean Road, Apollo Bay Vic 3233 Open: 7-days per week, 9.00am – 5.00pm

Colac Otway Performing Arts & Cultural Centre (COPACC)

95-97 Gellibrand Street, Colac Vic 3250 T: 03 5232 9418 E: copacc@colacotway.vic.gov.au W: www.copacc.com.au Open: Monday – Friday. 9.00am – 5.00pm (except public holidays)

Bluewater Leisure Centre

118-134 Hearn Street, Colac Vic 3250 T: 03 5232 9551 E: bluewater@colacotway.vic.gov.au W: www.bluewater.org.au Open: 7-days per week (check website for current hours) Gymnasium open 24/7

Great Ocean Road Visitor Information Centre (GORVIC)

100 Great Ocean Road, Apollo Bay Vic 3233 T: 03 5237 6429 or 1300 689 297 E: gorvic@colacotway.vic.gov.au Open: 7-days per week, 9.00am – 5.00pm

Colac Visitor Information Centre

53 Queen Street, Colac Vic 3250 T: 1300 OTWAYS (689 297) E: colacvic@colacotway.vic.gov.au Open: Mon – Thurs 9.00am – 3.00pm; Fri 9.00am – 5.00pm; Sat 9.00am – 3.00pm; Sun: 10.00am – 2.00pm

Colac Maternal Child Health Centre

49 Queen Street, Colac T: 03 5232 9570 E: inq@colacotway.vic.gov.au Open: Monday - Friday 9.00am – 4.30pm (Contact Colac MCH Centre for MCH Outreach Centre hours)

Introduction

21,662 population

3,438 square km

1,622 km of local roads

556 km of sealed roads

1,056 km unsealed roads

95 km coastline

110,000 hectares of forest and National Park

16 towns



5.6% 0-4 years 17.7% 5-19 years 15.7% 20-34 years 21.9% 50-65 years 21.8% 65+ years 1.2% Aboriginal & Torres Strait Islanders 9% of the population was born overseas Our population growth rate is currently 0.46% Where do we work Manufacturing – 1,440 Healthcare & Social Assistance – 1,341 Agriculture, Forestry & Fishing – 1,284 Retail Trade – 936

Tourism - **876**

Crisie River e Beech Forest hype River hopolo Bay

Our Location

Agenda - Council Meeting - 15 December 2021

Location

A LARGE RURAL AND COASTAL SHIRE WITH A POPULATION OF 21,662, COLAC OTWAY IS WITHIN COMMUTING DISTANCE FROM MAJOR REGIONAL CITIES OF GEELONG TO THE EAST, WARRNAMBOOL TO THE WEST AND BALLARAT TO THE NORTH.

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 our major tourism centre 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 has been an unsubdivided municipality (no wards) since March 2017.

HISTORY

Before European arrival in the district, Colac was known as 'Kolak' or 'Kolakgnat', which means 'belonging to sand' to the Gulidjan people. The Gadubanud people occupied the rainforest, estuaries, grass and wetlands and coastline of the Otway's¹.

Lake Colac, the volcanic plains and the Otway's provided rich and diverse food supply, including drinkable water from Lake Colac in the southeast and the Woady Yaloak River to the north². Ownership and custodianship of these areas span thousands of years and is still present today.

European settlement dates from 1837 when pastoralists settled near Lake Colac, with further development occurring over the following years as timber getting and sawmills were established. The Apollo Bay township was established in the 1860s, with other coastal villages being settled by the 1880s.

The opening of the Great Ocean Road in 1932 gave greater access to coastal townships, with tourism spurring forth in the 1950s. Since the 1970s, rural residential living has steadily increased in popularity.

OUR COMMUNITY

Our resident population is estimated at 21,662 as at 30 June 2021. Approximately 83% of the Shire's residents were born in Australia and of those born overseas, 4% came from non-English speaking backgrounds.

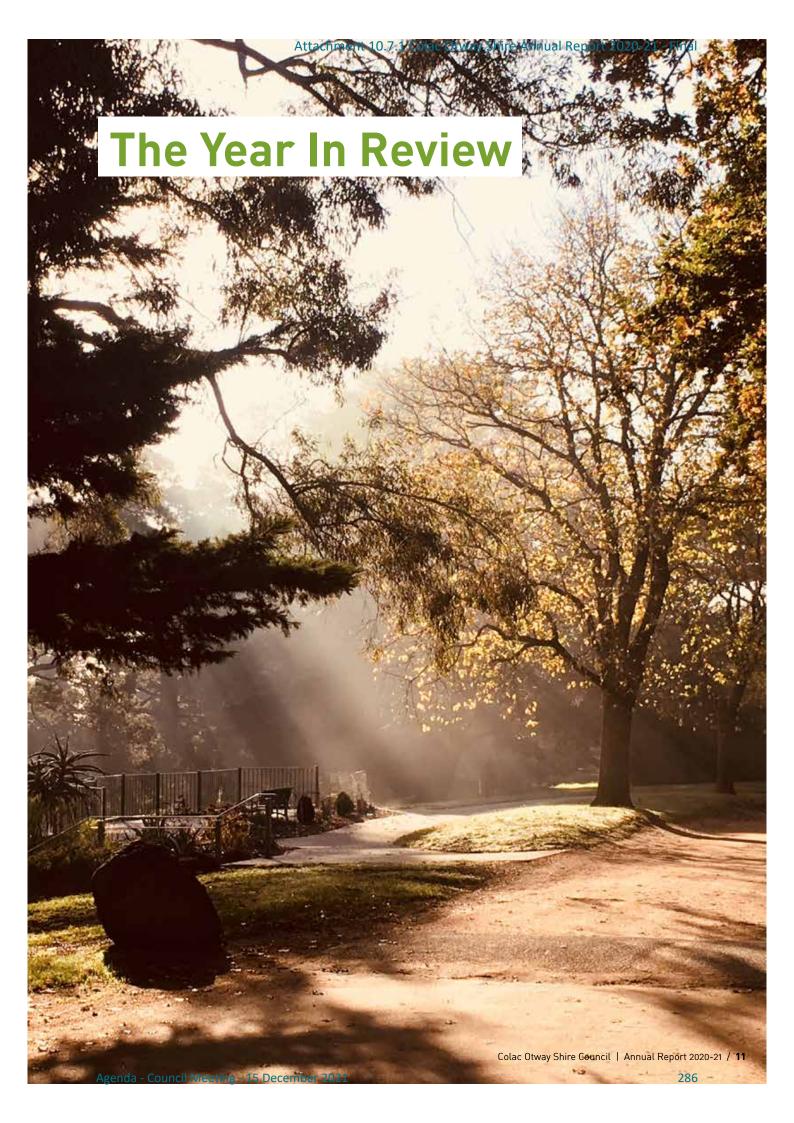
Completion of the dual highway to Geelong has opened up the region, making the commute to major centres more comfortable and an attractive option for both the local population and for those seeking a lifestyle change.

EMPLOYMENT

The following five major industry sectors make up 56.5% of the employed resident population in Colac Otway Shire.

1. Aboriginal History Volume 33 - Lawrence Niewojt

2. Aboriginal settlement of the saline lake and volcanic landscapes of Corangamite Basin, western Victoria - Ian J McNiven



Fast Facts About Our Services

342

Planning Permit applications received

46,147 Walk-ins to Visitor Information Centres

3,767

Incoming calls to Visitor Information Centres

4,163

Payments processed at Rae Street reception

2,859

Payments processed over the phone at Rae Street reception

690

Payments processed at Apollo Bay reception

36,929

Phone calls processed by customer service

56.67% Phone calls resolved at first contact by

customer service

22,432 Animals through Colac Regional Saleyards

991 Local Development business forum attendees

4,700 Attendees at 176 COPACC business events

1,200 Attendees at 16

COPACC exhibitions

Attendees at 10 externally produced COPACC events

1,100 Attendees to COPACC produced events

240

Bluewater childcare attendees

7,833

Bluewater casual pool attendees

1,055 Bluewater casual gym attendees

60,005 Bluewater gym member attendees

3,327 tonnes Organic waste diverted from landfill **396** kilos Household waste to landfill

25km Rural roads tree trimming

1,271km Footpath repairs

2,771 Maternal Child Health consultations

209 Birth notifications received

6,875 Meals on Wheels delivered

16,689 Home care hours

16,590 Personal care hours

2,285 Child & flu vaccinations performed

206 Food safety Inspections

2,750 Trees, grasses, lilies & shrubs planted

135

Children participated in environmental activities

138 Animals retu

Animals returned to owners

104 Animals rehomed

36,059

Correspondence received by Councils INQ email

296,499 Records crea

Records created or registered in organisation

192 Properties mapped carbon emissions reduced

15,644 Rateable properties

2,063 Pension rebates on property rates

1,466 land certificates issued

Footpath repairs*

*The lower lineal metre figure is as a result of the replacement and upgrade of a significant section of the Barongarook Creek path from footpath width (1.5 metres) to a 2.5 metres wide shared use cycling and walking path.

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Financial Summary

The purpose of the Annual Report is to convey the performance of Council for the 2020-21 financial year. From a finance perspective, it is important to consider this Annual Report in conjunction with the Council Plan, incorporating Council's Strategic Resource Plan, which focuses on the longer term objectives of Council. This document can be found on Council's website at www.colacotway.vic.gov.au

A summary of our performance is outlined below. Detailed information relating to council's financial performance is included within the financial statements and performance statement sections of this report.

OPERATING POSITION

Council achieved a surplus of \$6.4 million in 2020-21, which is an increase of \$5.2 million from 2019-20 and \$6.9 million favourable to the adopted budget. As per Note 1 in the Financial Statements, the variance to budget is primarily due to:

- \$3.3m reduction in the landfill restoration provision movement (recognised as revenue);
- \$2.5m lower materials and services expenditure (decrease of 11.3% compared to 2019-20);
- \$1.0m additional successful capital opportunities, including Central Reserve lighting and netball court redevelopment funding of \$514,000 (increase of 54.9% compared to 2019-20 -\$3.9 million of additional capital grant revenue was received in advance and is included in the balance sheet and recognised as revenue when performance obligations are met);
- \$0.6m non-monetary contributions for gifted subdivision infrastructure assets;
- \$0.9m lower depreciation (decrease of 8.6% compared to 2019-20).

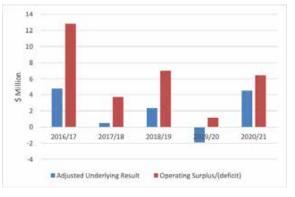
This is partly offset by:

- \$1.9m additional employee benefits (increase of 9.2 % compared to 2019-20). The COVID-19 pandemic required the continued closure of Council facilities in 2020-21 and resulted in a decrease in Council user fee revenue and associated expenses. Additional costs from closed facilities were offset in 2020-21 by redeployment of Council staff to activities funded by the Working for Victoria program in response to the pandemic.
- \$1.0m reduced operating grants (decrease of 6.7% compared to 2019-20 - \$1.2 million of additional operating grant revenue was received

in advance and is included in the balance sheet and recognised as revenue when performance obligations are met); and

 \$0.6m impairment expense for right of use assets relating to leased two-way radio equipment not able to be recovered from the supplier following voluntary liquidation in 2019.

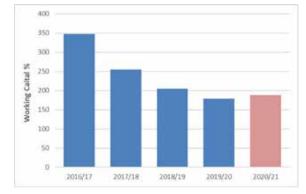
The adjusted underlying result (excluding nonrecurrent capital funding, cash and non-monetary capital contributions,) increased to \$4.5 million. The result is due to a significant reduction in the landfill restoration provision movement by \$3.3 million offset by a \$580,000 impairment expense for right of use assets. This would have been \$1.8m underlying surplus if this provision movement had not been recognised. This result is higher than budgeted due to the timing of expenditure associated with operating initiatives carried forward to 2021-22 of \$1.2 million. It is a critical financial strategy to aim for underlying surpluses to provide capacity to renew the \$372 million of community assets managed and controlled by Council.



LIQUIDITY

Cash has increased by \$5.8 million to \$22.0 million primarily due to increasing reserve commitments by \$6.1 million, including increased carry forwards by 4.3 million. This reflects the timing of grant funding received in advance (\$5.5 million) and associated carry forward expenditure. No additional loans and borrowings were undertaken in 2020-21 and \$286,000 of existing borrowings were repaid.

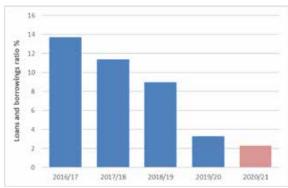
The working capital ratio which assesses Council's ability to meet current commitments is calculated by measuring Council's current assets as a percentage of current liabilities. Council's result of 190% is an indicator of satisfactory financial position and within Local Government Victoria's expected target of greater than 100%. However, it should be noted that this indicator is forecast to decline.



OBLIGATIONS

Council aims to ensure that it is able to maintain its infrastructure assets at the expected levels, while at the same time continuing to deliver the services needed by the community. Council invested \$9.6 million in renewal and upgrade works during the 2020-21 year (97% of capital works) toward bridging the infrastructure gap. The renewal gap ratio, which compares the rate of spending on existing assets through renewal, restoration, and replacement with depreciation, was 98% in 2020-21 compared to Local Government Victoria's expected low risk target of 100%.

At the end of the 2020-21 year, Council's debt (borrowing) ratio which compares interest bearing loans and borrowings to rate revenue was 2.31%, which is well below Council's maximum threshold of 20%. This ratio has decreased primarily due to \$286,000 being repaid from existing loans and borrowings in 2020-21.



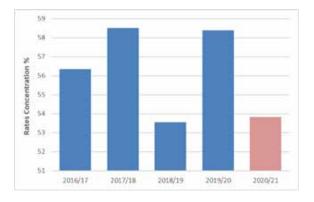
Council also has a policy to establish cash reserves to meet specific future obligations. At 30 June 2021 Council's established reserves totalled \$22.9 million (refer Note 9.1 of Financial Statements), which exceeds Council's cash balance by \$940,000. This means that some of Council's reserves will continue to not be 'cash backed' for the third consecutive year, until Council can take steps to increase its cash balance.



STABILITY

Council raises a wide range of revenues including rates, user fees, grants and contributions. Council's rates concentration, which compares rate revenue to adjusted underlying revenue, was 53.8% for the 2020-21 year. Rate concentration has decreased from 2019-20 primarily due to a significant oneoff reduction in the landfill restoration provision movement by \$3.3 million (recognised as revenue) in 2020-21 (refer to Note 5.5 of Financial Statements). A rate concentration ratio of approximately 60% is widely considered a healthy balance of not being over reliant on external funding to remain sustainable.

Further information on Council's performance can be found on the Know Your Council website, www. knowyourcouncil.vic.gov.au



Amanda Barber Manager Financial Services

Major Capital Projects Report

KEY HIGHLIGHTS OF THE YEAR

Substantial progress was made against the actions in the 2017-2021 Council Plan with the development of a draft capital allocations policy, internal capital works reporting framework and project management framework. These actions have provided a sound structure for the delivery of capital works to ensure that they are linked to strategic priorities and delivered efficiently, safely and cost effectively.

Standards are now embedded in infrastructure planning and design to ensure best practice Crime Prevention Through Environmental Design (CPTED) principles are used and community safety has been further enhanced through upgrades to the CCTV network in Colac.

One outstanding action from the 2017-2021 Council plan will be progressed in the coming period, being the development of a Property Management Framework.

PROJECT DELIVERY

Despite a very challenging year, impacted substantially by COVID-19, 72% of the Capital Works Program was successfully delivered and substantial external funding (over \$5.93 million) was received for a range of projects. 2020-21 saw the completion of major projects such as the Central Reserve Netball Courts and Lighting upgrade; Forest Street Bridge replacement and widening; Forrest shared path upgrade and the delivery of federally funded Local Roads and Community Infrastructure Projects, which enabled Council to deliver new community infrastructure such as footpaths and playspaces.

CAPITAL PROJECTS STATISTICS 2020/21

- 1,622 km of roads
- 566 km sealed
- 1,056 km unsealed
- 251 bridges and major culverts
- 146 km of footpaths
- 168 buildings

CENTRAL RESERVE NETBALL COURTS AND LIGHTING UPGRADE

This project has enhanced local community facilities within the Colac Otway Shire. Central Reserve is Colac's premier football and netball facility which is used by Colac Football Netball Club during the home and away season, and as the finals venue for the Colac and District Football Netball League (four weekends (six days) during August/September).

Completing this project has resulted in the redevelopment of the Central Reserve facilities as a regional sporting venue through the provision of compliant AFL local match standard lighting (150 lux) and two redeveloped compliant netball courts with competition standard lighting (200lux) and spectator tiered seating for 80 people. The new facilities were completed in time for the 2021 football netball season (end of March 2021) and to support local sport (clubs, volunteers, officials) and the community.

Council was successful in receiving funding of \$375,164 under the State Government's Local Sports Infrastructure Fund, and \$425,000 under the Federal Government's Building Better Regions Fund (Infrastructure Projects). Council's contribution towards completing the project was \$243,890.

During the construction period, completing this project contributed towards the local economy. It provided local businesses and industry with additional work during the construction period with the appointed contractor supporting local businesses and industry by using local civil contractors, trenching businesses, crane operation, site gravel removal, concrete suppliers and contractors, fencing contractors, accommodation providers and food businesses.

FOREST STREET BRIDGE REPLACEMENT AND WIDENING

The project was awarded under a design and construct contract to Gradian Projects for \$903,000, with a funding contribution of \$504,000 from State Government's Fixing Country Roads Program. The project aimed to widen the existing 7.2m bridge crossing so as to better serve current and future transport needs in terms of heavy vehicles.

Council originally specified a replacement bridge of 10m width however during the design phase the contractors faced constraints with existing power, gas and water assets all in the direct vicinity of the bridge. A compromise in the bridge width to provide a trafficable width of 9.6 meters was reached to avoid the cost and delays needed to relocate gas or power assets, the water/sewer assets were actually supported by the existing bridge and did need relocation.

The type of bridge chosen for the Forest Street crossing is a pre-certified, modular & semiintegral type of bridge that was recently developed by engineering firm SMEC and InQuik Bridging Systems. Use of this system allowed flexibility over traditional precast bridge construction techniques and enabled the designers to maximise the cantilever effect so that maximum deck width could be achieved while maintaining a safe distance between the driven piles supporting the bridge and the underground gas mains.

Construction works to replace the bridge began on site in October 2020 after finalising the approvals with Barwon Water for service relocation works to temporarily relocate the water and sewer main pipework that was attached to the original bridge structure. Council and Barwon Water negotiated shared costs for these service relocation works, with the water and sewer pipes being permanently reattached to the new bridge structure.

The bridge replacement works reached practical completion in April 2021. The total project cost to Council, including the service relocation costs, was just over \$1.2 million.

SHARED PATH, GRANT STREET, FORREST

The project aimed to provide safety improvements and community benefit by upgrading an existing pedestrian footpath to a wider and smoother shared path, as well as improvements to the stormwater drainage along the shared path. The original scope included a crossing of the Forrest main road (Grant Street) however this feature was removed from the project following community consultation. The contract was awarded under a construct only contract to a local contractor Deja Eight Pty Ltd for \$143,000. The project had a funding contribution from TAC to be matched by Council.

Works began on site in March 2021 starting with drainage works to replace old culverts, install culvert endwalls, supply beaching and reshape the swale drains. The old path was removed and the base reworked to widen, strengthen and remove soft spots before a new 2.5m wide asphalt path was laid down and finished off with bike holding rails, tactiles, linemarking and signage. The project reached practical completion on 21 June 2021 with the works costing \$159,000.

Following practical completion the TAC carried out a Road Safety Audit which has called for additional signage and tactiles which will be installed in the coming months.



CHALLENGES

Key challenges for Assets and Project delivery include:

- efficient and cost effective delivery of capital works within the unpredictable impacts of COVID-19 such as; delays for delivery of materials, industry costs increasing due to demand, limited availability of suitable contractors to undertake the work, travel restrictions limiting attendance to site and movement of consultants and contractors.
- responding efficiently to an increase in development referrals within available resource constraints
- planning for resilient infrastructure in response to climate change impacts such as landslips, coastal erosion and flooding
- Council encountered a significant project challenge in June 2019 that impacted the 2020-21 financial year.

The objective of the project was to establish a Digital Mobile Radio managed network for Council's field staff that work across some of the most challenging terrain in the region. Council awarded contracts for this work in September 2018 but unfortunately the supplier went into voluntary administration in June 2019. While the failure of the supplier was beyond Council's control, the resultant issues were compounded by the complex contractual arrangements Council had entered. This included an operating lease with a third party (financial institution) that was not visible to Councillors when the contract with the supplier was approved through formal resolution of Council. The operating lease was based on 120 monthly payments to the financial institution at \$14,000 per month.

Two milestone payments (to a total of \$765,729) were made by the financial institution to the supplier under the authorisation of Council. The supplier had ordered equipment on behalf of Council but it was not installed or commissioned and the payments were therefore in advance of the delivery or completion of work.

After the supplier went into administration, Council was able to secure a large amount of hardware at a fee of \$32,499 to the Administrator. Council is still negotiating with the relevant parties and the financial outcomes are yet to be determined. The audited financial statements incorporated in this Annual Report reflect the appropriate financial accounting of the arrangements as known at this time.

Council has recognised that a series of project and contractual governance failings contributed to the circumstances that it finds itself in. Council knows that Councillors and the community expect and reasonably need confidence in its management of public money. Council has already implemented a range of corrective actions including:

- Improved project management governance processes; and
- Improved management of officer delegations supported by officer training.

Internal reviews are not yet finalised and further corrective actions and improvements are expected to be identified and implemented.

Sustainability Report

COLAC OTWAY SHIRE CARBON NEUTRAL TARGET 2020

Council's 2020 Carbon Neutral Target – originally established in 2010 – set a mandate for significant emissions reduction activities, ultimately achieving reductions of 36% by the end of 2019-20. This was achieved across a wide range of Council operations and significantly reduced the quantity of offsets required to claim carbon neutrality.

Figures compiled at the end of the 2019-20 financial year show that with the purchase of 100% Greenpower, Council is responsible for approximately 1,799 tonnes of residual greenhouse gas emissions (CO2-e) per year. The Environment team are currently working with expert consultants Pangolin Associates to provide third party verification of Colac Otway Shire's greenhouse inventory that will allow Council to secure the required offsets to declare its carbon neutral status for the 2020-21 financial year.

Following a February 2021 Council Briefing, which examined options for meeting the carbon neutral target, Councilors requested further investigation into reducing reticulated gas consumption at Bluewater Leisure Centre. Gas use at Bluewater accounts for around 13% of total shire emissions, almost entirely consumed for water and space heating (HVAC) at the facility.

Working closely with the Project Delivery and Bluewater teams, the Environment team have provided significant project guidance and technical advice, promoting the advantages of highly efficient electric heat pumps as an alternative to the current gas boilers and in April 2021 allocated funds to undertake this energy efficiency and emissions reduction upgrade.

In June 2020, COS commissioned network operator Powercor to upgrade the 125 remaining fully-owned Category V (Main Roads) streetlights within the Shire to LED. Following delays due to COVID-19 and other factors, the upgrade of these lights was completed in February 2021. It is estimated this upgrade will deliver savings of around \$9,000 (45,000 kWh) per year, reducing carbon emissions released into the atmosphere by 48 tonnes CO2-e.

REVIEW OF COUNCIL'S ENVIRONMENT STRATEGY 2010-2018

The Environment Unit has commenced an internal review of Council's Environment Strategy 2010-2018. The review is focused on the evaluation of Council's progress against the targets set in the strategy, related achievements, changes in administrative, regulatory and legislative settings and requirements and future opportunities to inform Council's new Environment Strategy (2022-2030), set to be finalised in 2022.

SUPPORT FOR COMMUNITY ACTIVITIES

Colac Otway Shire was approached by Geelong Sustainability Group in February 2021 with a plan for a comprehensive solar and battery bulk buy program across the Barwon South West region. Colac Otway Shire agreed to provide promotional support for the program, which has partnered with local community groups Southern Otways Sustainable and Colac Otway Sustainability Group, along with regional solar installers and RACV Solar for delivery. Still in its early stages, the program has received unprecedented interest from residents across the region, with almost half of all enquiries incorporating batteries, a significant increase on previous programs.

ORGANISATIONAL EMISSIONS FOR 2020-21

The purchase of 100% Greenpower from 1 July 2020 has had a considerable impact on organisational emissions in 2020-21, effectively halving Council's organisational GHG footprint to 1,775 TC02-e. By way of comparison, efficiency upgrades and COVID-19 lockdowns have reduced GHG emissions from utility consumption by 7% compared to 2019-20.

Total COS Greenhouse Emissions (CO2-e tonnes)						
	Buildings	Gas	Street/ Public Lighting	Fleet	Total	
2010-11	1,999	311	1,181	2,114	5,605	
2011-12	1,916	290	1,202	1,727	5,135	
2012-13	1,879	323	1,182	1,698	5,082	
2013-14	1,484	186	1,014	1,523	4,207	
2014-15	1,356	3	872	1,530	3,761	
2015-16	1,846	282	436	1,269	3,833	
2016-17	1,881	478	412	1,560	4,331	
2017-18	1,887	488	406	1,329	4,110	
2018-19	1,747	470	406	1,263	3,886	
2019-20	1,389	466	417	1,333	3,605	
2020-21	0* (1,199)	451	0* (379)	1,324	1,775 (3,353)	

*Electricity consumption is emissions-free due to the purchase of 100% Greenpower from 1 July 2020. Numbers in brackets show avoided emissions.

BUILDINGS

Council's purchase of 100% Greenpower, which renders electricity consumption emissions-free across the organisation, removes the emissions attributable to buildings. Electricity consumption at Council buildings fell by 14% due to energy efficiency improvements and Covid shutdowns. In particular, electricity use at Pound Road Depot has fallen by 93% compared with 2019-20, largely due to the 30kW solar system installed in early 2020.

STREETLIGHTS

Street and public lighting emissions are also emissions-free due to the purchase of Greenpower. Streetlight electricity consumption overall fell 9% in 2020-21, largely due to efficiency upgrades to Council's fully owned Main Roads (Category V) streetlights. LED upgrades commissioned by Council to 125 high powered, major road streetlights were completed in February 2021.

FLEET

There was an overall decrease of 1% in fleet emissions during 2020-21. Fuel card diesel was down 28% due to COVID-19 restrictions on staff travel, however bulk diesel was up 27% due to additional utility vehicle usage as part of the Working for Victoria program, as well as a focus on maintaining essential operations through the Pound Road Depot. Despite considerable extra dredging in Apollo Bay Harbour during late May and early June, where around 24,000 m3 of sand were removed, annualised diesel consumption for the dredge remained consistent compared with the previous year.

WATER

Water use in the Shire has decreased overall by around 26% compared to last year, mainly due to reduced watering and the shutdown of key facilities throughout the Shire. Another wet year has meant significantly reduced water consumption at the Colac Botanical Gardens, Central Reserve and Memorial Square, with COVID-19 shutdowns dramatically impacting water use at Bluewater Leisure Centre and the Saleyards.

Total Water Usage for Council Facilities (kL)					
2011-12	95,498		2016-17	80,867	
2012-13	104,735		2017-18	92,787	
2013-14	99,908		2018-19	92,935	
2014-15	86,740		2019-20	91,058	
2015-16	93,900		2020-21	67,333	

WASTE

Organic Waste Diverted from Landfill



Council received an extra 208 tonnes of organics this year compared to last year. As residents were home during lockdowns cleaning up their properties before fire season.

The introduction of two green waste 18-metre skip bins, were placed at Wye River and Kennett River in spring to encourage residents to clean up their properties before fire season. 19 tonnes were collected via these skip bins, with no reports of contamination.

Household Waste to Landfill



In 2020-21 there has been an increase of 76 kilos per household. Total number of kerbside tenements 10,264.

Total number of general waste bins in service 10,485 (includes additional bins in service.)

The increase in household waste to landfill, was due to COVID-19 and the lockdown restrictions all Victorians faced during 2020-21, as more people stayed at home, more waste was created across all waste streams.

Our Council

Council | Annual Report 2020-21 Suncil Meeting - 15 December 2021

Who Are Our Councillors

IN 2020, THROUGHOUT THE LOCAL GOVERNMENT ELECTION PERIOD, THE STATE OF VICTORIA WAS UNDER COVID-19 RESTRICTIONS, THEREFORE A POSTAL VOTE WAS CONDUCTED TO ELECT OUR NEW COUNCILLORS.

In November 2020, three new Councillors were elected to Colac Otway Shire Council, with four previous Councillors re-elected. Councillor Kate Hanson was elected as Mayor on 16 November 2020.

Council is governed by the *Local Government Act 2020*, and is responsible for setting the overall strategic direction of the municipality and ensuring it is achieved. This is achieved through longterm planning and includes the Council Plan, financial plans, the municipality strategic statement and other strategic plans. For additional information on the role and powers of Council, please see page 78

Council would like to thank outgoing Councillors, Brian Crook, Jason Schram and Chris Smith, who represented the Colac Otway Shire through the 2017-2021 Council period.



CR KATE HANSON, MAYOR First elected: 2016 Re-elected: 2020 M: 0409 038 843 E: councillor.hanson@colacotway.vic.gov.au



CR GRAHAM COSTIN, DEPUTY MAYOR First elected: 2020 M: 0475 444 006

E: councillor.costin@colacotway.vic.gov.au



CR JAMIE BELL First elected: 2020 M: 0475 777 002 E: councillor.bell@colacotway.vic.gov.au



CR STEPHEN HART First elected: 2002 Re-elected: 2008, 2012, 2016, 2020 M: 0407 962 412

E: councillor.hart@colacotway.vic.gov.au



CR JOE MCCRACKEN





CR CHRIS POTTER First elected: 2016 Re-elected: 2020

- M: 0427 821 435
- E: councillor.potter@colacotway.vic.gov.au



CR MARGARET WHITE First elected: 2020 M: 0475 111 388

E: councillor.white@colacotway.vic.gov.au

Council Meetings

ORDINARY COUNCIL MEETINGS

Council conducts its business in open and publicly advertised meetings. Council meetings are usually held on the fourth Wednesday of each month at Colac Otway Performing Arts and Cultural Centre (COPACC), Colac. Reports are prepared independently by staff for both information and decision of Council. Two Council meetings were scheduled to be held in Apollo Bay for the 2020-21 year; however, one of those meetings was rescheduled to COPACC due to COVID-19 restrictions that were in place.

Due to the COVID-19 restrictions on the movement of people imposed by the State Government, Council has continued live streaming public Council meetings.

QUESTION TIME

In addition to Council business, question time is held at the start of each Council meeting. It provides the opportunity for members of the public to ask questions on issues in which Council has a direct interest or responsibility.

BRIEFING SESSIONS

In addition to formal statutory meetings, Councillors attend briefing sessions. Briefing sessions are not decision-making forums. They are an opportunity for the administration to provide information on significant matters that will generally come before Council for formal consideration in the Council Chamber.

DELEGATED COMMITTEES

A Council may by instrument of delegation, delegate to members of a delegated committee any of its powers, duties or functions, under the *Local Government Act 2020* or any other Act (with exceptions). Council has one delegated committee, being the Planning Committee of Council.

AUDIT AND RISK COMMITTEE

Audit and Risk Committee meetings are held quarterly, or more frequently as determined. The functions and responsibilities of the Audit and Risk Committee are set out in a Charter approved by Council. The Committee's purpose is to:

- a. Monitor the compliance of Council policies and procedures with the overarching governance principles, the Act, regulations and any Ministerial directions.
- b. Monitor financial and performance reporting.
- c. Oversee internal and external audit functions.
- d. Monitor and provide advice on risk management and fraud prevention controls.

The Committee's membership includes two Councillors and three independent members, one of whom is appointed as the chairperson.

PLANNING COMMITTEE OF COUNCIL

Planning Committee meetings are held on the second Wednesday of the month, as required. The Planning Committee considers and determines all matters referred to it pursuant to its instrument of delegation, including matters relating to strategic issues, and other matters referred to the Committee.

SPECIAL COUNCIL MEETINGS

Special Council meetings are called to consider specific matters. The following Special Council meetings were held: October 2020 to consider the financial statements for 2019-20; November 2020 to elect the Mayor and Deputy Mayor; June 2021 was a closed session to appoint the new CEO.

SUBMISSION COMMITTEE MEETINGS

The Submission Committee (established in September 2020, replacing the Special Committee) meetings, are held to enable community members to speak to matters that have been put out for public consultation. There were two Submission Committee meetings held in 2020-21, the first in July 2020 and the second in June 2021, both were to consider submissions to the draft budget of the respective year.

INFORMATION ABOUT ALL OTHER ADVISORY MEETINGS AND COUNCILLOR ATTENDANCE AT MEETINGS IS AVAILABLE IN THE DEMOCRATIC GOVERNANCE SECTION OF THIS REPORT, COMMENCING ON PAGE 79

Community Engagement

Council engages with it's community through formal means including, community information sessions, surveys and submissions.

Council has a dedicated page on the website, you can subscribe to receive updates on active community engagement opportunities, via the community consultation page. Alternatively contact Council with your feedback at inq@colacotway.vic. gov.au

In 2020-21 Council formally consulted with the community on the following matters:

- Community Vision 2050 which included a panel of 24 community members to inform the development of the Community Vision 2050 and Council Plan 2021-2025 as part of a deliberative community engagement process
- Acquisition and Disposal of Council Property Policy
- Community Engagement Policy
- Domestic Animal Management Plan
- Draft 2021-22 Budget
- Old Coach Road Proposed Changes
- Queen Street, Colac Street lighting and public safety
- Roads Management Plan
- Two Waste Management Survey's for:
 - Kerbside collections
 - Drop off facilities.

Our People

24 \ Colac Otway Shire Council

15 Decemb

Executive Management Team

AN EXECUTIVE MANAGEMENT TEAM (EMT), LED BY THE CHIEF EXECUTIVE OFFICER, MANAGES COLAC OTWAY SHIRE. THE EMT PLANS, COORDINATES AND MONITORS THE PROGRESS OF COUNCILS STRATEGIC DIRECTION AND GOALS.



Peter Brown – Chief Executive Officer

Peter has a degree in Economics and has more than three decades' experience in local government including seven years as Horsham Rural City Chief Executive. Prior to this position

at Horsham Rural City, Peter served as Director of Corporate Strategies with the Warrnambool City Council and also held the role of Chief Executive of Wimmera Uniting Care. Peter has a strong interest in regional communities and the benefits of collaboration with neighbouring councils and other levels of government to achieve mutually beneficial outcomes.

Peter retired from Colac Otway Shire, finishing in August 2021.



Errol Lawrence – General Manager Corporate Services

Errol has 16 years' experience in local government, the last four of which have been with the Colac Otway Shire Council. His formal qualifications include a Diploma in Accounting and Company Director Diploma.

Errol relocated from Perth in 2017, where he was employed at the City of Kwinana for the previous 12 years as Director of Corporate and Engineering Services.

For 22 years prior to local government, Errol gained extensive experience in corporate finances while working in the automotive industry.

Tony McGann – General Manager Environment & Infrastructure

Tony brings 20 years of local government experience to the role of General Manager Environment and Infrastructure. He is qualified with a Master of Business Administration and a Bachelor of Engineering. His private sector experience relates to designing and project managing civil engineering and building projects. In the Council environment, Tony has managed diverse portfolios including COPACC, Bluewater, town planning, asset management, waste management, local laws, environment, services and operations including the Port of Apollo Bay and capital works delivery.



Ian Seuren – General Manager Development & Community Services

Ian has over 25 years' experience in the public service and not-for-profit sectors, with qualifications including a Master of Sport Business and Bachelor of Applied Science (Human Movement).

With considerable experience in both local and state government organisations, Ian's career has focussed on community and business engagement and delivering on public sector policy. Ian has been employed with Colac Otway Shire since 2010, firstly as Manager Arts and Leisure before progressing to the position of General Manager Development & Community Services. Prior to working at Colac Otway Shire, Ian held regional roles with Regional Development Victoria and Sport and Recreation Victoria.

Marlo Emmitt – Manager Governance & Communications



Marlo has over 20 years' experience in Local Government, with qualifications that include a Bachelor of Commerce (Business Law) and Diploma of Business in Hospitality

Management. Prior to joining Colac Otway Shire in February 2021, Marlo most recently held executive roles of Acting Director Governance and Acting Manager Improvement and Program Integration at the City of Melbourne. Marlo focusses on providing high level support and advice to Councillors and the wider organisation, ensuring the organisation's reputation and enhanced risks are anticipated and managed, well-informed decisions are made by the administration and Council and Council's corporate planning and statutory responsibilities are met.

Organisation Structure

CHIEF EXECUTIVE OFFICER Peter Brown*

Office of the Chief Executive, Mayor & Councillors

GOVERNANCE & COMMUNICATIONS

Marlo Emmitt – Manager Executive & Councillor Support Communications Governance & Privacy Freedom of Information

Corporate Planning & Reporting

CORPORATE SERVICES

Errol Lawrence – General Manager

PEOPLE & CULTURE Jo Grainger – Manager

Human Resources
Risk & OH&S
Training & Development
Customer Service & Visitor Information Centres

INFORMATION SERVICES Steven Crawford – Manager • Information Technology • Information Management • Geographic Info System • IT Helpdesk

FINANCIAL SERVICES Jason Clissold – Manager • Accounts & Payroll • Financial Management & Reporting • Rates • Strategic Financial Planning

PROCUREMENT & CONTRACT MANAGEMENT

ENVIRONMENT & INFRASTRUCTURE

Tony McGann – General Manager

ASSETS & PROJECT DELIVERY Maddy Bisits - Manager

Capital Works
 Asset Management
 Strategic Property
 Management
 Project Delivery
 Infrastructure Development

SERVICES & OPERATIONS Cameron Duthie

CITY DEALS Frank Castles – Project Director • Port of Apollo Bay

ENVIRONMENT & COMMUNITY SAFETY Tony Gullone - Acting Manager • Environment & Sustainability • Local Laws & School Crossings • Fire & Emergency Management • Landfill Rehabilitation DEVELOPMENT & COMMUNITY SERVICES Ian Seuren – General Manager

PLANNING, BUILDING & HEALTH Doug McNeill – Manager

• Building
 • Health Protection
 • Statutory Planning
 • Strategic Planning
 • Planning Enforcement

ECONOMY & BUSINESS ENTERPRISES James Myatt – Manager • Economic Development & Tourism (Incl. Events & Grants) • Bluewater • COPACC • Saleyards

HEALTHY ACTIVE COMMUNITIES Tamzin McLennan

Manager
Recreation & Open Space
Family & Childrens Services
Maternal & Child Health

Library Services
Community Engagement

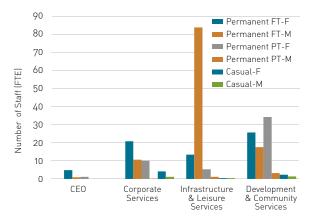
OLDER PERSONS & ABILTY SUPPORT SERVICES (OPASS)

*Anne Howard commenced in the role of CEO in August 2021.

Colac Otway Shire Staff

Colac Otway Shire employs 244 (FTE) staff with predominantly permanent full-time roles at 73% with 23% permanent part time and 4% casual roles.

Employment type by gender indicates that Colac Otway Shire is almost 50/50, with males making up 49.5% and females 50.4% of the workforce. Permanent full-time roles are predominantly held by males at 63.4% whilst females are strongly represented in part-time roles at 78.5%.

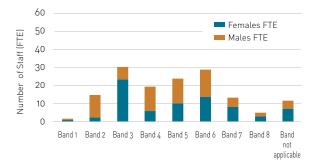


STAFF BY EMPLOYMENT BAND AND GENDER

Our banding profile is generally consistent with comparable regional councils. Bands 2 and 3 are predominantly outdoor and community care workers.

Bands 4 and 5 are general administrative staff. Bands 6 and 7 consist of technical specialists, team leaders and coordinators. Band 8 consists of highly specialised, technical experts who may also have a supervisory role.

A summary of the number of full-time equivalent staff categorised by employment classification and gender is set out below:



RECRUITMENT

We advertised 59 positions, attracting 349 applications, during the past year, which due to COVID-19 was considerably lower than previous years. Vacancies ranged across nearly all departments of the organisation, including Finance, Community Care, Assets and Project Delivery and Services and Operations.

FLEXIBLE WORKING

Council is proud to support our employees by facilitating a range of flexible working arrangements to assist them to fulfil their professional and personal responsibilities. We supported 16 formal flexible working arrangement requests including, additional purchased leave, job sharing, unpaid leave etc.

STUDENT WORK PLACEMENTS

We continue to support students in their pursuit of career advancement. This year we supported the following:

- One nursing student obtained experience in the practice of immunisation.
- Two university students completed practical work placement towards their Maternal and Child Health nurse qualifications.
- Two students needing to complete a practical component for their Certificate III in Fitness completed their placement with our Bluewater Leisure Centre.
- A Year 11 student commenced a VCAL work placement one day per week in the Information Communications Technology Department where he is gaining experience first-hand in the work place that will contribute towards his Certificate II in Information Technology.

Our Parks and Gardens team hosted a number of student placements this year:

- Two students from Colac Specialist School have been enjoying one day per week and will continue into the 2021-22 financial year.
- A group of 12 students who are doing Vocational Education and Training undertook a Structured Workplace Learning (SWL) placement. SWL placements allows students to have a handson experience under supervision, these students worked to improve the banks of the Barongarook Creek in Colac. Tasks included weeding, mulching, and planting of indigenous plants.

TRAINEESHIPS

Colac Otway Shire Council is proud to support young people to obtain employment, and develop work skills and experience directly from the workplace. We will continue to offer more opportunities to school leavers towards the end of the 2021 school year.

Five people commenced with our Services and Operations Department in the roles of Mechanic, Gardener and Civil Construction. In addition to these, one trainee is now in their third year as Apprentice Gardener.

One trainee also commenced in the role of Office Administrator, Economy & Business Enterprise Department.

EQUAL EMPLOYMENT OPPORTUNITY (EEO)

Our commitment to Equal Employment Opportunity is covered in our local Enterprise Agreement and through Council's EEO, Diversity and Inclusion, and Unacceptable Workplace Behaviour Policies. We commit to compliance with EEO and antidiscrimination legislation and to promoting equality of opportunity and the elimination of discrimination in employment policies and practices. We are also committed to ensuring an inclusive workplace culture that values diversity and provides a work environment free from bullying, harassment and other forms of unacceptable workplace behaviour.

We identify ourselves as an 'Equal Opportunity Employer' in all external recruitment advertisements and ensure that all new employees are made aware of our EEO, Diversity and Inclusion, and Unacceptable Workplace Behaviour Policies as a mandatory component of our induction program.

All staff are required to attend mandatory Equal Opportunity/anti-discrimination and unacceptable workplace behaviour refresher training at regular intervals.

We also have a formal internal grievance policy and procedure that enables staff to raise complaints.

LEARNING & DEVELOPMENT

The disruption of COVID-19 restrictions inhibited the learning and development opportunities offered this year, but some key programs were delivered from a strategic perspective to lead us into the 2021-22 financial year.

Our highlights in the 2020-21 year were:

• Commencement of a Leadership Development program for the 14 members of the Senior Leadership Team (SLT) that included psychometric testing using the Clarity 4D tool, 360 degree feedback, and coaching for development. This program has brought the SLT together after a period of disruption and isolation to focus on a new foundation for leadership, in preparation for a new Chief Executive Officer and delivery of a new Council Plan.

• A Women's Leadership Development Program attended by 18 women over eight sessions, allowing time for practice of tools, skills and knowledge between sessions. Women will continue to be supported in their development.

Training Programs Delivered 2020-21

- Health and Safety Representative Initial Course and refresher
- First aid/CPR update
- Unshakeable at Work (resilience building)
- Spectrum Spatial Analyst (SSA) Training (new mapping system program)
- Infection Control
- Women's Leadership (8 session program)
- Business Writing
- Time Management
- Speed Reading
- Mental Health first aid refresher
- Launch of Senior Leadership Team Development Program
- Fraud and Corruption Prevention
- Bullying and Harassment Awareness

Webinars offered

- Dealing with difficult behaviour
- Managing a remote team
- Authorisations what Councils need to know when appointing authorised officers

HEALTH & WELLBEING



Our usual Health and Wellbeing program is filled with events and social occasions to build relationships and have fun. Due to COVID-19 restrictions we had minimal offering of activities but promoted our online resources such as recordings to manage stress, finances, as well as a new online eight week course on mindfulness. Staff reported gaining great benefit from an increased awareness of stress responses and learned ways to manage those responses to minimise the impact on one's health and wellbeing, despite the circumstances they find themselves in.

FLEXIBLE WORK OPTIONS

In accordance with the Chief Health Officer's direction for staff who 'can work from home, must work from home', Colac Otway Shire staff worked from home during 2020-21.

Our IT Department worked tirelessly to ensure systems were in place so that Staff could be set up in a timely manner.

APPRECIATING OUR STAFF

We were fortunate enough to deliver our key reward and recognition event in person this year after hosting it online in 2020 due to COVID-19 restrictions. The annual Years of Service Awards is a semi-formal event to celebrate key milestones reached by staff in their years of service.

We also acknowledge and highlight the valuable contributions our staff bring to the organisation and community and show appreciation for the work they do.

Colac Otway Shire recognised 47 employees for key service milestones, these included 5 years; 10 years; 15 years; 20 years; 25 years; 35 years; 40 years.

REVIEW OF THE REWARD AND RECOGNITION PROGRAM

With the launch of our new organisational values, a review of our reward and recognition programs has commenced with a view to create new and innovative ways to appreciate our staff. This review will be complete in the latter half of 2021.

OCCUPATIONAL HEALTH & SAFETY

Colac Otway Shire has continued to actively work with its employees, contractors and volunteers in order to maintain and improve positive safety performance and minimise incident and injury.

The ongoing maintenance of effective consultative processes such as Council's OHS committee structures, continue to assist with fostering a positive and action focused organisational safety culture. There are 22 Health and Safety Representatives (HSR's) elected, representing each of the 17 designated work groups across Council. Additional Occupational Health and Safety (OHS) systems such as policies, procedures and processes have been further developed and improved, with a particular focus on lone workers; emergency management and high-risk work activities.

Workplace incidents continue to be actively reported and investigated in order to proactively facilitate the implementation of corrective actions and preventative control measures. By collaborating with the injured worker, their manager and any workplace rehabilitation providers, medical or other health professionals as well as our insurer, Council aims to achieve positive and healthy outcomes for both our employees and for Council. We will continue to focus on communications with injured employees and educating our leaders with skills and resources to improve early intervention management and overall injury outcomes.

There were seven standard WorkCover claims for 2020-21; one more than the previous year.

MENTAL HEALTH

Council continues to maintain a proactive and selfmotivated Mental Health Network to help support the role of the Mental Health First Aid Officers. Our commitment to providing employees with a psychologically safe and healthy workplace is ongoing and includes:

- An Employee Assistance Program provider; Converge International.
- 20 Mental Health First Aid Officers accessible to staff across all areas of Council.
- A Mental Health Network consisting of the Mental Health First Aid Officers and Senior Leadership Team which meet bimonthly.
- A dedicated page on the staff intranet called "COS We Care", providing access to all wellbeing resources.

In 2020-21 Council also committed to undertaking the People at Work survey; a validated psychosocial risk assessment survey, which assesses a number of the most common psychosocial hazards and factors. This survey will be conducted in 2021-22 with findings to form part of Council's strategic action plan towards controlling psychosocial risks in the workplace.

DAYS LOST TO INJURY

We had 301.16 days lost due to injury during the 2020-21 year; a total of 301.16 effective full-time (EFT) days compared with 401.84 EFT days in 2019-20 period; a reduction of 29%.



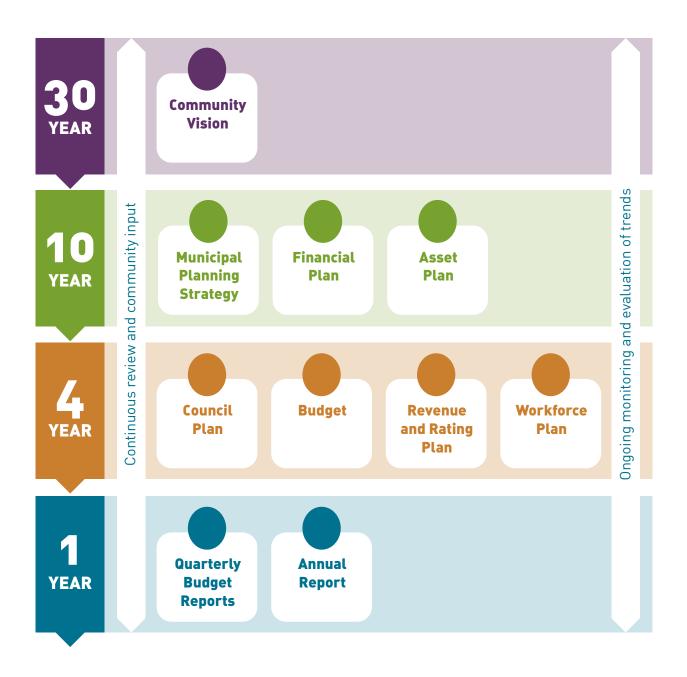
SUPPORTING OUR EMPLOYEES

Employees (and their families) have access to an extensive range of support services through our employee assistance program. Employees can discretely and confidentially access a range of emotional, physical and social support services including:

- 24/7 face-to-face and telephone counselling.
- Manager hotline.
- Health and wellbeing services.
- Extensive online resources e.g. health risk assessment, mortgage assist, finance assist and legal assist.

Report of Operations

INTEGRATED PLANNING FRAMEWORK



Report of Operations

ECONOMIC AND ENVIRONMENTAL IMPACTS

The onset of COVID-19 has seen a significant change in how business is carried out by Council, both internally and externally, with major operational changes required to ensure services provided to our community were able to continue in a COVID safe environment for our community and employees.

With continued restrictions and lockdowns, flexibility and innovative thinking went into:

- Continuing to provide care services to our community's most vulnerable.
- Working with various stakeholders and authorities in the management of a local COVID-19 outbreak.
- Providing employment opportunity to our community through the Working for Victoria program.
- Supporting staff to work from home.
- Providing work opportunities for our staff, through redeployment within the organisation.
- Finding suitable options for virtual meetings.
- Finding alternatives to providing access to Council Meetings.
- Limiting the number of staff in offices.
- Ensuring those in the office were able to social distance.
- Ensuring Council facilities adhered to ongoing changes with COVID-19 restrictions.
- Providing online and phone customer service during centre closures.

MAJOR OPERATIONAL CHANGES

A considerable review was undertaken of Colac Otway Shire's organisational structure focussing on the need for synergies, consistent quality and efficient delivery of services to the community. The Executive Management Team also consulted a number of service reviews undertaken to guide the understanding of future service delivery and organisation needs.

The realignment of the organisation structure supports two specific deliverables for the organisation, being strong community connections and services, and secondly economic growth and development through enhanced management of business enterprises. The following changes occurred at a department level:

- Disestablishment of the Arts and Leisure department.
- Community Services Department was renamed, Healthy Active Communities.
- The Economic Development and Tourism Department was renamed, Economy and Business Enterprises.
- Establishment of the City Deals department.

The following changes occurred at a business unit level:

- The Arts and Leisure Teams was dispersed into the Healthy Active Communities and the Economy and Business Enterprises business units. Recreation and Open Space moved into the Healthy Active Communities department, whilst Bluewater and COPACC moved into the Economy and Business Enterprises department.
- OPASS was removed from the Healthy Active Communities department and now reports directly to the General Manager Development and Community Services.
- Visitor Information Centres have joined the Customer Service team within the People and Culture department.
- Port of Apollo Bay has joined the City Deal department.

The following changes have occurred at a divisional level:

- Infrastructure and Leisure Services was renamed, Environment and Infrastructure Services.
- Environment and Community Safety department has joined the Environment and Infrastructure division.

Description of Operations

COLAC OTWAY SHIRE IS RESPONSIBLE FOR 52 SERVICES AND FACILITIES ACROSS A WIDE RANGE OF AREAS FROM, PROVIDING COMMUNITY SERVICES, ENVIRONMENTAL MANAGEMENT, CUSTOMER SERVICES, HEALTH AND WELLBEING, FAMILY AND CHILDREN'S SERVICES, OPEN SPACES, WASTE MANAGEMENT, TOURISM, PARKS AND GARDENS; TO BUSINESS DEVELOPMENT, PLANNING FOR APPROPRIATE DEVELOPMENT AND ENSURING ACCOUNTABILITY FOR COUNCIL'S BUDGET.

The delivery of services, activities, support and advocacy to achieve the Strategic Objectives Council has set out in its Council Plan 2017-2021, is measured by a set of service performance indicators and measures. Council also has a wide range of responsibilities under Victorian legislation.

As this is the final year reporting on the Council Plan 2017-2021, an assessment has been undertaken and each action has been identified as:

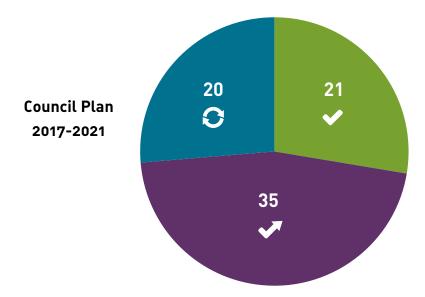
Complete and/or business as usual This indicates the project undertaken to achieve the action has been completed, or the work done in achieving this action will now continue to be undertaken as part of Council's business as usual (core duties). **Complete with further priorities (i.e. stage two of project) in the draft Council Plan- 2021-2025** This indicates the work undertaken to date has achieved the outcome of the action, however there have been additional works identified through the process or the project involves a staged approach over consecutive Council Plans.

S

Carry over with ongoing priorities in the draft Council Plan 2021-2025

This indicates the work undertaken to achieve the action requires further work to be considered complete.

The following chart shows the status of the Council Plan actions, as at 30 June 2021.



Our Prosperity

WE WORK TOGETHER TO IMPROVE THE PROSPERITY OF OUR PEOPLE, BUSINESS AND COMMUNITY PARTNERS BY WORKING TO PROMOTE OUR BEAUTIFUL SHIRE AS AN ATTRACTIVE PLACE TO LIVE, WORK, INVEST AND VISIT.

THE IMPORTANCE OF OUR PROSPERITY AS A THEME

Colac Otway Shire has a diverse economy, much of it built on the natural environmental values. The area has enjoyed successful dairy and food processing industries for many decades; supports the timber industry; has a growing tourism industry built on both a striking coastline and the forests of the Otways; small, specialist food producers, many forming the Colac Otway food trail; plus, a host of local retail businesses, arts and crafts enterprises; and health and education services.

The shire has two larger towns of Colac and Apollo Bay, and a number of smaller towns. Each of these has unique attractions and supports local cultures and communities. The shire is strategically placed halfway between Geelong and Warrnambool which provides opportunities for economic development and a growing population supported by access to work.

FOUR STRATEGIES CONTRIBUTE TO ACHIEVING OUR GOAL

- 1. Plan infrastructure, assets and land use with a long-term vision for economic growth.
- 2. Support a thriving economy and industries.
- 3. Strengthen partnerships with key stakeholders to benefit the whole community.
- 4. Improve strategic planning and coordination of the Great Ocean Road.

Key highlights for projects and activities linked to our Prosperity begin on page 35

Our Prosperity

SERVICES CONTRIBUTING TO OUR PROSPERITY

The following services/activities were funded in the 2020-21 budget and contribute to achieving the goals and strategies for this Theme.

SERVICE AREA	DESCRIPTION OF SERVICE	NET COST ACTUAL BUDGET VARIANCE \$000		
Building Control	This service provides for planned building developments to meet present and future community requirements.	1,322 <u>1,106</u> 216		
Events	This service provides for active community involvement in the provisioning of management and support for community entertainment and events.	101 <u>127</u> (26)		
Economic Development	The service facilitates a healthy and resilient			
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.	457 <u>561</u> (104)		
Apollo Bay Harbour	This service manages and maintains the Apollo Bay Harbour for the enjoyment of the community.	311 <u>17</u> 294		
Colac Regional Saleyards	Colac Regional Saleyards This service provides a vital link in our rural infrastructure by providing a marketplace for buying and selling livestock.			
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.	1,167 <u>972</u> 195		
Strategic Planning	This service ensures that land use planning is undertaken to meet the sustainable long term needs of current and future generations.	548 <u>261</u> 287		

Our Prosperity

HIGHLIGHTS

Apollo Bay Harbour Development Plan

A master plan for redevelopment of the Apollo Bay Harbour was finalised and adopted by Council, providing direction for future improvements of the harbour precinct aimed at increasing its desirability as a destination for tourists. This Plan facilitates implementation of State and Federal City Deal funding for key elements of the redevelopment.

Reduced planning permit processing times

Despite the challenges of remote working for staff during COVID-19 stay at home restrictions, and a 28% increase in planning permit activity for the year, processing times for planning permit applications were reduced, reflecting increased use of technology for paperless assessment and approvals and other process improvements. The median number of days to determine an application reduced from 40 to 32, and the percentage of applications determined within the 60 day statutory period increased from 72% to 76%.

Sale of Council land at Bruce Street, Colac

After completing an environmental audit of Council owned land in the residential zone abutting a closed landfill in Bruce Street, Council resolved to sell the land for residential development, incorporating social housing. An Expression of Interest process commenced to seek interest from developers to achieve this outcome.

COVID-19 Business Support

During the 2020-21 financial year COVID-19 had a substantial impact on local businesses and the community. Council delivered a range of programs to support local businesses and the community as well as conducting advocacy work to State and Federal government raising issues affecting Colac Otway businesses and seeking business COVID-19 assistance. Specific projects delivered include:

- Business Diversification Program
- Outdoor Dining Expansion Program
- Small Arts Projects Program
- Buy Local Campaign
- Connecting with Asia Program.

Priority Project Funding

The Economy team has taken a leading role in facilitating the management process of Council's applications, and management of external grants.

A focus has been on aligning grant funding to Council's priority projects to maximise community benefit. During the 2020-21 financial year, the Economy team has directly achieved funding for the following projects, as well as conducted advocacy work for other priority projects that raise their profile for future funding programs. The team has also successfully advocated to external bodies e.g. NBN to conduct upgrades in our small towns.

- \$5.7m for Birregurra NB upgrade
- \$2.32m for Forrest Mountain Bike Network Revitalisation
- \$2m for Accessible Camping facilities and area at Apollo Bay Recreation Reserve Campground
- \$533,369 for Agricultural Road Upgrades (Swan Marsh Stonyford Rd)
- \$290,000 for Colac Municipal Aerodrome Upgrade – Stage 2
- \$290,000 for Business Digital Transformation Program
- \$35,625 for Community Event COVID Recovery Support.

CHALLENGES

Increased development activity

The increased development activity across the Shire is placing pressure on Council staff in a range of approval related areas such as planning, building, health and engineering. The challenge is to maintain service levels in responding to this pressure, and in particular to maintain permit processing times and facilitate development that contributes to the economic recovery of the community.

COVID impacts on health inspections

Council's Environmental Health activities have been heavily impacted by the pandemic which has necessitated significant support being provided to both the Council organisation in its response and recovery, but also to the business community with regularly changing State health orders. This has adversely impacted the routine inspection activities of health staff and will continue to influence staff operations into 2022 until vaccinations reach a threshold level.

Economy and Business

COVID-19 will continue to impact on the Colac Otway economy and businesses. A key challenge will be to ensure when borders open, that Australian residents continue to visit our region. Some sectors including tourism and the arts may need additional stimulus support to return to pre-COVID-19 levels of activity.

Key Worker Housing availability is continuing to impact on workforce availability for businesses across the shire. Both in Colac and Apollo Bay a significant number of jobs are unfilled due to a lack of available workforce. Projects are underway to mitigate the issue in the short term and address in the medium-long term.

FUTURE OUTLOOK

Residential land availability in Colac

Completion of the Princes Highway duplication from Colac to Geelong and increased interest of people moving from Melbourne to the regions post COVID-19, has resulted in a critical shortage of available residential land to meet demand for housing. The priority will be to complete a Development Plan for existing zoned land at Colac West, undertake further strategic planning for the Colac Deans Creek Growth area (including preparation of development contribution plans) and facilitate rezoning proposals. Council will work with the State Government to facilitate development adjacent to the former Colac High School.

Social Housing

A Social Housing Plan will be finalised following consultation with the community, providing direction for Council efforts to achieve increased social housing across the municipality. The plan will be used to advocate for State Government investment in social housing projects from the Big Housing Build program, and for negotiation with developers to achieve social housing in new estates rezoned for residential purposes.

Availability of affordable housing for key workers

Council will be working with Apollo Bay and other coastal communities in seeking to address the shortfall in affordable housing for workers in these towns through a Joint Task Force. Council is also participating in a regional project to develop solutions to the issue, and is advocating on behalf of the community.

Economy and Business

At the end of the 2020-21 financial year, the team was successful in accessing funding for multiple projects to stimulate and upskill local businesses including the Digital Transformation Program. The first half of the year will be an opportunity to deliver on these projects and create a platform to provide business support, private and public investment attraction and plan infrastructure for a post-COVID-19 economy.

PLANNING AND BUILDING STATISTICS 2020-21

VICSMART APPLICATIONS (decisions made within 10 days)

YEAR	2016 /17	2017 /18	2018 /19	2019 /20	2020 /21
Applications received	12	52	54	63	68
Determined \downarrow 10 days	9	44	50	54	60
Median Processing Days	7.6	7.5	6	7.2	5.75

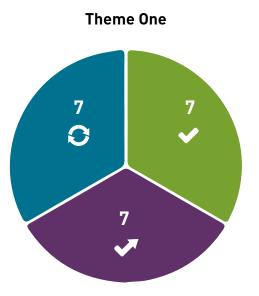
REGULAR PLANNING APPLICATIONS (decisions made within 60 days)

YEAR	2016 /17	2017 /18	2018 /19	2019 /20	2020 /21
Applications received	365	319	342	245	396
Determined ↓ 60 days	282	178	166	209	204
Median processing days	43.3	70	86	4	31.4
Appeals to VCAT	2	1	6	2	2
Council decision upheld	2	1	0	1	0

Council Plan Objectives

THE FOLLOWING PAGES INCLUDE A SUMMARY OF THE WORK THAT HAS OCCURRED OVER THE FOUR YEARS OF THE COUNCIL PLAN 2017-2021, AGAINST THE ACTIONS IN THEME ONE.

The chart below provides details of the status of the 21 actions under Theme One.





Complete and/or business as usual

Complete with further priorities (i.e. stage two of project) in the draft Council Plan- 2021-2025

Carry over with ongoing priorities in the draft Council Plan 2021-2025

Performance Against

	Action	Work undertaken over four-year Council Plan	Status
Plan I	Infrastructure, assets and land us	se with a long- term vision for economic growth.	
1.1	Provide direction on how growth across the Shire should proceed and ensure adequate land is provided for industrial and residential use.	Colac 2050 Growth Plan finalised and a planning scheme amendment implemented to include relevant provisions in the Planning Scheme. Colac Commercial and Industrial Land Use Strategy finalised and the planning scheme updated, including rezoning of further land for industrial purposes Development planning undertaken for residential land at Colac West to facilitate residential development adjacent to the former Colac High School, and land acquired from the former school for public open space.	
1.2	Develop and implement a Colac Otway Economic Development Strategy.	Council endorsed the Economic Development Strategy March 2019. As at 30 June 2021 ten of the actions are complete and fully implemented, with numerous other actions ongoing in nature.	S
1.3	Conduct a review of the housing stock in Colac and establish a Residential Housing Strategy to ensure current and future stock is suitable to attract new residents.	A residential demand and supply analysis was undertaken to inform the Colac 2050 Growth Plan. A Housing Strategy assessment to identify future Housing need/ types based on the population trends and community patterns has not yet been funded. Officers have participated in a Key Worker Housing Project with other Great Ocean Road Councils which aims to identify actions to overcome housing availability constraints for employees in Colac's key professional and manufacturing industries and for seasonal workers in Apollo Bay. Officers are participating in a G21 Regional Social Housing Study which will identify housing needs across the Shire for the most vulnerable and establish strategies to address this. A Social Housing Plan for Colac Otway Shire is being presented to Council at the August 2021 OCM for adoption. A business case to develop a Shire-wide Settlement Strategy that incorporates a review of the Rural Living Strategy, including boundaries of the Rural Living Zone was not supported in the 2020-21 budget, but will be reconsidered for the 2021-22 budget process.	٢
1.4	Identify and improve tourism assets across the Shire.	 \$20 million has been secured through the City Deal for upgrade of the Apollo Bay Harbour, Coastal Discovery Trail and Kennett River parking and toilets Forrest Mountain Bike Revitalisation Project has received \$2.32 million (\$500,000 Regional Development Victoria, \$250,000 Colac Otway Shire and Department Environment, Land, Water & Planning \$1.57 million). Wildlife Wonders in Apollo Bay opened its doors to the public in 2021. Investment has been attracted to improve multiple tourism assets including Beachamp Falls camping; Stevenson's Falls camping; Great Ocean Road. 	
1.5	Prepare an Infrastructure Master Plan for Apollo Bay and Coastal Townships, covering categories including roads, car parking, bus parking, footpaths and stormwater drainage	Apollo Bay, Skenes Creek & Marengo Community Infrastructure Plan in development.	€

	Action	Work undertaken over four-year Council Plan	Status
1.6	Attract investment to implement key master plans that will drive economic growth such as the Lake Colac Foreshore Master Plan.	Investment secured for the following projects: \$2.3 million for Forrest Mountain Bike Network. \$112,000 for implementation of stage 1 of the Colac Municipal Aerodrome Master Plan \$20 million for the City Deal Projects \$670,000 in total (including Council contribution) for Memorial Square Playground upgrade. \$500,000 in total (including Council contribution) for Cororooke Open Space implementation.	
1.7	Remove unnecessary planning triggers to streamline planning processes.	Four-year Planning Scheme Amendment review adopted. Some of the key items to note: Amendment C102 which removed redundant Environmental Significance Overlays at Colac, Elliminyt and Warrion groundwater area has been finalised. Amendment C90 has been submitted to the Planning Minister for approval, this will remove planning permit requirements associated with building works in flood prone areas where they are constructed above nominated flood level. Prepared an amendment to Heritage Overlay provision in Colac to remove requirements for minor building works following a Council resolution at the September 2020 Ordinary Council Meeting. The Erosion Management Overlay provisions to reduce mapping overlay and planning requirements is being finalised and scheduled to be reported to Council mid-2021.	
1.8	Strengthen partnerships with employers in the Shire.	Council officers have maintained direct contact with employers, and also maintained contact with employer representative bodies such as the Chambers of Commerce and the Colac Large Employers Group. Council officers have worked actively with the Warrnambool City Council to support the designated area migration agreement. To date seven local businesses and a total of 14 employees have been successful through the Designated Area of Migration Agreement program.	~

Suppo	Support a thriving economy and industries					
1.9	Identify and promote Tourism pathways between attractions across the whole Shire.	 Apollo Bay Destination Marketing Plan was completed in 2017. This plan links to the 2015 'I am Apollo Bay' Brand Positioning work. Annual Destination marketing campaigns for Apollo Bay are ongoing. The Colac Destination Plan was completed in February 2020. The decision to disband the Otway Tourism Advisory Committee (OTAC) was made in early 2020. Additionally, Otway Country to Coast Tourism disbanded in 2019. Council and the business associations (Colac Chamber, the Otway Harvest Trail and the Apollo Bay Chamber and the Action for Apollo Bay group) continue to work together on strategic initiatives. Council also engages with tourism operators, tourism 	③			
		associations and Great Ocean Road Regional Tourism via the Destination Leadership Groups that formed/ forming out of the Destination Action Plan processes.				

	Action	Work undertaken over four-year Council Plan	Status
1.10	Identify and support employment in tourism	 Council partnerships have been established in the following: Great Ocean Road Regional Tourism and Visit Victoria to market our tourism regions. Great South Coast Councils to develop and implement Key Worker Accommodation Study. Great Ocean Road Regional Tourism to develop workforce planning. Council's tourism and Visitor Information Centre resources have been redeployed to a business support function, focussed on contacting local businesses (including tourism businesses) to better understand what the impact of COVID-19 has been, and how Council can help. Council has facilitated the expansion of outdoor dining throughout the shire, with a particular emphasis on Apollo Bay. Council has continued to support tourism operators and assist them with accessing government support throughout COVID-19. 	
1.11	Explore options to facilitate new tourism accommodation	A Colac Accommodation Investment Feasibility study was completed in June 2020. This included a demand study document, site identification report and investment prospectus.	•
1.12	Review planning controls for the coastal hinterland and support establishment of tourist accommodation	Funding to progress this initiative was not obtained throughout the 2017-2021 term, however this action will be addressed through the Great Ocean Road Strategic Framework Plan being led by Department Environment, Land, Water & Planning.	€
1.13	Review the Shire Events Strategy and partner with event organisers to assist them preserve the amenity of residents while running successful events.	Shire Events Strategy was incorporated into the Economic Development Strategy 2019-2024.	Ø
1.14	Facilitate the attraction of investment in the development of high standard accommodation in Colac and Apollo Bay, complemented by high yielding nature based experiences.	Council officers facilitated a process for consideration of a proposed five-star hotel on land to the rear of Apollo Bay, which was called in by the Planning Minister in January 2019, and was considered by an independent Panel appointed by the Minister. Whilst the Minister has since refused the application, it is expected this work will contribute to future development of the site. Colac Accommodation Demand Study complete; Site identification complete; Investment Prospectus for Colac complete. Council is continuing conversations with potential investors and developers led by the study.	•
1.15	Encourage and support existing owners of accommodation to upgrade, refurbish and develop new infrastructure to meet visitor demand.	Due to COVID-19 this action has been temporarily put on hold to respect the financial difficulties our accommodation sector is experiencing as a result of restrictions and social distancing. However, investigations continue into securing opportunities to expand Colac and Apollo Bay's accommodation offerings more broadly.	€
1.16	Review the Great Ocean Road Closure Policy.	Policy has been reviewed and endorsed by Council in May 2020.	

	Action	Work undertaken over four-year Council Plan	Status
Stren	gthen partnerships with key stak	eholders to benefit the whole community.	
1.17	Seek regional funds from state and Federal Governments.	Council's internal grant identification, application and management processes have been improved leading to multiple projects being funded. Priority projects have been a focus of Council.	
1.18	Develop and maintain regional partnerships and joint advocacy.	Council continues to be involved with all regional bodies including: - G21 Regional Alliance - Great Ocean Road Regional Tourism - Barwon Regional Partnership - Regional Development Australia - Barwon South West committee - G21 Great South Coast CEO's group - Regional Forums where Council CEO's are invited	S
1.19	Seek to influence education providers to match local job opportunities with available skills training.	Council has ongoing participation in the GROW program as well as regular liaison with local employers and schools to support the implementation of this action. Council actively engages with Colac Otway Careers Advisors and Teachers Network to assist in matching education with industry trends. South West TAFE has recorded significant growth in registered students and training uptake.	
1.20	Support programs to reduce youth unemployment and promote employment for disadvantaged groups in partnership with employers, G21 and the GROW initiative.	Jobs Fair held 2019 and another planned for late 2021. Council has ongoing participation in the GROW program as well as regular liaison with local employers and schools to support the implementation of this action. Council actively engages with Colac Otway Careers Advisors and Teachers Network to assist in matching education with industry trends. South West TAFE has recorded significant growth in registered students and training uptake.	

Impro	Improve strategic planning and coordination of the Great Ocean Road					
1.21	Advocate for the establishment of a Great Ocean Road Authority	Great Ocean Road Authority established 1 December 2020				

Local Government Performance Reporting Framework

SERVICE / INDICATOR / MEASURE	Results 2018	Results 2019	Results 2020	Results 2021	COMMENTS
Statutory Planning Timelines Time taken to decide planning applications [The median number of days between receipt of a planning application and a decision on the application]	70.00	86.00	91.00	74.00	Additional staff engaged to assess applications and respond to increased permit numbers received post COVID-19, and increased efficiencies from electronic processing of applications and other process improvements.
Service standard Planning applications decided within required time frames [(Number of regular planning application decisions made within 60 days) + (Number of VicSmart planning application decisions made within 10 days) / Number of planning application decisions made] x100	74.25%	73.22%	80.23%	77.19%	Minor change from previous year.
Service cost Cost of statutory planning service [Direct cost of the statutory planning service / Number of planning applications received]	\$3,634.56	\$3,367.43	\$3,447.93	\$1,998.25	The cost per application decreased due to a significantly higher number of applications being received and processed during 2020-21
Decision making Council planning decisions upheld at VCAT [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	100.00%	0.00%	50.00%	0.00%	There were no Council decisions set aside by VCAT.

Our Places

OUR PLACES ARE WELL-PLANNED. WE WORK WITH LOCAL AND GOVERNMENT PARTNERS TO PLAN HEALTHY, SAFE ENVIRONMENTS WHICH PROMOTE COMMUNITY LIFE AND ENHANCE WELL-BEING. OUR INFRASTRUCTURE ASSETS ARE MANAGED SO THAT THEY ARE SUSTAINABLE FOR THE LONG TERM.

THE IMPORTANCE OF OUR PLACES AS A THEME

Infrastructure assets such as roads, drainage and footpaths are important because they help to deliver services to the community. Roads and footpaths provide the ability for people to access work, education and recreation. Drainage provides protection to properties and allows for safe transport.

It is important for us to manage assets in a rational way so that we can ensure they are sustainable over the long term so that those services are provided to future generations.

It is important that Council operations are undertaken in consideration of the natural environment and where possible take action to help improve to protect, enhance and restore the environmental values of the region.

SIX STRATEGIES CONTRIBUTE TO ACHIEVING OUR GOAL

- 1. Assets and infrastructure meet community needs.
- 2. Our places are managed for long term sustainability.
- 3. Towns and places are welcoming and attractive.
- 4. Leadership in natural environment through good management practices.
- 5. Delivery of our capital works program.
- 6. Emergency management is coordinated locally and on a regional basis.

Key highlights for projects and activities linked to Our Places begin on page 45

Our Places

SERVICES CONTRIBUTING TO OUR PROSPERITY

The following services/activities were funded in the 2020-21 budget and contribute to achieving the goals and strategies for this theme:

SERVICE AREA	DESCRIPTION OF SERVICE	NET COST ACTUAL BUDGET VARIANCE \$000
Emergency Management	Provision of necessary support for the community in the case of an emergency event occurring.	649 <u>953</u> (304)
Environment	Management of our natural environment for to the betterment and enjoyment of all members of our community.	558 <u>680</u> (122)
Infrastructure Services	Provides for the physical assets required by the community to maintain a happy, healthy and sustainable lifestyle.	7,567 <u>5,355</u> 2,212
Parks, Gardens and Reserves	Maintenance of open space for the enjoyment of all community members.	977 <u>2,319</u> (1,342)
Waste Management	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.	(2,638) <u>772</u> (3,410)

Our Places

<u>HIGHLIGHTS</u>

Environment and Sustainability

Communities Combating Pests and Weeds Grant Program

Council's Environment unit successfully concluded and acquitted the 18-month, \$200,000 federally funded program at the close of the 2020 year. The program was a resounding success, targeting a wide range of noxious weeds as well as rabbits across the diverse landscapes of the shire. The program involved three distinct components each of which was the subject of highly positive feedback: grants for private landowners, projects on public land and the development of community education materials. Public land works included a significant Gorse removal project along Atkins Creek, Birregurra, and weed treatment at a range of former landfill sites. Most significantly, Council provided a 50% contribution for weed and pest control projects on private land to more than 50 property owners in Colac Otway Shire during the life of the project. Both landowners and local contractors provided commentary on the invaluable nature of the program, particularly at a very difficult time of multiple uncertainties for our region.

Garden for Wildlife Booklet

In the 2020-21 financial year, Council's Environment unit completed its development of a locally focused guide for gardeners in our communities to enhance habitat for native fauna. The booklet is the first of its



kind to be developed by a regional Council in Victoria. This educational resource provides an accessible way to understand the unique landscapes and species within the Colac Otway Shire, and will inform landholders on garden design, planting, maintenance, as well as offering innovative ideas on how to create spaces for wildlife within the backyard. It also includes an in-depth guide to beautiful, local and available flora that supports the wellbeing of wildlife. The booklet will be launched as part of National Tree Day celebrations later in 2021.

Environmental Education Program commencement - Colac Specialist School

In early winter 2021, Council's Environment unit commenced a program with Colac Specialist School to enable hands-on environmental education for



students across a range of class groups and ages. The program will provide students with a long-term view of native revegetation and maintenance, and will focus on locally native species and the values that they bring to the environment. Two sites have been selected for revegetation under the program: a section of Barongarook Creek, close to its entry into Lake Colac, and a highly accessible embankment in the grassed lawn between Barongarook Creek and the Bird Reserve. The aim in designating two very specific locations is that the students will achieve a sense of ownership of their work, and be able to see the results as the plants develop over time.

Emergency Management and Fire Prevention

- 671 fire inspections, with less than 5% noncompliance
- With cooperation and collaboration from various departments within Council, "letters of support" were issued to absentee landholders within the municipality permitting travel to their properties to undertake fire prevention works during COVID-19 lockdowns.
- Contribution to a successful response to the COVID-19 outbreak in Colac Otway Shire.
- Implementation of the new Emergency Management Legislation Amendment Act 2018 which will enable a new integrated, comprehensive and coordinated framework for Emergency Management planning at state, regional and municipal levels.
- Establishment of a Municipal Emergency Management Planning Committee (MEMPC) compliant with the new reform guidelines.
- Secured Safer Together funding to facilitate and coordinate Community Based Emergency Leadership courses aimed at empowering communities and enhancing resilience.
- Our Fire Awareness Officer and Municipal Fire Prevention Officer, successfully completed Bushfire Attack Level (BAL) Assessor training, which adds to the skills and expertise of our emergency management team.

Closed landfill management

Council completed the work commenced by the Barwon South West Waste Resource and Recovery Group to assess the risk of all of its former, smaller landfill sites. The assessment of the closed landfills, some that stopped operating over fifty years ago, found a differing level of risk, however none of the sites pose a risk to health or the environment to warrant immediate rehabilitation. Aftercare management plans will be developed to action the management recommendations of the assessment.

The closed landfill financial assurance for the rehabilitation and aftercare of all of Colac Otway's landfills has been updated to reflect the findings of the risk assessment and new statutory requirements of the Environmental Protection Authority.

Several assessments of the former Bruce Street landfill were undertaken and included the:

- landfill risk assessment
- hydrogeological assessment
- environmental monitoring plan
- rehabilitation plan.

The assessments were included in the Post Closure Pollution Abatement Notice requirements for Bruce Street Landfill that was verified by an Environmental Protection Authority appointed environmental auditor.

Property Management

Council achieved a substantial 24% improvement in its Essential Emergency Services (fire-fighting equipment in all Council owned or operated buildings) compliance, which is now at 97.5% following a recent audit.

Leases and Licences are 94.5% compliant with payments up to date. The Sale of Land Policy was reviewed, and subsequently replaced with the Acquisition and Disposal of Council Property Policy

Asset Management

Substantial progress was made in the development of a suite of Asset Management Plans (AMPs) for all of Council's asset types. Comprehensive condition assessments were undertaken for over 250 bridges and major culverts and draft AMPs were prepared for footpaths, buildings and roads.

Development of these plans and review of Council's Asset Management Strategy and Policy will guide the 10-year long term financial plan and is a requirement of the new *Local Government Act 2020* to be completed by end of June 2022. Council was 100% compliant with its legislative requirements as outlined in the Road Management Plan, being to rectify more than 85% of defects within set timeframes and complete 100% of programmed asset inspections.

Dedicated efforts to improve programming, design and delivery of sealed and unsealed roads saw a significant increase in the community satisfaction scores for these assets compared to prior years.

Infrastructure Development

With steadily increasing residential development and strategic planning for new developments, Council's engineering department has completed thousands of inspections and permit applications for new stormwater connections, roads, footpaths, drainage and other works and processed over 350 planning applications in 2020-21.

Advocacy and works to improve road safety were ongoing including Road Safety Audits for accident hot spots, speed and traffic data collection on priority streets to inform future traffic calming, completion of a Movement and Place assessment in Apollo Bay to inform the creation of a more pedestrian friendly environment, and gaining commitment from the Department of Transport to reduce the speed limit and improve safety at the new roundabout on the Princes Highway, eastern entry to Colac.

Strategic work and analysis has been undertaken to inform infrastructure improvements in flood prone areas, such as the Birregurra Flood Study, Kennett River and Skenes Creek Stormwater Concept Plans and the Aire Valley Estuary Floodplain Project.

Council is currently completing stages one and two of the footpath on Roadknight Street, Birregurra, providing an important pedestrian connection between the Birregurra Train Station and Main Street. Both stages of this project were able to be completed as a single project by combining Council Funds and COVID-19 Stimulus funding provided by the Federal Department of Infrastructure, Transport, Regional Development and Communications. This allowed the full connection to be delivered, satisfying the request contained within a petition tabled at the December 2019 Council Meeting, which was signed by more than 400 community members. The works are expected to be completed during the first half of the 2021-22 financial year.

Service and Operations

As a result of scheduling improvement practices, Services and Operations were able to complete all planned scheduled activities within Roads and Parks and Gardens within budget. More efficient work practices allowed for a reduction in contracted services by freeing up resources to allow works to be completed in-house at a lower cost.

Works programs were reviewed and developed for:

- Open spaces, playgrounds and sporting precincts,
- Townships and street scapes,
- Street Sweeping,
- Unsealed road, trees and drainage maintenance
- Sealed road, line marking and drainage maintenance
- Footpath and path maintenance

Taking on additional in-house Capital Works for resheets, drainage and concreting allowed more control over our quality, timings and costs. Internal resourcing efficiency improvements permitted for additional works to be performed.

Services and Operations were able to undertake the scheduled program of works throughout the COVID-19 pandemic to be able to complete the programmed operational and capital reactive works. Upholding safety measures to protect staff members and the community, roads, building maintenance, waste services and parks & recreation reserves continued to ensure that all services were safe and functional.

Successfully implementing a State Government funded Working for Victoria program of works allowed for 14 people to remain in work during the COVID-19 pandemic for six months.

The program funded Colac Otway Shire staff affected by closures to continue full time employment, including staff members redeployed from Bluewater Leisure Centre, school crossing attendants and aged care.

Six additional external staff were employed through the scheme, all of whom remained in employment post the original six month deadline.

The program delivered improvements in our open spaces, trails, parks and gardens, COVID-19 sanitisation and building maintenance. Some of these include:

- Building fire compliance activities
- Test and tagging of electrical equipment
- Sanitisation of Colac Otway Shire building assets for COVID-19
- Maintaining and upgrading the Colac Lake Foreshore and Botanic Gardens

- Small township beautification
- Colac Hockey Rooms upgrade for user groups
- Path cleaning in Colac and Apollo Bay
- Building Asset roof gutter cleaning
- New street name blade installation

CHALLENGES

Environment and Sustainability

The ongoing difficulties and uncertainties of the global pandemic have once again had a deep impact on the delivery of outward facing services in the Environment and Sustainability space. One of the biggest challenges has been navigating on-ground and in-person events. These are usually a highlight of the calendar in this area, and include community revegetation days, as well as signature events such as World Environment Day. Unfortunately, for the second year in a row, World Environment Day activities had to be cancelled at short notice.

Emergency Management and Fire Prevention

The ongoing threat of COVID-19 outbreaks and subsequent lockdowns will challenge us in the way we can deliver our services, particularly community based programs where potential on-line training may reduce participant numbers and limit the dissemination of key information into communities.

Service and Operations

- Managing an aging workforce across Services & Operations.
- Difficulty finding full time staff in Apollo Bay. Due to the high cost of living and lack of affordable accommodation.
- Uncertainty of the COVID-19 pandemic lockdowns challenges resourcing, work practices and operational activities.
- Maintaining council's facilities and buildings to community expectations with current resources.

FUTURE

Environment and Sustainability

Council has remained committed to exploring new opportunities and potential collaborations with regional partners in both natural resource management and sustainability. In terms of future outlook, the unit has a commitment to flexibility and innovation that will continue to enable us to meaningfully engage with our communities.

Emergency Management and Fire Prevention

We continue to plan and prepare for emergencies of all types and incorporate COVID-19 safe practices into the planning. Ongoing collaboration and communication between council departments and neighbouring councils will ensure we continue to develop and enhance our response to emergencies.

Closed Landfill Management

Council has budgeted for the development of aftercare management plans for the closed landfill sites included in the Closed Landfill Risk Assessment, which will provide a uniform approach for post closure landfill management across the Colac Otway Shire. The results of groundwater and landfill gas investigations at the sites will determine the extent of landfill monitoring and aftercare management required into the future.

The landfill capping options for Alvie Landfill will be further investigated to determine how the nonoperational site will be rehabilitated in accordance with the Environmental Protection Authority (EPA) guidelines and current Environmental Protection Act requirements. The total cost of rehabilitation will depend on the capping type agreed to by the EPA.

Service and Operations

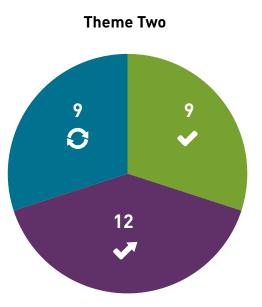
Restructuring the Colac roads crews into road maintenance, general maintenance and capital works will allow for works to be completed more efficiently and cost effectively.

To assist in the resourcing of council's facilities and buildings, the development of a Building Maintenance Charter and help desk triage system will ensure that building maintenance is performing priority works. The Charter will provide clarity over building maintenance and its functions and assist in the efficient upkeep of council owned assets.

Council Plan Objectives

THE FOLLOWING PAGES INCLUDE A SUMMARY OF THE WORK THAT HAS OCCURRED OVER THE FOUR YEARS OF THE COUNCIL PLAN 2017-2021, AGAINST THE ACTIONS IN THEME TWO.

The chart below provides details of the status of the 30 actions under Theme Two.



Complete and/or business as usual

Complete with further priorities (i.e. stage two of project) in the draft Council Plan- 2021-2025

Carry over with ongoing priorities in the draft Council Plan 2021-2025

Performance Against

	Action	Work undertaken over four-year Council Plan	Status		
Assets and infrastructure meet community needs.					
2.1	Develop and implement a Property Strategy.	This action is not complete because the Property Strategy has not been developed. We do, however, review social issues such as availability of alcohol and gambling machines when considering policy for Council property.	\bigcirc		
2.2	Develop and maintain constructive partnerships to access appropriate levels of funding, coordination, infrastructure and services.	Council has established strong relationships with: - G21 Great Ocean Road Taskforce - Regional Development Victoria - Regional Roads Victoria - Barwon Water - Southern Rural Water - Great Ocean Road Regional Tourism (GORRT) - Parks Victoria - State and Federal Government Members of Parliament.			
2.3	Conduct an ongoing program of service reviews to guide planning for infrastructure	Council has an adopted service review program September 2018.	\bigcirc		
2.4	Council to work with key stakeholders such as the Otway Coast Committee, the Apollo Bay Chamber of Commerce and Council with the aim of aligning strategic planning and advocacy efforts for Apollo Bay and district.	The Mayor, Councillors and officers meet monthly with the Action for Apollo Bay group to ensure open dialogue. Key collaborations over the 2020-21 CP include: - Support for Apollo Bay Boat Harbour renewal and development - Affordable housing - Economic and social response to COVID-19 - Response to coastal erosion - Development of Community Infrastructure Plans - Major events in Apollo Bay	S		

Our pl	laces are managed for long term	sustainability.	
2.5	Update the Planning Scheme to reflect changing community needs and priorities.	 Council adopted its Four Yearly Planning Scheme Review in March 2018. Planning scheme amendments undertaken to: Implement the Colac/Elliminyt Flood Study - adopted by Council in March 2021 Birregurra Flood Study - Council resolved to exhibit amendment in April 2021 Implement the Colac 2050 Growth Plan - adopted by Council in July 2020 Support a new service station at Colac East - adopted by Council in April 2021 Remove unnecessary environmental significance overlays - adopted by Council June 2019 	
2.6	Ensure best practice guides planning and management of the natural environment and associated assets.	Environmental advice continues to be provided on planning applications, strategic planning matters and on Council's major projects to ensure best practice standards are being met. Recent advice has involved ensuring minimising environmental impacts associated with local developments and projects being undertaken by Council's Infrastructure Division.	0

Towns	Towns and places are welcoming and attractive.					
2.7	Enhance the attractiveness of towns in the Shire for both residents and tourists/visitors.	Negotiations with Regional Roads Victoria to improve presentation of proposed roundabout at Lavers Hill. Negotiations with VicRoads for improved planting and landscape treatments to the eastern entrance to Colac as part of the Princes Highway duplication works. Development of draft designs for entry signage to Colac at eastern and western approaches. Completion of concept designs for the Barongarook Creek picnic area. Development of a concept design for a new regional play space at Colac's Memorial Square.	€			

	Action	Work undertaken over four-year Council Plan	Status
2.8	Advocate for improvements to public open space where the State Government is the land owner/ manager.	A list of priority projects has been prepared identifying reserves and open space infrastructure improvements that Council will advocate for, where State Government is the land owner/ manager. Elliminyt Recreation Reserve Master Plan endorsed, funding secured for the resurface of the velodrome. Funding has been secured to improve the Memorial Square play space in 2019-20. Continued work with the community to evolve the open space offering including the Forrest Common Draft Master Plan and review of the Cororooke Open Space Master Plan following the construction of the Cororooke Tennis Courts, tennis club storage shed and Cororooke public toilets. Land secured at the former Colac High School site for public open space. Actions for Lake Colac Masterplan are complete within the existing budgets available. Future initiatives will require further funding.	
2.9	Develop and implement a prioritised program to review and implement master plans, community infrastructure plans and structure plans for small towns across the Shire, including the City Deal project.	A Community Infrastructure Plan is being developed for Apollo Bay, Skenes Creek and Marengo that will identify future social, community and physical infrastructure needs. The Colac 2050 Growth Plan is complete, and Development Plans are being facilitated for residential growth areas in Colac West and Elliminyt (including the development of shared infrastructure plans), and industrial land at Forest Street, Colac. Future budget allocations will be required to review the structure plans for Birregurra and Forrest. Small town master plans are currently under review.	S
2.10	Incorporate treatments into infrastructure standards that enhance community perceptions of safety.	Included a process for developers to engage a consultant to be accountable for entire design and construction of third party works based on best practice from other LGAs. Lighting project to enhance public security measures incl: Memorial Square (incl CCTV) and Lake Colac pathway. Installation of safety guard rails and other safety measures at various locations.	S
2.11	Maintain Parks and gardens, sports reserves and streetscapes.	 Tree plantings New bridge over Barongarook Creek was installed New solar and caged bins installed Aged seats and picnic tables replaced Lake Colac recreation area weeds cleared A program of works has been scheduled for parks, open space, reserves and trees This is done on a three scale service level Q1-3, where Q1 is the highest standard. Monthly routine cleaning of the CBD footpaths in Colac has been introduced. Apollo Bay CBD footpaths are cleaned bi-annually and by exception throughout the year. 	S
2.12	Support enjoyment of outdoor experiences through the provision of a network of quality open spaces, including paths and trails.	Ongoing implementation of Active Transport Strategy includes a range of strategic path connections completed such as: Forrest shared path and various footpaths within Colac and Apollo Bay. Open space improvements underway at Memorial Square and Cororooke as a result of external grant funding.	€
2.13	Develop a prioritised program of works to support physical activity and active transport, and advocate for funding to continue to implement actions identified in the Active Transport Strategy.	A range of strategic footpath connections have been delivered in line with the Active Transport Strategy throughout the term of the previous Council Plan, as well as upgrades to existing path networks.	€
2.14	Evaluate the feasibility of a regional wet waste facility to manage waste from road and drainage maintenance.	Under a new formal agreement with landholders, recovered material from road side collection is now repurposed with land owners. This practice has been introduced as an alternative to a wet waste facility.	\bigcirc
2.15	Continue to support the Apollo Bay community's advocacy for the development of a public indoor heated swimming pool in Apollo Bay.	Indoor pool project completed and open to the public.	

	Action	Work undertaken over four-year Council Plan	Status
2.16	Work with our community to protect amenity values in our places through strategic compliance action and animal management that is focused on ensuring education, safety and liveability.	Council employed an additional Compliance Officer in December 2019 to provide better service to coastal areas and address domestic animal issues across the shire. The Domestic Animal Management plan is currently under review, with further actions to implemented in the 2021-2025: Council Plan.	۲

eaule	ar sinp in naturat environment th	rough good management practices.	
2.17	Ensure best practice guides planning and management of the natural environment and associated assets and Council's response to climate change.	Environmental advice continues to be provided on planning applications, strategic planning matters and on Council's major projects to ensure best practice standards are being met.	
		Implementation of a Local Hazard Assessment project	
2.18	Minimise coastal erosion in partnership with other stakeholders and implement measures to assist climate	Department of Environment, Land, Water & Planning (DELWP) allocated \$3 million to help address erosion along the coast in the Apollo Bay and Marengo region.)
	adaptation	Working closely with DELWP and the Otway Coast Committee on the management of coastal erosion.	
2.19	Improve the health and sustainability of the natural environment through structured planning with our partners.	Council continues to work with various other government agencies and community groups to improve the environment. Recent examples include working with DELWP on coastal erosion, Barwon Water on the Colac and Regional Renewable Organics Network and with councils from across south western Victoria on the formation of a new Greenhouse Alliance.	
		The Community Safety Sub Plans are in progress (these are attached to the operational township plans) for 12 townships, these plans have been consulted with COS and other community stakeholders. These plans are the localised Community Fire Plans , but with boarder context and rebranded as Community Safety Sub Plans. The plans are still in progress with a milestone completion date of December 2021.	
.20	Deliver localised planning to communities to reduce fire risk.	There is also a Safer Together Local Operational Response Planning committee consisting of CFA, VicPol, Colac Otway Shire, Corangamite Shire, Surfcoast Shire, DEWLP and Parks Vic which meet a few times throughout the year.	
		Out of this Safer Together funding there has been a number of community focussed initiatives with fire safety a key component, rolled out into some of our "at risk" communities. i.e. Community Based Bushfire Management and Community Based Emergency Leadership programs.	
		The Bluewater Solar Array was completed 2017-18.	
		Audits of Council facilities completed in 2018-19 to identify further energy saving opportunities	
2.21	Implement emission reduction programs for Council operations.	More efficient lighting has been installed in 2018-19 in Council facilities. The retrofits reduce electricity consumption across all sites by 97,494 kWh/yr. and will save Council around \$23,487 per year, reducing greenhouse emissions by a considerable 104.2 tCO2e/yr.	
		Work continues toward achieving the Carbon Neutral Target in 2020. In 2019-20 efficient heating and cooling systems have been installed at Bluewater and COPACC. Further upgrades of Council's street lights has commenced and solar panels have been installed on the Colac Community Library and Learning Centre. In addition, Council has endorsed the purchase of 100% Green Power which will mean that all electricity purchased by Council comes from renewable energy sources which produce no emissions.	

	Action	Work undertaken over four-year Council Plan	Status
2.22	Enhance the level of resource recycling and reuse across the Shire.	Presentations to local schools and community groups have commenced as part of Council's education campaign for resource recycling and reuse across the shire. Opportunities to recycle or reuse material are continually being explored. Materials recovered from works is saved and used where possible. Examples of this is the top soil from central reserve being used to level holes on the lake foreshore and bluestone rocks from footpaths being used in drainage works. Wood chips from tree maintenance is used on garden beds and surplus amounts are made available to community groups for mulching. Road materials recovered from asphalt renewal projects is repurposed in high maintenance areas on gravel roads. Recovered bitumus material from Regional Roads Victoria is used by Colac Otway Shire on local roads. Colac Otway Shire collect printer cartridges, mobile phones, CDs and DVDs for recycling. E-waste is also gathered for recycling.	
2.23	Enhance and protect biodiversity through weed control and revegetation.	Councils weed program was implemented within the budget constraints. New weed mapping was completed for Council's roadsides and reserves to inform the development of a new approach to Council's weed control program. The first stage of the large willow removal near the mouth of Barongarook Creek is complete. Indigenous plants have been planted to backfill the voids left by the removal. The second stage will be undertaken once the new plants have grown enough to provide a reasonable amount of shelter for the adjacent caravan park. Environmental Weed Control Program has been delivered. Target weeds include Boxthorn, Broome, Gorse, Blackberry and Spanish Heath. In addition, Council is managing a grants program for private landholders to manage pest plants and animals, with funds provided through a \$200,000 Federal Government Grant.	
2.24	Implement Council's Climate Adaptation Strategy.	Council endorsed the Climate Change Adaptation Plan 2017-2027 in April 2017. It is estimated 30-40% of the priority actions have been fully or partially delivered. Delivery of the actions has been impacted by COVID-19. The Plan is a ten-year plan and on track to be delivered. Development of management plans for high risks identified in the Local Coastal Hazard Assessment, these plans inform Council and other relevant agencies on how to best manage these areas under different climate change scenarios. Training for staff has been undertaken to help effectively manage climate as part of their projects. Council continues to undertake actions in accordance with Council's Climate Adaptation Plan. Funds were obtained from DELWP to develop landslide risk mitigation plans for Grey River, Kennett River and Skenes Creek. These plans have been completed and are now being used as the basis for seeking further funding to help make these towns more resilient to landslides.	③

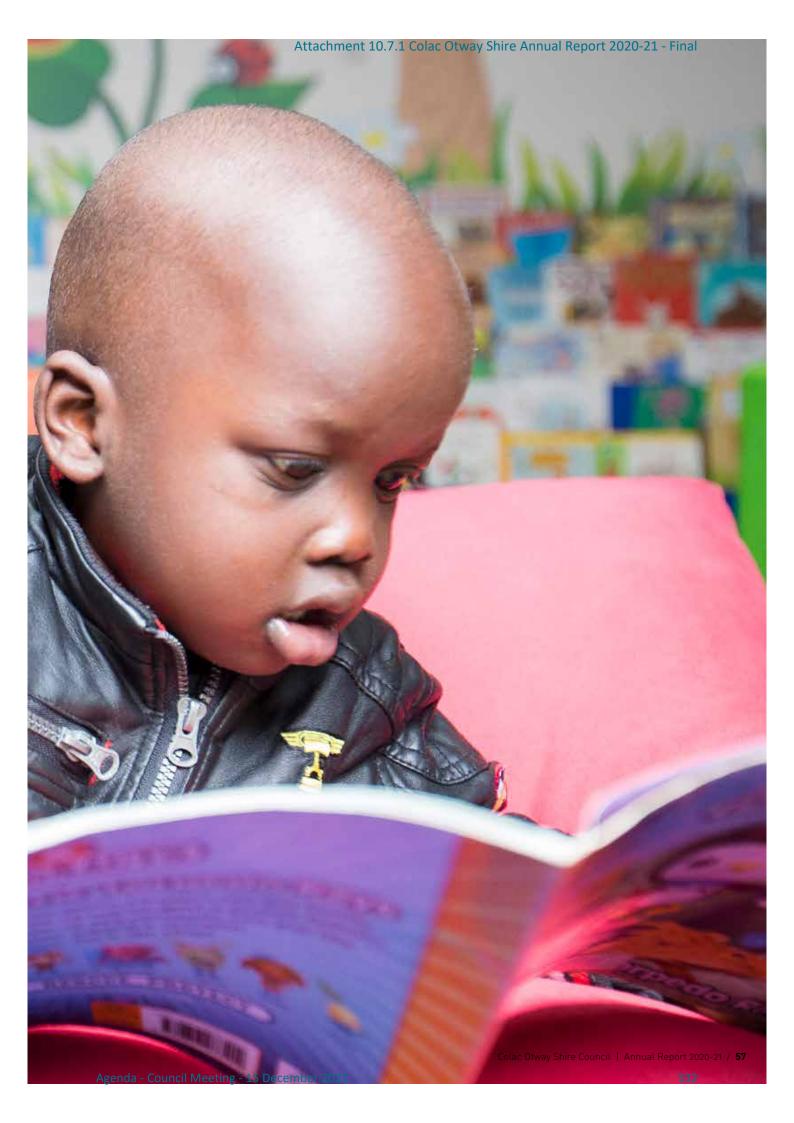
	Action	Work undertaken over four-year Council Plan	Status
Delive	ery of our capital works program		
2.25	Develop a system of capital allocations based on Asset Management Plans.	Although progress was made this work is not yet complete. Asset Management Plans will be completed to draft stage in the 2021 calendar year and this will allow them to influence the capital works program. Having said that capital program consists of 90% renewal works, which is in good alignment with sound asset management.	③
2.26	Develop a project management framework, covering proposals, planning and delivery.	 Project Delivery Procedure Manual developed as a framework for guiding project proposals, planning and delivery completed in 2018-19. CAMMS Project implemented in 2018-19 to track progress against individual projects. New project plan template developed to ensure accurate pre-planning, estimating and scoping is undertaken prior to delivery of projects or seeking funding. Development of a 'Funding Ready' and 'Shovel Ready' definitions and workflow to prepare projects for external funding and business cases, 2019-20. 	
2.27	Develop a capital works reporting framework.	Monthly capital works report presented to EMT Quarterly Performance Report presented to Council each quarter	\bigcirc
2.28	Deliver the annual capital works program.	Annual Capital Works Program is delivered annually. 2017-18 - Capital works program delivered 96% at 30 June 2018. 2018-19 - Capital works program delivered 97% at 30 June 2019. 2019-20 - Capital works program delivered 89% at 30 June 2020, with remaining works committed. 2020-21 saw 69% of the program delivered due to variables of the impacts from COVID-19	٢

2.29	Community based planning to build local understanding and preparedness for emergency events.	ild local understanding and eparedness for emergencyDowns and Gellibrand. These events focused on the location of Neighbourhood Safer Places and the need for people to develop			
2.30	Education, joint planning and preparations undertaken to prepare for climate related threats and emergencies.	Various training has been undertaken by Council staff in relation to managing Emergency Relief Centres and providing leadership during emergency events. A large Emergency Relief Centre Exercise was undertaken in October with Corangamite and Surf Coast Shires to help staff put their training into practice. Further training is being organised for staff in 2020 to further enhance Council's capacity to respond to emergency events.			

Local Government Performance Reporting Framework

SERVICE / INDICATOR / MEASURE	Results 2018	Results 2019	Results 2020	Results 2021	COMMENTS
Roads Satisfaction of use Sealed local road requests [Number of sealed local road requests / Kilometres of sealed local roads] x100	15.95	23.24	28.50	24.21	Sealed Local Road Requests has decreased due to implementation of a timely re- sealing program, and improvement in Road Management Plan inspections, that have found defects and rectified them in a timely manner, resulting in a well-maintained road network with less requests.
Condition Sealed local roads maintained to condition standards [Number of kilometres of sealed local roads below the renewal intervention level set by Council / Kilometres of sealed local roads] x100	93.58%	93.73%	93.11%	100.00%	Implementation of a timely re-sealing program, and improvement in Road Management Plan inspections, that have found defects and rectified them in a timely manner has resulted in a well-maintained road network.
Service cost Cost of sealed local road reconstruction [Direct cost of sealed local road reconstruction / Square metres of sealed local roads reconstructed]	\$52.61	\$41.06	\$51.70	\$87.30	Covid-19 affected the number of tenderers available to do work locally due to travel restrictions. This resulted in decreased contractor availability and higher contract prices in the supply-demand equation, which resulted in increased prices.
Service Cost Cost of sealed local road resealing [Direct cost of sealed local road resealing / Square metres of sealed local roads resealed]	\$5.99	\$5.40	\$5.14	\$5.16	Minimal change to costs which is consistent with expectation.

SERVICE / INDICATOR / MEASURE	Results 2018	Results 2019	Results 2020	Results 2021	COMMENTS
Satisfaction Satisfaction with sealed local roads [Community satisfaction rating out of 100 with how council has performed on the condition of sealed local roads]	39.00	42.00	44.00	53.00	Satisfaction with sealed local roads has increased due to implementation of a timely re- sealing program and improvement in Road Management Plan inspections, which have found defects and rectified them in a timely manner, resulting in a well-maintained road network with greater customer satisfaction.
Waste Collection Satisfaction Kerbside bin collection requests [Number of kerbside garbage and recycling bin collection requests / Number of kerbside bin collection households] x1000	58.69	69.92	68.36	87.94	Council's new waste contract started in September 2020. Council received 232 new kerbside requests this year, which is approx. 15 more than previous year.
Service standard Kerbside collection bins missed [Number of kerbside garbage and recycling collection bins missed / Number of scheduled kerbside garbage and recycling collection bin lifts] x10,000	2.30	2.13	1.63	3.09	Council's new waste contract started in September 2020 which required a change in some of the drivers, who were unfamiliar with the regular runs. This resulted in a slight increase in missed kerbside bin collection requests in 2020-21.
Service cost Cost of kerbside garbage bin collection service [Direct cost of the kerbside garbage bin collection service / Number of kerbside garbage collection bins]	\$140.36	\$138.96	\$141.50	\$99.09	The decrease in cost is due to changing from a Metro Landfill centre to a Regional Landfill centre, where levies are lower.
Service cost Cost of kerbside recyclables collection service [Direct cost of the kerbside recyclables bin collection service / Number of kerbside recyclables collection bins]	\$37.74	\$45.44	\$61.21	\$62.04	This increase is part of the new waste contract and a slight price increase in processing costs for recycling.
Waste diversion Kerbside collection waste 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	47.79%	52.06%	60.38%	57.53%	Includes 100% recycling this year as kerbside tonnages are now recorded separately, also includes 100% Organics kerbside collections.



Our Community

WE WORK TO KNOW COMMUNITY AND TO UNDERSTAND THEIR NEEDS AND ASPIRATIONS. WE PLAN OUR ASSETS AND SERVICES TO MEET COMMUNITY NEED AND TO FOSTER A CULTURE OF GOOD SERVICE AND PARTNERSHIP.

THE IMPORTANCE OF OUR PLACES AS A THEME

Colac Otway Shire sustains a mixed population of tourists, businesses, farmers, retirees and families, some of whom settled in the Shire recently and some of whom can trace their family's history back to European settlement, whilst our population of Aboriginal people dates back tens of thousands of years. The land of the Shire sustains different ways of living, from affordable housing options in towns, to spectacular properties with views of the forest and the sea. Potential for population growth in the Shire has increased due to the highway improvements and proximity to the larger centres of Geelong, Ballarat and Warrnambool. The Shire is well resourced compared with many other semi-rural shires, and enjoys good services and infrastructure, supporting families to connect and live well at all life stages.

SIX STRATEGIES CONTRIBUTE TO ACHIEVING OUR GOAL

- 1. Increase social connection opportunities and community safety.
- 2. Connect people through events and activities.
- 3. Opportunities for the community to participate in lifelong learning.
- 4. Provision of resources to support physical activity by the community.
- 5. Foster an inclusive community.
- 6. Community planning informs provision of Council services and social infrastructure.

Key highlights for projects and activities linked to Our Community begin on page 60

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Our Community

SERVICES CONTRIBUTING TO OUR COMMUNITY

The following services/activities were funded in the 2020-21 budget and contribute to achieving the goals and strategies for this theme:

SERVICE AREA	DESCRIPTION OF SERVICE	NET COST ACTUAL BUDGET VARIANCE \$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.	172 <u>671</u> [499]		
Recreation	reation This service provides for active community involvement and the promotion of healthy lifestyles by providing for suitable sporting and recreational facilities.			
Leisure Centres	This service actively promotes a healthy lifestyle for our community by directly providing swimming and gymnasium facilities.	1,023 <u>936</u> 87		
Local Laws	Laws This service provides for community safety and health by providing for a framework for behaviours which affect our community well-being.			
Public Health	blic Health This service promotes a healthy and safe lifestyle by actively promoting and policing public health issues.			
Older Persons and Disability Support Services				
Children and Family Services	Supports our children, families and youth to encourage and nurture their growth and development.	190 <u>183</u> 7		
Library Service	Provides resources and oversight to the Geelong Regional Library Corporation for the provision of information, education, recreation and enrichment of the community.	878 <u>741</u> 137		

Our Community

HIGHLIGHTS

Colac Otway Performing Arts and Cultural Centre (COPACC)

With the immensely popular Morning Music season scuppered for 2020, the team kept eyes and ears open for opportunities to present something for the community, in a different and COVID-19 safe Morning Music format.

Two morning music performances were secured and recorded, and the link provided through COPACC's website for access at no cost across a four-day period in early December; The Broadway I Love (Promac Productions) and a medley of songs from Rhonda Burchmore at her home in Melbourne.

This promotion was generously supported by Council's Community Engagement and Older Persons and Ability Support Services (OPASS) teams, with funding received through the Victorian Government's Community Activation and Social Isolation (CASI) initiative - an initiative intended to help people who might be feeling lonely or have lost their regular networks during coronavirus (COVID-19) to build or rebuild social connections and support networks.

Bluewater

Reopening the facility after multiple closures due to the COVID-19 pandemic often at extremely short notice, Bluewater staff have been incredibly resilient and efficient on each occasion. Commitment displayed by key staff to often work long hours to get the facility operational for the public is to be commended.

In Term 2 of 2021, the Bluewater Swim School program reached an all-time high of 487 student enrolments.

Scheduled pool plant maintenance, even during lockdown, enabled a relatively smooth reopening and continuity for users – at no time for 2020-21 were our pools unavailable to the public or user groups due to pool plant failures.

Open Space

Successful completion of upgrades to the netball courts and lighting at the Central Reserve.

Resurfacing of the velodrome at the Elliminyt Recreation Reserve, which has enhanced the facility for cyclists.

Council was successful in grant applications for projects such as oval lighting upgrades at five

sporting reserves; and a new electronic scoreboard for Lake Oval.

Local Laws

Council's Community Safety Team waived all "goods on footpath" permit fees, this was supported by Council as part of our COVID-19 recovery response. The Community Safety Team worked collaboratively with business to support alfresco dining in the main precinct areas of the Shire.

The community Safety team responded to a number of COVID-19 related matters, in particular providing traffic management at the COVID-19 testing station at Central reserve Colac.

Older Persons and Ability Support Services (OPASS)

The OPASS Service Delivery has continued during a very challenging period during COVID-19 with little disruptions for clients. The incredible demand to maintain Personal Protective Equipment working in over 600 homes each fortnight with limited disruptions and no breaches with IPP bears testimony to the professionalism of all the OPASS staff.

COVID-19 had a significant impact on our community and the function of the Regional Assessment service. Assessments were conducted over the phone rather than in client homes. This was a surprisingly relaxed and positive experience for both participants and assessor. Complex situations were followed up with a home visit when possible, and additional phone calls weeks and/or months later. Anecdotally, over the phone assessments were effective as people looked forward to interactions and were keen to engage and 'have a chat'. Restrictions meant that people were at home and had none of their usual distractions, activities and commitments to work around and plenty of time.

Maternal Child Health Services

During COVID-19 lockdowns and outbreaks, our Maternal and Child Health and Family Day Care teams were able to put measures in place to enable them to continue providing high-quality services to children and families. High participation rates continued in both programs as a result.

Our Maternal and Child Health team made a successful return to group work after COVID-19 lockdowns via its Sleep and Settling and Circle of Security programs.

Sleep and Settling focuses on newborns, and babies of 6-8 months and 18 months of age. Circle of Security is an eight-week program that helps parents engage with their newborns and better interpret their cues.

Whilst overall birth rates were down on last year, we achieved 100% enrolment rates from these birth notifications, with overall participation rates in Maternal and Child Health programs increasing.

Children and Family Services

Family Day Care educators completed the Smiles for Miles program, dedicated to improving dental hygiene of the children in their care.

Library Services

Colac Otway made a successful transition from the Corangamite Regional Library Corporation to the Geelong Regional Library Corporation.

CHALLENGES

Colac Otway Performing Arts and Cultural Centre (COPACC)

The COVID-19 pandemic and restrictions have continued to severely impact the arts, culture and entertainment industries.

Survey results indicate that audiences are keen to return to live performances, however to encourage and facilitate a swift return, venues are focussed on providing a COVID-safe environment which necessitates increased costs associated with cleaning consumables and staff/labour for the additional cleaning and sanitising.

Heath Protection

Council's Environmental Health activities have been heavily impacted by the pandemic which has necessitated significant support being provided to both the Council organisation in its response and recovery, but also to the business community with regularly changing State health orders. This has adversely impacted the routine inspection activities of health staff and will continue to influence staff operations into 2022 until vaccinations reach a threshold level.

Open Space

Limited budget means Council is relying on attracting external funding for recreation and open space upgrades and improvements.

Local Laws

The Community Safety Team are currently working on a Domestic Animal Management Plan, this plan is a Council document that focuses on the management of dogs and cats, and outlines the key issues, objectives and priorities for how these will be managed. This plan will be implemented over a four year period commencing 2022.

The Community Safety Team will also implement an online form to seamlessly facilitate online pet registrations, this will avoid pet owners attending a customer service centre to complete registration of their pet.

Bluewater

Disruptions to operations due to unplanned emergency maintenance/asset renewal of building assets including:

- Pool hall ceiling removal
- Repairs to damaged section of the stadium roof
- Replacement of steam room generator
- Replacement of sand in Spa and 25m pool filters

COVID-19 pandemic:

- Bluewater was closed for a total of 116 days during the 2020-21 financial year. Further, the centre was often operating with patron limits due to restrictions.
- Significant reduction in centre visitation and subsequently income for the facility.
- Loss of experienced staff due to constant lockdowns and minimal availability of work, resulting in constant rostering challenges.

Older Persons and Ability Support Services

Recruitment of community care workers to meet the increasing demands to provide services. (There was an increase of 2,633 hours during 2020-21 from 2019-20 for direct services).

Planning around the continued growth in the Home Care Packages field. Future administration and case managers required staff resources to maintain a quality standard.

Children and Family Services

Securing stable childcare options for Apollo Bay and Colac.

Maternal Child Health Services

Continuing to adapt maternal and early childhood programs to a COVID-safe environment to ensure we can continue to provide high quality services, maintain participation rates and grow our group work offerings.

FUTURE

Colac Otway Performing Arts and Cultural Centre (COPACC)

The COPACC staff look forward to welcoming audiences and facility users back to COPACC in a COVID-safe environment, and helping to facilitate and encourage participation in the arts.

Open Space

Commencing work on masterplans for four city reserves, being Eastern Reserve, Western Reserve, Lake Oval and Central Reserve to provide Council with direction for future facility upgrades and improvements. Also supporting the Great Ocean Road Authority to prepare a master plan for the Apollo Bay Recreation Reserve.

Investigating the feasibility of a path around the perimeter of Lake Colac.

Implementing a range of on-ground projects that have received external funding such as the Cororooke open space development, lighting at five sporting reserves, and the Memorial Square Playspace.

Bluewater

Conduct a feasibility study to investigate the viability and costs associated with the replacement of gas boilers at Bluewater with electric heat pumps in a bid to reduce the carbon emissions of the facility. The gas boilers currently heat the 25m pool, toddler pool, splash pad, warm water pool and the spa pool.

Conduct an internal service review on Bluewater Operations to provide strategic direction on future improvements to operations.

Conduct an expression of interest process for the lease of the Bluewater Consulting Rooms and Café services at the centre.

Expression of interest process to donate old Bluewater gym equipment to community groups.

Asset renewal/replacement:

- Implementation of outcomes from the scheduled August Life Saving Victoria pool safety assessment
- Replacement of the roof over the 25m pool.
- Replacement of the non-compliant pool ladders in the 25m pool.
- Replacement of sand in Warm Water Pool Filters
- Review and renew

Older Persons and Ability Support Services

Review of Colac Otway Shires Aged Care Services to meet the challenges being implemented by Commonwealth Department of Health Aged Services.

Community Services

Developing a youth advisory group to elevate young people's voices and provide input into Council's ongoing strategic planning.

Implementing a Reflect Reconciliation Action Plan

and progressing to the next stage of partnerships with our Aboriginal and Torres Strait Islander communities.

Embedding a shared knowledge about family violence in key areas of the organisation and implementing strong processes for information sharing in line with the Multi-Agency Risk Assessment and Management Framework.

Children and Family Services

Rolling out campaigns to attract new Family Day Care educators to Council's service.

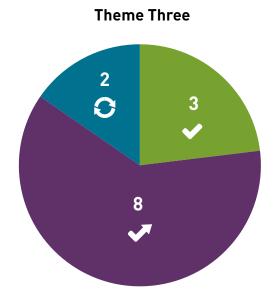
Completing the Early Years Infrastructure Plan to provide a more strategic approach to the way Council manages and upgrades its early year's buildings.

Moving the Apollo Bay Preschool into its new purpose-built kindergarten on the town's P-12 College site.

Council Plan Objectives

THE FOLLOWING PAGES INCLUDE A SUMMARY OF THE WORK THAT HAS OCCURRED OVER THE FOUR YEARS OF THE COUNCIL PLAN 2017-2021, AGAINST THE ACTIONS IN THEME THREE.

The chart below provides details of the status of the 13 actions under Theme Three.



Complete and/or business as usual

Complete with further priorities (i.e. stage two of project) in the draft Council Plan- 2021-2025

Carry over with ongoing priorities in the draft Council Plan 2021-2025

Performance Against

	Action	Work undertaken over four-year Council Plan	Status
Increa	ase social connection opportuniti	es and community safety.	
3.1	Support community organisations through the community grants program.	Ongoing grants program delivered and well subscribed.	\bigcirc
3.2	Support community clubs, groups and associations to provide welcoming and inclusive environments for all members of our community within council facilities.	Meetings within a number of communities have been held to discuss our ageing population and Access, Equity and Inclusion. There is continued participation in committees and groups such as: The Gathering Place; Colac Multicultural Committee; Barwon Neighbourhood House Network; and, Positive Ageing Ambassadors and regular user groups of Council facilities eg: recreation reserve.	Ø

Conne	Connect people through events and activities.					
3.3	Provide grant programs to involve local people in activities that facilitate their health, wellbeing and enjoyment.	Ongoing grants program delivered and well subscribed. Additional grants programs provided during COVID-19 included one for arts projects to bring community together.	S			
3.4	Supports community activities through information dissemination and planning information.	Council is active in sharing information about community activities via its social media, traditional media and other communication channels including community and sporting groups.				

Opportunities for the community to participate in lifelong learning.					
3.5	Provide opportunities for lifelong learning and community connections through library programs.	Council has successfully transitioned to the Geelong Regional Library Corporation, which will result in an enhanced service to the community.	S		
3.6	Support for community groups	Ongoing support to community groups includes support to transition from Section 86 committees to Community Asset Committees; close working relationships with local sporting groups and associations; and close relationships with groups such as U3A, Positive Ageing Ambassadors, Neighbourhood Houses etc. In-kind contribution is part of the weighting criteria for funding applications.			

Provis	ion of resources to support phys	ical activity by the community.	
3.7	Deliver programs through the Bluewater Centre that promote physical activity in the Shire.	Increased Learn to Swim enrolments to a record level. A range of programs delivered on an ongoing basis. Commenced 24/7 gym operations. Myzone wearable heart-rate technology introduced to encourage further engagement in achieving fitness goals and will continue to improve systems, processes and customer service. Visitation increased prior to the closure brought on by COVID-19 restrictions.	S
3.8	Build capacity of local sports groups in promoting healthy eating and physical activity.	Council partners with groups such as Colac Area Health, Great Ocean Road Health, Leisure Networks and community groups and associations to promote healthy eating and physical activity.	
3.9	Encourage more people to participate and be inclusive of others.	Council's fees and charges for sporting groups will be reviewed as part of the new Council Plan 2021-2025, with a view to incentivising aspects like gender equity, healthy eating and growing diversity.	S

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	Action	Work undertaken over four-year Council Plan	Status
3.10	Participate in the G21 Healthy Eating and Active Living regional priority project.	Council is an active member in G21's HEAL project (Healthy Eating, Active Living). Council is working in partnership with Colac Area Health and Deakin University on a childhood obesity project. Council staff are monitoring the health and wellbeing of more than 600 community members who receive services from Older Person Ability Support Services.	S
3.11	Consider health of the community when formulating policy for Council's Property Strategy.	A reference to community health is included in Council's Property Management Framework. This action is not complete because the Property Strategy has not been developed. We do, however, review social issues such as availability of alcohol and gambling machines when considering policy for Council property.	€

Foster	Foster an inclusive community						
3.12	Increase advocacy in partnership with our community to enhance cultural awareness, inclusiveness, safety and health, community, family and education.	A review and community consultation has occurred to enable implementation of the Access Equity and Inclusion Plan, 50+ Plan and Municipal Early Years Plan. Aboriginal Victoria and Eastern Maar Cooperative provided two workshops and two site visits for Councillors and staff to enhance Aboriginal cultural awareness and gain a greater understanding of local indigenous heritage. Ongoing work to improve accessibility of Council buildings, facilities, paths and open spaces in line with Access, Equity and Inclusion Plan. Council also works with Leisure Networks and state sporting associations to develop inclusive club policy, particularly in relation to gender equity.	Ø				

Community planning informs provision of Council services and social infrastructure.						
3.13	Update social infrastructure planning on a continuing basis to guide asset planning.	The Apollo Bay, Skenes Creek & Marengo Community Infrastructure Plan examined social infrastructure needs. Broader Shire wide Social Infrastructure Plan did not gain funding in budget, therefore has not progressed.	€			

Local Government Performance Reporting Framework

SERVICE / INDICATOR / MEASURE	Results 2018	Results 2019	Results 2020	Results 2021	COMMENTS
Aquatic Facilities Service standard Health inspections of aquatic facilities [Number of authorised officer inspections of Council aquatic facilities / Number of Council aquatic facilities]	1.00	1.00	1.00	0.00	No inspections were conducted at the Centre in 2020 due to COVID-19 closures and restrictions.
Utilisation Utilisation of aquatic facilities [Number of visits to aquatic facilities / Municipal population]	5.01	4.60	5.17	1.68	Bluewater Leisure Centre was closed for a total of 118 days due to COVID-19 restrictions in Victoria in the 2020- 21 financial year. Additionally, when the centre reopened on multiple occasions, visitation to the centre was often limited due to COVID-19 restrictions. Further, Bluewater changed point of sale & membership software providers in October of 2020, data was not captured on casual or multipass visits to the centre from 1 July 2020 to 27 October 2020 (noting the centre was only open 20 days in July during this period due to COVID-19 closures).
Service cost Cost of aquatic facilities [Direct cost of aquatic facilities less income received / Number of visits to aquatic facilities]	New in 2020	New in 2020	\$5.41	\$23.59	Bluewater Leisure Centre was closed for a total of 118 days due to COVID-19 restrictions in Victoria in the 2020- 21 financial year. Additionally, when the centre reopened on multiple occasions, visitation to the centre was often limited due to COVID-19 restrictions. Further, to reduce the financial burden on facility users, when the centre reopened Council's Executive Management Team approved a month of free access for members and several periods of discounted memberships during restricted operations. Note: From 2020, this measure replaced two previous measures: 'Cost of indoor aquatic facilities' and 'Cost of outdoor aquatic facilities', see retired measures.

SERVICE / INDICATOR / MEASURE	Results 2018	Results 2019	Results 2020	Results 2021	COMMENTS
Animal Management Timeliness Time taken to action animal management requests [Number of days between receipt and first response action for all animal management requests / Number of animal management requests]	1.00	1.00	1.00	1.00	This achievement is consistent with core business targets.
Service standard Animals reclaimed [Number of animals reclaimed / Number of animals collected] x100	77.63%	74.52%	48.62%	61.14%	The number of animals reclaimed reflects the increased use of social media where impounded animals were placed on Facebook and the owners either observed their pet there, or were informed by friends etc. that their dog/cat was at the pound.
Service standard Animals rehomed [Number of animals rehomed / Number of animals collected] x100	New in 2020	New in 2020	42.46%	23.83%	The lower figure of animals rehomed, is a result of the increase in animals being reclaimed by owners. Note: New measure for 2019-20 financial year.
Service cost Cost of animal management service per population [Direct cost of the animal management service / Population]	New in 2020	New in 2020	\$15.98	\$14.69	Note: This measure is replacing previous 'Cost of animal management service', which was based on cost per number of registered animals, see retired measures.
Health and safety Animal management prosecutions [Number of successful animal management prosecutions / Number of animal management prosecutions] x 100	New in 2020	New in 2020	100.00%	100.00%	Note: This measure is replacing previous 'Animal management prosecutions', which was a measure of number, not proportion, see retired measures.
Food Safety Timeliness Time taken to action food complaints [Number of days between receipt and first response action for all food complaints / Number of food complaints]	2.00	2.32	1.41	0.50	The number of complaints received was significant less, however prompt action to investigate these complaints was initiated.

SERVICE / INDICATOR / MEASURE	Results 2018	Results 2019	Results 2020	Results 2021	COMMENTS
Service standard Food safety assessments [Number of registered class 1 food premises and class 2 food premises that receive an annual food safety assessment in accordance with the Food Act 1984 / Number of registered class 1 food premises and class 2 food premises that require an annual food safety assessment in accordance with the Food Act 1984] x100	100.00%	95.02%	101.24%	49.02%	The number of food safety assessments has decreased from previous year due to officers being redirected to manage the COVID-19 outbreak within the Shire. Some premises were also closed for trading for some of the 2020 calendar year, resulting in the inability to assess these temporarily closed premises.
Service cost Cost of food safety service [Direct cost of the food safety service / Number of food premises registered or notified in accordance with the Food Act 1984]	\$402.10	\$501.48	\$468.48	\$458.84	The cost per food premises has reduced marginally due to the small increase in food registrations being serviced without additional staff cost.
Health and safety Critical and major non- compliance outcome notifications [Number of critical non- compliance outcome notifications and major non-compliance notifications about a food premises followed up / Number of critical non-compliance outcome notifications and major non-compliance notifications ado major non-compliance notifications about a food premises] x100	100.00%	94.74%	97.50%	90.00%	Result remains high despite a lower result than previous year.
Libraries Utilisation Physical library collection usage [Number of physical library collection item loans / Number of physical library collection items]	4.68	4.32	3.51	1.98	Reduction in collection usage reflects limitations on branch library access during COVID-19 lockdown periods. Note: From 2019-20, this indicator measures the performance of physical library items as a subset of the wider library collection.
Resource standard Recently purchased library collection [Number of library collection items purchased in the last 5 years / Number of library collection items] x100	68.18%	69.03%	66.40%	50.28%	The overall percentage reduced owing to a reduction in purchasing new stock pending the exit of partners from the Regional Library Corporation.

Attachment 10.7.1 Colac Otway Shire Annual Report 2020-21 - Final

SERVICE / INDICATOR / MEASURE	Results 2018	Results 2019	Results 2020	Results 2021	COMMENTS
Participation Active library borrowers in municipality [Number of active library borrowers in the last three years / The sum of the population for the last three years] x100	16.04%	14.99%	15.45%	No data	Due to the current Library Management System the data for active borrowers includes a proportion of non-active members and therefore isn't relevant for trend comparison in this category against previous years.
Service cost Cost of library service per population [Direct cost of the library service / Population]	New in 2020	New in 2020	\$32.59	\$34.30	Note: This measure is replacing the previous 'Cost of library service' indicator which measured based on number of visits, see retired measures.
Maternal and Child Health (MCH) Service standard Infant enrolments in the MCH service [Number of infants enrolled in the MCH service [from birth notifications received] / Number of birth notifications received] x100	99.54%	100.91%	99.57%	100.00%	SMS messaging and full staffing have contributed to increased participation rates
Service cost Cost of the MCH service [Cost of the MCH service / Hours worked by MCH nurses]	\$72.85	\$81.94	\$68.33	\$73.60	A number of factors contributed to this financial years variance, including: use of casual MCH nurses in response to birth notifications; funding to provide a sleep and settling program; and COVID-19 restrictions impacted nursing hours.
Participation Participation 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	70.85%	74.44%	55.23%	75.83%	Data cleansing has assisted in cleaning up old histories and bringing data back to previous years participation rates. We have also worked on our overdue KAS reporting which allowed us to contact and re- engage with some families.
Participation Participation in the MCH service by Aboriginal children [Number of Aboriginal children who attend the MCH service at least once (in the year) / Number of Aboriginal children enrolled in the MCH service] x100	66.67%	58.33%	55.26%	72.00%	Small numbers but the Maternal Child Health service has been participating in a new program to increase participation rates for Aboriginal children in early year's services and emphasis on more active engagement.
Satisfaction Participation in 4-week Key Age and Stage visit [Number of 4-week key age and stage visits / Number of birth notifications received] x100	New in 2020	New in 2020	88.09%	103.35%	SMS messaging and full staffing have contributed to increased participation rates

WE WILL WORK TOGETHER WITH OUR COMMUNITY TO CREATE A SUSTAINABLE FUTURE. WE WILL DELIVER VALUE FOR MONEY FOR RATEPAYERS IN EVERYTHING WE DO AND WE WILL ACHIEVE LONG TERM SUSTAINABILITY AND TRANSPARENT COMMUNITY LEADERSHIP.

THE IMPORTANCE OF OUR LEADERSHIP AND MANAGEMENT AS A THEME

There are many demands on the resources of the Colac Otway Shire. The major source of income, ratepayer's funds, has been constrained through the introduction of rate capping by the State Government and an increasing challenge for the community to continue to afford rate increases.

The environment of the shire is attractive and wellrecognised. Its diversity also results in involvement by many authorities and stakeholders, creating the need for partnerships and clarity about the role of the Shire. Incidents such as bushfire, floods and more recently COVID-19 impact on the community and draw a significant amount of organisational resources, both in emergency responses but also in longer term planning and support to the community. It is expected that fire and flood events will be more common as climate change accelerates.

FIVE STRATEGIES CONTRIBUTE TO ACHIEVING OUR GOAL

- 1. Effectively manage financial resources.
- 2. Openness and accountability in decision making.
- 3. Organisational development and legislative compliance
- 4. Provide value for money services for our community.
- 5. Communicate regularly with our community and involve them in decision-making.

Key highlights for projects and activities linked to Our Leadership & Management begin on page 72

SERVICES CONTRIBUTING TO OUR LEADERSHIP AND MANAGEMENT

The following services/activities were funded in the 2020-21 budget and contribute to achieving the goals and strategies for this theme:

SERVICE AREA	DESCRIPTION OF SERVICE	NET COST ACTUAL BUDGET VARIANCE \$000
Councillors and Chief Executive	This area of governance includes the Mayor, Councillors, Chief Executive Officer and Public Relations Team and associated support which cannot be easily attributed to the direct service provision areas.	1,757 <u>2,027</u> (270)
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.	5,769) <u>(5,080)</u> (689)
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.	448 <u>463</u> (15)
Corporate Services	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.	516 <u>417</u> 99
Contract Management Service	This service provides oversight and governance on contractual and procurement services undertaken by Council.	265 <u>353</u> (88)
Information Services	This services provides management and governance of information flows, storage and retrieval within the organisation in accordance with appropriate legislation and standards.	2,435 <u>2,541</u> (106)
People and Culture	This service provides and develops a culture of high performance, productivity and accountability across the organisation.	755 777 (22)
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.	473 <u>653</u> (180)

<u>HIGHLIGHTS</u>

Governance

Following the Local Government Elections in October 2020, we welcomed a new Council consisting of three new and four returning Councillors. A comprehensive induction program was undertaken by all Councillors. On 16 November 2020 at a Special Council meeting the Councillors elected Cr Kate Hanson as Mayor and Cr Graham Costin as Deputy Mayor. The first Council meeting for the new Council was conducted on 25 November 2020.

Throughout 2020 and 2021 we have continued to work on the implementation of the *Local Government Act 2020.* Currently many of the required policies and processes designed to align with the new act are now in place.

To enable the community to have greater access to Council's decision making processes, we have continued to live-stream Council and Planning Committee meetings. This allows the public to view these meetings on line in real time.

People and Culture

Global Pandemic Response

Workplaces were challenged with a different type of emergency in 2020-21. Council was no different and found itself rapidly adapting to a changing employment landscape. Collaboration across the organisation ensured that we were responsive to closures, work from home and increasing mental health concerns. Positively, Council can now see a successful model of working from home with greater flexibility and adaptation.

Working for Victoria

Council was successful in obtaining funding from the Victorian State Government's Working for Victoria program. This program was implemented in response to the significant job losses experienced from specific industries as a result of the pandemic. This funding supported the creation of 22 full-time jobs for a period of six months. The program was a significant boost for Council to be able to respond to increasing demands on our workforce as a result of organisation and community needs. This program was able to employ new employees into the organisation as well as support our own employees affected by service closures.

Launch of New Organisation Values and Behaviours

Following the 'What We Stand For' project commenced in early 2020, and during a difficult year of lockdowns and work from home, the organisation successfully created a new direction for the organisation through its values and behaviours. The new values and behaviours were launched in October 2020 and are continually being implemented and absorbed into all aspects of the workplace and what we do.

Information Services

The unit's response to COVID-19 restrictions and working from home orders, has enabled an almost seamless change and has provided the organisation with, among other things, the ability to work remotely, meet virtually, both internally and externally, communicate one-on-one and in a team environment and consult, engage and survey the community.

The ever increasing risk of cyber-attack has been a focus for the ICT team. The team has, and will continue to be vigilant in its endeavour to ensure the protection of personal data and information, sensitive and confidential corporate information and the organisation's computer operating systems. An enormous effort has already been put towards this endeavour and will continue into the future.

Implementation and upgrade of Council's Electronic Document Record Management System (EDRMS) entailed upgrading to the latest supported version to ensure continuation of legislative compliance with the Public Records Act.

Performance and capacity improvements of new links to support Business requirements mediumlong term. Decommission of legacy single point of failure WAN link connection from Colac to Apollo Bay with separate connections implemented to each Apollo Bay site.

An upgrade of the GIS Web Portal on the public website provides much improved mapping capabilities including ability to create your own map, emergency management planning, and ability to view overlays/zones.

The implementation on online service to pay infringements provides the community greater flexibility to make payment.

CHALLENGES

People and Culture

As we progress through the ongoing pandemic there are continuing pressures from a work and personal perspective for our employees. The organisation is mindful of the mental health impacts on our workers and continues to implement enhance programs to support our response to the ongoing crisis and the impacts on the workforce.

Our Visitor Information Centres are experiencing a significant downturn of visitors and tourists within our region due to the travel restrictions imposed by the pandemic. This will continue to provide a challenge for our workforce and community until travel numbers increase.

Ongoing restrictions imposed by the State Government continue to result in the temporary closures of Bluewater, COPACC, Customer Service and the Visitor Information Centres. At a time of uncertainty for our employees the organisation responded by identifying redeployment opportunities for the majority of displaced employees.

Information Services

Challenges for the Information Service department and the continuation of COVID-19 lockdowns and subsequent demand for more readily available online digital services, with the ability to access from anywhere, as well as, the increasing, ongoing, and evolving nature of cyber-attacks occurring around the globe are having on human resources. Increased incoming electronic correspondence from external senders requiring a more flexible way of working.

FUTURE

Governance

Looking ahead we will continue to realise the benefits across the organisation of the ongoing implementation of the *Local Government Act 2020*, which is a principles based act, rather than a prescriptive act.

In the year ahead we look forward to continuing to live stream Council meetings and look for ways to enable the community to participate in these online meetings.

People and Culture

Workforce Flexibility

Council has seen considerable growth in the ability to implement flexible working arrangements as well as the implementation of systems and processes to enable this to continue into the future. The hybridworking model brings some challenges but adds convenience and balance to our workforce. Further, it provides new opportunities to capitalise on moving employment markets and ways of working.

Customer Service

Council is continuing to identify innovative and digital ways that our customers can interact with Council to deliver the best outcome. This will include the implementation of a Customer Service Charter and internal guidelines on customer service across the organisation.

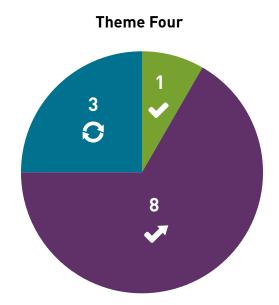
Information Services

Future outlook includes expansion of online service capabilities such as ability for the community to submit a request form via our public website and ability for new animal registration of cats and dogs. Upgrade of phone system to give office-based staff more flexibility to work in different work locations. Implementation of a digital enterprise email management, compliance, and productivity solution to improve quality of work for maintaining email records. Upgrade of facilities to enhance online meetings.

Council Plan Objectives

THE FOLLOWING PAGES INCLUDE A SUMMARY OF THE WORK THAT HAS OCCURRED OVER THE FOUR YEARS OF THE COUNCIL PLAN 2017-2021, AGAINST THE ACTIONS IN THEME FOUR.

The chart below provides details of the status of the 12 actions under Theme Four.





Complete and/or business as usual

Complete with further priorities (i.e. stage two of project) in the draft Council Plan- 2021-2025

Carry over with ongoing priorities in the draft Council Plan 2021-2025

Performance Against

	Action	Work undertaken over four-year Council Plan	Status
ffect	ively manage financial resources	5.	
4.1	Manage the short and long-term financial sustainability of the shire through prudent financial management.	Continued improvements in financial management reporting has provided management the ability to proactively provide enhanced financial management. Financial reporting occurs each quarter through the Quarterly Performance Report, also included in the Annual Report. Finance Business Partnering supporting managers in delivering the adopted budget and making informed business decisions. A Budget Development and Management Policy has been developed to guide Council in meeting its legislative responsibilities in relation to sound financial management principles.	
4.2	Maintain the 10-year long-term financial plan.	Work has continued with developing a service based long term financial plan for adoption by Council by October 2021.	€
4.3	Identify new income opportunities.	Council has limited access to new income opportunities. Advocating for revenue increases to line with rate cap to ensure Council costs do not continue to outstrip increased revenue.	${ $
4.4	Maintain low risk audit rating for financial sustainability.	Council's 2017-18 financial result is consistent with a low risk rating in relation to financial sustainability. Overall, the Victorian Auditor-Generals Office rated Colac Otway Shire low risk in relation to financial sustainability for 2018-19. The 2019-20 results show that Council remains financially sustainable, but some critical indicators continue to trend downward. Information on Council's financial position will be completed when the accounts for 2020-21 are complete, this will be reported in the Annual Report 2020-21.	

Openi	ness and accountability in decisio	n making.	
4.5	Ensure where ever possible decisions are debated and made in open Council meetings.	Councillors are proactive in ensuring that Council only goes in committee when it is absolutely necessary.	
4.6	Develop and implement a program of regular reporting on key activities to ensure they are focused on implementing priorities.	Quarterly Performance Reporting has been introduced, reports are available on Councils website. Internal Monthly Reporting has been introduced to monitor performance and risks.	

	Action	Work undertaken over four-year Council Plan	Status
Organ			
4.7	Support organisational development to ensure key organisational capability areas support the organisation to deliver on Council priorities, with a particular emphasis on attracting suitably qualified applications to fill regulatory roles.	 The People and Culture Strategic Plan 2019-2021 was completed and circulated to all staff in December 2018. The proposed Year One actions are now being implemented on a timely basis and the progress of the strategic plan actions are being regularly reported to the EMT and staff. Major initiatives already completed include: The development and implementation of an internal Coaching and Mentoring Program Staff Alignment and Engagement Survey Delivery of Performance Management and Development training for leaders A review of the onboarding and offboarding processes Health and Wellbeing Program Implementation of an e-recruit platform Regular scheduling of professional development speakers for the leadership team. 	
4.8	Manage our risk exposure, including providing a safe working environment where "Work Health and Safety is everyone's business".	Mental Health Network established (approx. 15 members). Regular departmental safety audits have been implemented An audit of Council's OH&S policies, procedures and safe-work practices was conducted by Crowe Horwath in accordance with Australian Standard 4801.	

		•	
4.9	Implement a program of ongoing service reviews to ensure our services are efficient and effective and are valued by the community.	Council adopted a Three Year Service Review Program on 12 December 2018. It was completed within budget constraints during 2020-21. Further reviews are budgeted for 2021-22, namely Service and Operations and the Saleyards.	€
4.10	Enhance opportunities for increased local spending of Council expenditure.	Although Council is unable to accurately determine if local spending has increased by at least 5% over the four years, Council's Procurement Policy encourages local spending and the Tender Procedure has a weighting towards local employment and suppliers.	
4.11	Develop partnerships to procure services and materials on a regional basis.	Council's Procurement Policy (adopted September 2018, reviewed annually) instructs testing requirements for shared services when certain criteria are met.	S
4.12	Review the Community Engagement Policy to guide council decision making.	Council adopted Community Engagement Policy in March 2021, taking into consideration the Community Engagement Principles of the new Act.	S

Local Government Performance Reporting Framework

SERVICE / INDICATOR / MEASURE	Results 2018	Results 2019	Results 2020	Results 2021	COMMENTS
Governance Transparency Council decisions made at meetings closed to the public [Number of Council resolutions made at ordinary or special meetings of Council, or at meetings of a special committee consisting only of Councillors, closed to the public / Number of Council resolutions made at ordinary or special meetings of Council or at meetings of a special committee consisting only of Councillors] x100	17.86%	6.10%	8.11%	7.64%	This indicator has randomly fluctuated around a relatively stable percentage for the past three years, due to the fact that since 2019 our decisions regarding awarding of contracts have been held in open Council meetings, with relevant confidential information distributed to Councillors.
Consultation and engagement Satisfaction with community consultation and engagement Community satisfaction rating out of 100 with how Council has performed on community consultation and engagement	55.00	54.00	55.00	60.00	The increase in this measure compared to the 2019-20 result may be due to the increased emphasis on community engagement in Local Government via the implementation of the Local Government Act 2020.
Attendance Councillor attendance at council meetings [The sum of the number of Councillors who attended each ordinary and special Council meeting / [Number of ordinary and special Council meetings] × [Number of Councillors elected at the last Council general election]] x100	97.14%	90.29%	92.48%	98.57%	This score indicates that Councillor attendance at Council meetings is at a very high value. Councillors have physically attended meetings through COVID-19 with social distancing etiquette being observed.
Service cost Cost of elected representation [Direct cost of the governance service / Number of Councillors elected at the last Council general election]	\$41,116.71	\$42,300.86	\$44,852.14	\$47,857.87	There has been a significant increase in the cost of elected representation for 2020/21 due to mandatory Councillor induction upon election in October 2020.
Satisfaction Satisfaction with council decisions [Community satisfaction rating out of 100 with how council has performed in making decisions in the interest of the community]	49.00	52.00	50.00	58.00	The increase in this measure compared to the 2019-20 result may be attributed to Council's response to the COVID-19 pandemic and public optimism towards the newly elected Council.

Democratic Governance

COUNCIL'S MAIN RESPONSIBILITIES ARE TO SET THE OVERALL DIRECTIONS AND GOALS FOR THE MUNICIPALITY AND THEN MONITOR THEIR IMPLEMENTATION AND SUCCESS.

The tools for setting these directions and goals are the major strategic plans. These include the Council Plan, the Financial Plan, the Municipal Strategic Statement and the Municipal Public Health and Wellbeing Plan. Council also has a role in advocating on behalf of its communities to State and Federal levels of government, statutory authorities and other sectors.

Colac Otway Shire is constituted under the *Local Government Act 2020* to provide good governance to its municipal district for the benefit and wellbeing of the municipal community.

A council must in the performance of its role give effect to the overarching governance principles, which include:

- Council decisions are to be made and actions taken in accordance with the relevant law;
- Priority is to be given to achieving the best outcomes for the municipal community, including future generations;
- The economic, social and environmental sustainability of the municipal district, including mitigation and planning for climate change risks, is to be promoted;
- The municipal community is to be engaged in strategic planning and strategic decision making;
- Innovation and continuous improvements is to be pursued;
- Collaboration with other Councils and Governments and statutory bodies is to be sought;
- The ongoing financial viability of the Council is to be ensured;
- Regional, state and national plans and policies are to be taken into account in strategic planning and decision making;
- The transparency of Council decisions, actions and information is to be ensured.

DECISION-MAKING PROCESS

Council is authorised to make decisions in only one of two ways:

 By resolution at Council meetings and Delegated Committees of Council; By Council officers under delegated authority. The Chief Executive Officer (CEO) is authorised under the Act to manage the day-to-day operations of the organisation. The CEO has the power to delegate decisions on operational matters to officers.

There are certain powers that Council cannot delegate. Examples include, but are not limited to the adoption of the Council Plan and Council Budget.

RELATIONSHIP BETWEEN COUNCIL AND THE EXECUTIVE

The CEO is the only staff member who is appointed by the Council. As such, Councillors are accountable for setting the CEO's performance plan and monitoring performance. The CEO, along with the Executive Management Team, is responsible for implementing resolutions of Council and running the day-to-day affairs of the organisation. Individual Councillors cannot instruct staff to undertake specific duties.

COUNCILLOR CODE OF CONDUCT

Council has a Councillor Code of Conduct, last reviewed and adopted by Council on 24 February 2021. The Code outlines the principles of good governance, guides Councillors' behaviour, accountability and dispute resolution between Councillors. All Councillors are expected to behave ethically and with integrity. The Code is available on Council's website.

CONFLICT OF INTEREST

Councillors are elected by their communities to make decisions on behalf of those communities. To ensure the public interest is served at all times, Councillors are required to separate their private interests from their public duties, which may mean stepping aside from a decision where a conflict of interest arises.

During 2020-21, Councillors disclosed 12 conflicts of interest during Council meetings and two conflicts of interest during Planning Committee meetings.

COUNCIL MEETINGS

In addition to the Advisory and Committee meetings listed on page 22 the following are also internal Committees of Council:

CENTRAL RESERVE ADVISORY COMMITTEE

This meeting is held quarterly and facilitates communication between Council, park users and local residents about matters concerning planning, development, maintenance and operation of the reserve.

CITY DEALS PROJECT – COLAC OTWAY SHIRE EXECUTIVE STEERING COMMITTEE

- Cr Stephen Hart

This committee meets monthly, to provide community engagement, strategic directions, guidance and support and to discuss status and critical issues.

COLAC MUNICIPAL AERODROME ADVISORY COMMITTEE - Cr Joe McCracken

This committee meets quarterly, to provide input, advice and support to Council in the ongoing sustainability, planning, development and maintenance of the Colac Municipal Aerodrome.

COLAC REGIONAL SALEYARDS ADVISORY COMMITTEE – Cr Jamie Bell

This committee meets quarterly as required, to provide advice on the operations of the centre and make recommendations to Council.

FRIENDS OF THE BOTANIC GARDENS ADVISORY COMMITTEE – Cr Margaret White

This committee meets monthly to undertake voluntary projects and to act as an advisory committee for Council.

LAKE COLAC COORDINATING COMMITTEE

- Cr Jamie Bell and Cr Margaret White This committee meets quarterly and provides a forum to assist Council in the implementation of the Lake Colac Management Plan and the Lake Colac Master Plan and to advise Council on the revitalisation and development of Lake Colac.

CEO EMPLOYMENT MATTERS ADVISORY COMMITTEE

Meeting at least six monthly, the committee reports to the Council and provides recommendations, appropriate advice information and feedback on relevant matters.

In addition to the previously listed committees, Councillors represented the Council on other external committees and groups:

Apollo Bay Harbour Precinct Redevelopment Project Control Group

– Mayor Cr Kate Hanson and Deputy Mayor Cr Graham Costin

Australian Local Government Association (ALGA) – Cr Chris Potter

Barwon South West Waste and Resource Recovery Local Government Forum

– Deputy Mayor Cr Graham Costin

Barnard Trust Committee – Cr Stephen Hart

Colac Community Library and Learning Centre Joint Use Committee – Cr Stephen Hart

Colac Road Safety Group - Cr Chris Potter

COPACC Trust - Cr Joe McCracken and Cr Margaret White

Corangamite Regional Library Corporation – Cr Stephen Hart

Geelong Regional Library Corporation - Cr Stephen Hart

Great South Coast Group – Deputy Mayor Cr Graham Costin

G21 Board – Mayor Cr Kate Hanson

Lavers Hill Swimming Pool Committee of Management – Cr Stephen Hart

Mooleric Road Quarry Consultative Committee – Cr Jamie Bell

Municipal Association of Victoria – Cr Stephen Hart

Municipal Emergency Management Planning Committee – Cr Chris Potter

Municipal Fire Management Planning Committee – Cr Chris Potter

Ondit Quarry Consultative Committee – Cr Jamie Bell

Port of Apollo Bay Consultative Committee – Cr Chris Potter

Rural Councils of Victoria – Cr Margaret White

Rural Financial Counselling Service Vic – Wimmera Southwest (RFC) – Mayor Cr Kate Hanson

Timber Towns Victoria Committee – Cr Chris Potter

Weeds Consultative Committee

– Cr Jamie Bell

G21 Pillar Membership - Arts and Culture – Mayor Cr Kate Hanson

G21 Pillar Membership – Economic Development – Cr Chris Potter

G21 Pillar Membership – Education and Training – Cr Joe McCracken

G21 Pillar Membership – Environment – Cr Stephen Hart

G21 Pillar Membership – Health and Well Being – Cr Margaret White

G21 Pillar Membership – Planning and Services – Deputy Mayor Cr Graham Costin

G21 Pillar Membership – Sports and Recreation – Cr Chris Potter

G21 Pillar Membership - Transportation - Cr Jamie Bell

	COU	NCIL	SPECIAL COUNCIL		PLANNING COMMITTEE	
COUNCILLOR	Eligible to Attend	Attended	Eligible to Attend	Attended	Eligible to Attend	Attended
Jamie Bell	8	8	2	2	3	3
Graham Costin	8	8	2	2	3	2*
Brian Crook	3	3	1	1	1	1
Kate Hanson	11	11	3	3	4	4
Stephen Hart	11	11	3	3	4	4
Joe McCracken	11	11	3	3	4	4
Chris Potter	11	11	3	3	4	4
Jason Schram	3	3	1	1	1	1
Chris Smith	3	3	2	1	1	0
Margaret White	8	8	2	2	3	3

COUNCILLOR ATTENDANCE AT MEETING

*Cr Costin was unable to attend one Planning Committee meeting due to a conflict in meeting schedule

COUNCILLOR SUPPORT AND REMUNERATION

The Council Expenses Policy provides a broad overview of how the Council provides assistance and support to the Mayor and Councillors in carrying out their roles and official duties. A copy of the Policy is available for inspection, on Council's website under Council policies.

In line with the Policy, support is provided to the Mayor in the form of a council vehicle. Information and communication technology is available to all Councillors.

The Council Expenses Policy contains provisions for reimbursement of expenses for training, registration fees for conferences and functions, travel and child care.

The following table sets out the allowance paid to Councillors for the reporting period 2020-21

COUNCILLOR	Allowance (including superannuation)	Travel	Car Mileage Expenses	Childcare Expenses	Information and Communications Technology Expenses	Conference and Training Expenses	Total
Kate Hanson (Mayor)	\$62,233	\$932	\$304	-	\$547	\$1,593	\$65,609
Graham Costin (Deputy Mayor)	\$16,908	\$1,400	\$4,092	-	\$382	\$179	\$22,961
Jamie Bell	\$16,908	-	-	-	\$382	-	\$17,290
Stephen Hart	\$27,555	\$941	\$4,162	-	\$2,008*	\$268	\$34,934
Joe McCracken	\$27,475	-	-	-	\$523	-	\$27,998
Chris Potter	\$27,571	\$875	\$561	-	\$571	\$1,768	\$31,296
Marg White	\$16,908	\$875	-	-	\$382	\$1,813	\$19,978
Jason Schram	\$31,978	-	-	-	\$504	-	\$32,482
Chris Smith	\$10,567	-	\$794	-	\$48	-	\$11,409
Brian Crook	\$10,567	-	-	-	\$248	-	\$10,815
Total	\$248,620	\$5,023	\$9,913	-	\$5,595	\$5,595	\$274,722

*Cr Hart's ICT expenses include a one-off of charge of \$1,784 for installation of a Telstra Mobile Smart Antenna and an external antenna to address coverage issues.

LOCAL LAW

The following local laws are in force:

No. 1 Consumption of Liquor in Public Places

Date Adopted by Council: 28 August 2013 Date Operational: 28 August 2013

No. 2 General Local Law

Date Adopted by Council: 25 September 2013 Date Operational: 25 September 2013

No. 3 Livestock Local Law

Date Adopted by Council: 28 August 2013 Date Operational: 28 August 2013

No. 4 Governance

Date Adopted by Council: 26 August 2020 Date Operational: 26 August 2020

POLICIES, STRATEGIES AND PLANS

The following policies, strategies and key plans were reviewed, endorsed and/or adopted by Council during 2020-21:

Council Expenses Policy

Adopted: 22 July 2020

Grants Contributions and Sponsorship Policy Adopted: 22 July 2020

Audit and Risk Committee Charter Adopted: 26 August 2020

Election Period Policy Adopted: 26 August 2020

Governance Rules Adopted: 26 August 2020

Public Transparency Policy Adopted: 26 August 2020

Administration and Enforcement of Building Legislation Policy

Adopted: 16 September 2020

Apollo Bay Harbour Development Plan Adopted: 16 December 2020

Livestreaming and Recording of Council and Planning Committee Meetings Policy Adopted: 24 February 2021

Community Engagement Policy Adopted: 24 February 2021

Councillor Code of Conduct Adopted: 24 February 2021

Gifts, Benefits and Hospitality Policy Adopted: 24 March 2021

2021-2025 Revenue and Rating Plan Adopted: 24 June 2021

Acquisition and Disposal of Council Property Adopted: 24 June 2021

Procurement Policy Adopted: 24 June 2021

AUDIT AND RISK COMMITTEE

The Audit and Risk Committee (ARC) is an advisory committee of Council and its purpose is to provide a structured, systematic oversight of Council's governance, risk management and internal control practices. The ARC assists the Council and management by providing advice and guidance on the adequacy of initiatives for:

- Values and behaviours (What We Stand For)
- Governance structure
- Risk management
- Internal control framework
- Oversight of the internal audit activity, external auditors and other providers of assurance
- Financial and performance statements and public accountability reporting.

The Audit Committee meets five times in an annual cycle and has consisted of the following members over the financial year:

Audit Committee member	Eligible to attend	Actual Attendance
Mr Mike Said, Independent Member and Chairperson (EMES Consulting)	5	5
Mr Brian Keane, Independent Member (Brian Keane Consulting Pty Ltd)	5	5
Mr Richard Trigg, Independent Member	3	3
Cr Stephen Hart	5	5
Cr Jason Schram	2	2
Cr Graham Costin	3	3

Mr Mike Said was reappointed Chairperson of the ARC on 2 December 2020.

On 28 November 2018, Mr Brian Keane's appointment to the Audit Committee was ratified by Council at its Ordinary meeting. Mr Keane's first meeting as an independent member was on 5 December 2018. The ARC Charter (adopted by Council 26 August 2020), in accordance with the *Local Government Act 2020*, stipulates that the Committee consist of two Councillors and three independent members. Mr Richard Trigg was appointed to the ARC as the third independent member at the 25 November 2020 Council meeting. His first meeting as an independent member of the ARC was on 2 December 2020.

Cr Stephen Hart and Cr Jason Schram were appointed to the ARC at the Ordinary Council meeting held on 27 October 2019 and served until October 2020. Following the Local Government general election, Cr Stephen Hart and Cr Graham Costin were appointed to the Committee at the Council meeting held on 25 November 2020. The Chief Executive Officer, General Manager Corporate Services, General Manager Environment & Infrastructure, General Manager Development & Community Services, Manager Governance & Communications, Governance Coordinator, Manager Financial Services and the Finance Coordinator attend meetings to assist with information and support. Other Council officers attend as required.

Over the financial year the ARC dealt with issues under the following headings as per the Audit Committee Charter:

- Financial Reporting
- Internal Control
- Values and Ethics
- Risk Management
- Fraud and Corruption Prevention Systems and Control
- Business Continuity
- Internal Audit
- External Audit
- Compliance
- Reporting Responsibilities
- Performance Evaluation
- Review of Charter
- Meeting Schedule
- Other Responsibilities.

Outcomes 2020-21

- Development of the Audit and Risk Committee Charter in alignment with the *Local Government Act 2020.*
- Development of the Audit and Risk Committee Plan for the year.
- Review and endorsement of the financial statements and performance statement.
- Review end of year financial management.
- Reporting of Fraud Control Program.
- Review of Quarterly Performance reports of Council.
- Reviewed the audit scopes, reports and recommendations of internal audit projects.

Council's External Auditor is the Victorian Auditor General (agent McLaren Hunt).

Council's Internal Auditor is Crowe Howarth.

Corporate Governance

We are committed to ensuring that our governance practices are accountable, transparent and fair, and that we act with honesty and integrity in all of our operations and decisions.

The Chief Executive Officer (CEO), Peter Brown, was a direct appointment of Council and has a number of responsibilities that are set out in the Act. These include:

- Establishing and maintaining an appropriate organisational structure.
- Ensuring Council decisions are implemented promptly.
- Oversight of the day-to-day management of Council operations.
- Implementing the Council Plan.
- Developing a code of conduct for Council staff.
- Providing timely advice to the Council.

The CEO is also the main person to whom Council delegates its powers, duties or functions.

The organisation supports the Council by being responsive to the community, encouraging democratic participation and involving people in decisions that affect them. We strive for excellence in financial management and Council services and always look for better ways to do things. This encompasses:

- Making clear the legislation and regulations under which we operate.
- Local Laws we are authorised to make.
- Ethical decision-making processes.
- Delegations of authority.
- Effective risk management systems and processes.
- Establishing frameworks for planning and monitoring operational effectiveness.
- Performance management.

COUNCIL PLAN

The Council Plan 2017-2021, was developed with extensive community consultation. It is a high level strategic document responding to the issues faced by our community and sets our goals, key strategic activities and performance indicators over a four year period. This is the final year of the Council Plan 2017-2021, with development of a new Council Plan 2021-2025 underway.

RISK MANAGEMENT

Risk Management has a high organisational profile, reinforced by a Corporate Risk Register, which is reviewed and updated regularly by staff and monitored by Council's internal Risk Management Committee and the ARC. The current Risk Management Framework provides for the management of these business enterprise risks in accordance with best practice guidelines and International Standard ISO 31000.

The Risk Management Committee's primary function is to monitor the risk management framework across Council. In addition to representation from Council's Executive Management Team, the Committee has broad management representation across operational service areas. The ARC routinely monitor, the activies of this group.

BUSINESS CONTINUITY

Recognising the importance of continuous improvement, Council committed to an independent review of its business continuity framework in 2020-21. Recommendations from this review were used to develop a set of streamlined and tailored resources, replacing previous versions of Council's critical incident management plans. This project will continue into 2021-22 and incorporate invaluable learnings and operational efficiencies triggered by the events of the current global pandemic, such as the capacity to work remotely.

INSURING RISK

Mitigation of Council's liability is achieved through effective claims management and maintenance of appropriate insurance cover for insurable assets and liabilities.

With the cyber insurance landscape continuing to change significantly, rapidly and with increased cyber events, Council undertook an independent cyber risk review in order to profile and quantify Council's most important loss scenarios. The outcomes of this review were tested against the Council's current insurance programme, taking into account the Cyber Liability Policy and also any other responding policies. Based on the recommendations, Council chose to mitigate potential loss by increasing its cover for specific cyber related events.

Corporate Governance

CONTRACTS

During 2020-21 Council procured software upgrades and consultancy services relating to Council software totalling \$380,491 cumulative spend with one company without going to tender.

GRANTS AND DONATIONS TO THE COMMUNITY

Council provides grants and donations to assist the community to undertake projects and activities in cultural, recreational, environmental, community support initiatives and small business.

In 2020-21 Council provided a total of \$321,397 to our community: \$230,195 as a result of applications for funding by community groups, businesses, sporting and service clubs for a variety of projects ranging from minor facility and equipment updates to shop façade improvements, sporting equipment, arts and theatre group initiatives; and \$91,202 was allocated to support community events.

GOVERNANCE AND MANAGEMENT CHECKLIST

The checklist forms part of the *Local Government* (*Planning and Reporting*) *Regulations 2014* and is designed to measure whether a Council has strong governance and management frameworks. The following pages contain the checklist which is presented in the format prescribed in the regulations.

Governance and Management Checklist

GOVERNANCE AND MANAGEMENT ITEMS	ASSESSMENT	REQ.
Community engagement policy (policy under section 55 of the Act outlining Council's commitment to engaging with the community on matters of public interest)	Adopted in accordance with section 55 of the Act: 24/02/2021	
Community engagement guidelines (guidelines to assist staff to determine when and how to engage with the community)	Current guidelines in operation: 03/02/2021	
Financial (Strategic Resource) Plan (plan under section 91 of the Act outlining the financial and non-financial resources required for at least the next ten financial years)	Adopted in accordance with section 91 of the Act: 22/07/2020	
Asset Plan (plan under section 92 of the Act that sets out the asset maintenance and renewal needs for key infrastructure asset classes for at least the next 10 years)	IN DEVELOPMENT	\bigcirc
Revenue and Rating Plan (plan under section 93 of the Act setting out the rating structure of Council to levy rates and charges)	2021 -25 Revenue and Rating plan adopted by Council 24/06/2021 Rating section being reviewed for 2022-2025	Ø
Annual budget (plan under section 94 of the Act setting out the services to be provided and initiatives to be undertaken over the next 12 months and the funding and other resources required)	Budget adopted in accordance with section 94 of the Act: 22/07/2020	S
Risk policy (policy outlining Council's commitment and approach to minimising the risks to Council's operations)	Date of operation of current policy: 24/10/2018	
Fraud policy (policy outlining Council's commitment and approach to minimising the risk of fraud)	Date of operation of current policy: 27/05/2020	

GOVERNANCE AND MANAGEMENT ITEMS	ASSESSMENT	REQ.
Municipal emergency management plan (plan under section 20 of the <i>Emergency</i> <i>Management Act</i> 1986 for emergency prevention, response and recovery)	In accordance with section 20 of the <i>Emergency</i> <i>Management Act 1989</i> 30/10/2018	©
Procurement policy (policy under section 108 of the Act outlining the principles, processes and procedures that will apply to all purchases of goods and services by the Council)	Date of operation of current policy: 01/07/2021	©
Business continuity plan (plan setting out the actions that will be taken to ensure that key services continue to operate in the event of a disaster)	Date of operation: 21/02/2018 Critical Incident Management Plan - Date of operation: 21/02/2018 CURRENTLY UNDER REVIEW	O
Disaster recovery plan (plan setting out the actions that will be undertaken to recover and restore business capability in the event of a disaster)	Plan Date of operation: 10/02/2021	S
Risk management framework (framework outlining Council's approach to managing risks to the Council's operations)	Date of operation of current framework: 02/03/2016 CURRENTLY UNDER REVIEW	O
Audit and Risk Committee (advisory committee of Council under section 53 and 54 of the Act)	Established in accordance with section 53 of the Act Date of establishment: 26/08/2020	S
Internal audit (independent accounting professionals engaged by the Council to provide analyses and recommendations aimed at improving Council's governance, risk and management controls)	Date of engagement: 01/08/2017	S
Performance reporting framework (a set of indicators measuring financial and non- financial performance, including the performance indicators referred to in section 131 of the <i>Local Government Act</i> 1989)	Date of operation: 28/07/2014	S
Council Plan report (report reviewing the performance of the Council against the Council Plan, including the results in relation to the strategic indicators, for the first six months of the financial year)	Dates statements presented: Q4. 16/12/2020 Q1. 16/12/2020 Q2. 24/02/2021 Q3. 26/05/2021	S

GOVERNANCE AND MANAGEMENT ITEMS	ASSESSMENT	REQ.
Financial reporting (quarterly statements to Council under section 138(1) of the <i>Local</i> <i>Government Act</i> 1989 comparing budgeted revenue and expenditure with actual revenue and expenditure)	Dates statements presented: Q4. 16/12/2020 Q1. 16/12/2020 Q2. 24/02/2021 Q3. 26/05/2021	
Risk reporting (six-monthly reports of strategic risks to Council's operations, their likelihood and consequences of occurring and risk minimisation strategies)	Reports Date of reports: 10/02/2021 11/08/2021 – Risk report was deferred from the May 2021 meeting to August 2021	\bigcirc
Performance reporting (six- monthly reports of indicators measuring the results against financial and non-financial performance, including performance indicators referred to in section 131 of the <i>Local</i> <i>Government Act</i> 1989)	Reports Date of report: Audit Committee Report Half Year: 16/12/2020 Full Year: 26/05/2021	
Annual report (annual report under sections 131, 132 and 133 of the <i>Local Government</i> <i>Act</i> 1989 to the community containing a report of operations and audited financial and performance statements)	Considered at a meeting of Council in accordance with section 134 of the Act Date of consideration: 16/12/2020	

Corporate Governance

CONTINUOUS SERVICE IMPROVEMENT

The Service Performance Principles outlined in the Act require Council to plan its services to the municipal community in accordance with the following principles:

- Quality and cost standards for every service set by Council should provide good value.
- Services should be provided in an equitable manner and responsive to community needs.
- Accessible and appropriately targeted services.
- Continuously improve service delivery in response to performance monitoring.
- Service delivery must include a fair and effective process for considering and responding to complaints about service provision.

The following pages provide details of service improvements that have been implemented during 2020-21.

PLANNING, BUILDING AND HEALTH

- Health, planning and building approval processes have become paperless through use of IT systems to process and determine applications for permits/consents, reducing use of paper and reducing the processing time for specific tasks. Staff had been making this transition but COVID-19 has increased the pace of change.
- Improvements have been made to CIVICA Authority to enhance the workflows for planning and building to enhance report and generate efficiencies. This is an on-going program of work.
- Applications for building over easements were transitioned over from the Building Department to the Infrastructure Department for processing to minimise double handling and reduce processing times.

ENVIRONMENT AND COMMUNITY SAFETY

Environment and Sustainability

The Environment Unit constantly seeks and investigates new opportunities – this endeavour is the core of continuous improvement. However, the inherent risk involved in taking up new initiatives has been an ongoing challenge for Council, particularly given the resource-limited environment in which we currently operate. The Environment Unit continues to utilise alternative and online delivery platforms for community education and engagement programs.

Emergency Management and Fire Prevention

Learning opportunities need to become a key driver for implementing improvements following emergency events or training exercises. It has been recognised that while we have the capacity to respond to emergencies, there are areas where improvements can be made. As a result, external consultants have been engaged to prepare an Emergency Management Planning Framework and an Emergency Management Training plan which will give a clearer view of where to concentrate our efforts when targeting training opportunities or development for our staff and our communities.

Closed Landfill Management

Council completed the work commenced by the Barwon South West Waste Resource and Recovery Group to assess the risk of all of its former, smaller landfill sites. The assessment of the closed landfills, some that stopped operating over fifty years ago, found a differing level of risk, however none of the sites pose a risk to health nor the environment to warrant immediate rehabilitation. Aftercare management plans will be developed to action the management recommendations of the assessment in 2021-22.

ASSETS AND PROJECT DELIVERY

A host of operational improvements have been made within the Assets and Project Delivery area to respond to challenges. Some examples include:

- Moving lease and licence record management to an automated system to improve accuracy of record keeping and ensure agreements are current.
- Implementation of a comments tracking system for development referrals to ensure matters are recorded, progressed and resolved.
- Development of new templates and processes in Project Delivery to ensure compliance with Council's Procurement Policy, efficient processing of claims, and comprehensive scoping of projects prior to funding to reduce risks through the delivery phase.

- Establishment of a Property Advisory Committee with representation across multiple Council departments. The group regularly reviews and makes coordinated recommendations regarding strategic use and management of Council property for executive and Council consideration, such as potential sale or purchase of land.
- Internal training for staff involved in Road Management Plan to ensure the compliance activities are accurately recorded in response to 2020 audit recommendations.
- Development of two draft policies to guide the transparent allocation of capital funding and prioritisation of projects in response to 2019 audit recommendations.

SERVICES AND OPERATIONS

The introduction of a casual staffing pool has allowed for the flexibility of staffing to ensure that works can be completed effectively and efficiently. The casual staff are able to be called upon when:

- A full time staff member is on long term sick leave or long service leave or
- When a position is required to be back filled during the recruitment process when a full time staff member leaves.

To ensure that all programmed works can be performed, Services and Operations full time workforce is complimented by the casual staffing pool and value added by the strategic use of contractors to assist in program completion.

Several heritage trees at the Botanic Gardens were audited and deemed to be at risk due to lack of water caused by the change in climate.

To protect the trees for future generations, a grant was awarded to upgrade and extend the current irrigation system.

INFORMATION MANAGEMENT

Further improvements and upgrade of Electronic Document and Records Management System (EDRMS) and supported software were made to ensure compliance with record keeping legislation. Implementation of Victorian Protective Data Security Framework and Standards. Development of online learning management module using Councils LMS system to deliver inductions for EDRMS. Increased awareness on further training opportunities for staff upon request.

GEOSPATIAL INFORMATION SERVICES SOFTWARE

Implementation of new modern GIS software (Spectrum Spatial Analyst) and publically available online mapping facility.

INFORMATION TECHNOLOGY

- Implementation of tighter security measures to reduce cyber risk using best practice technologies like multi-factor authentication for online applications and services.
- Increased Cyber Awareness training for staff to improve cyber awareness across the organisation whilst enabling hybrid workforce flexibility.
- Further enablement of digital capabilities such as online live streamed council meetings, online infringements payment facility to allow community to do this from anywhere.
- Modern AV upgrades of council sites to enable modern way of working by attending meetings online.

HEALTHY ACTIVE COMMUNITIES

Council adopted a new Community Engagement Policy and operational Framework in line with the new requirements of the Local Government Act 2020. The next step is to embed best practice community engagement across the organisation and upskilling staff.

Council continued to transition Section 86 committees into Community Asset Committees in line with new legislative requirements, and is now working on developing management agreements with the new Committees.

The Beginning Steps project has strengthened Council's relationship with the Aboriginal Gathering Place and has provided new tools to support an enhanced experience for new Aboriginal and Torres Strait Islander parents and children using our Maternal and Child Health services.

We progressed with implementing the recommendations of the Family and Children's Services service review, including changing the fees and charges structure to support the ongoing sustainability of the service.

OLDER PERSONS AND ABILITY SUPPORT SERVICES (OPASS)

The continuous improvement process for OPASS is based on ongoing feedback from:

- Service Users (and representatives)
- Staff
- Management and
- Other stakeholders including funders, other service providers and community organisations.

The OPASS Improvement Committee is responsible for the Continuous Improvement processes including identifying /reviewing all aspects of legislative requirements through our contracted and non-contracted services.

PEOPLE AND CULTURE

With increased difficulties of face to face training as a result of the ongoing pandemic emergency, Council invested in online training software that was capable of transferring compliance modules online for greater accessibility for all employees and increase Council's response to mandatory training.

Following the roll out of the new values and behaviours, Council implemented a customised App for all corporate communication. Given the complex workforce and a significant part of the organisation who does not work from a computer, ShoutOut provides a consistent communication method accessible to all employees.

Council's customer service team has implemented a new role, which has a focus to coordinate the digitalisation of customer services.

Council is working to deliver online services such as forms, payments and requests that are accessible to all in the community. Great face-to-face service will also continue to be a focus.

BLUEWATER

Following the expiration of a previous contract and subsequent request for quote procurement process, in October of 2020, Bluewater Leisure Centre implemented a new Facility Management Software program to manage point of sale, memberships, classes, facility bookings and retail at the facility. The new platform is cloud based and allows facility users to sign up and manage memberships and bookings online; features the previous platform was not capable of providing.

The implementation of a scheduled maintenance program for upkeep of pool plant equipment, has resulted in virtually zero unexpected downtime of pool facilities at Bluewater.

OPEN SPACE

Fees and charges structures for our sporting user groups will be reviewed in the coming period in order to achieve a more equitable structure in line with contemporary sporting approaches.

New licence agreements were executed with nine landowners along the Old Beechy Rail Trail, providing consistency of maintenance and insurance arrangements along the trail.

LEGISLATIVE COMPLIANCE

Council has responsibilities under a wide range of Victorian and Commonwealth legislation. Some of the key Acts that affect Council are:

- Building Act 1993
- Carers Recognition Act 2012
- Domestic Animals Act 1994
- Environment Protection Act 2017
- Equal Opportunity Act 2010
- Food Act 1984
- Freedom of Information Act 1982
- Infringements Act 2006
- Land Acquisition and Compensation Act 1986
- Local Government Act 1989
- Local Government Act 2020
- Occupational Health and Safety Act 2004
- Privacy and Data Protection Act 2014
- Planning and Environment Act 1987
- Public Interest Disclosures Act 2012
- Public Health and Wellbeing Act 2008
- Road Management Act 2004
- Road Safety Act 1986
- Sentencing Act 1991
- Subdivision Act 1988
- Valuation of Land Act 1960

The following Acts are required to be reported on in Council's Annual Report.

COMPLAINTS REGISTER - REPORTING ON PERFORMANCE

The Colac Otway Shire Complaints Policy was adopted by Council on 26 June 2019. It sets out for members of the community the way in which the organisation handles complaints. It aims to put in place an open and transparent complaint handling system, details the key performance indicators to which we hold ourselves accountable and sets out how staff record and analyse complaint data to identify where we can improve our services.

During the 2020-21 financial year, 44 complaints were recorded in the Complaints Register. The complaint handling process has been completed for 43 of these, with one still in progress. Summary statistics for these 43 complaints are as follows:

- The average time to complete the complaints handling process was 16.7 days*. Our standard for resolving complaints is within 28 days;
- 28% of the complaints were upheld, 44% were partially upheld and 28% were not upheld;
- No changes were made to services as a result of a complaint being registered;
- No complaints have proceeded to an internal review or escalated to an external body.

*For the purposes of calculating a representative average completion date, the completion date was set at the day the analysis was undertaken for the item that was not finalised.

DISABILITY ACTION PLAN

The Colac Otway Shire Disability and the Victorian State Disability Action Plan has been developed, with the following actions implemented:

- Client Incident Management Systems (CIMS).
- Workforce: Action 18: Employment of Qualified in Disability.
- Registered OPASS staff for the NDIS Worker Screening Check.
- Complied with Key Priority 3: Transport, Wheel chair access.
- Action 19: Safeguards, staff training around zero tolerance, how to report.

DOMESTIC ANIMAL MANAGEMENT PLAN

Under the *Domestic Animal Act 1994* Council is required to evaluate its Domestic Animal Management Plan implementation in the annual report. The plan was prepared in accordance with the requirements and responsibilities under the *Domestic Animals Act 1994*, the *Impounding of Livestock Act 1994*, the Colac Otway Shire Council's General Local Laws and relevant policies. A review of the current plan (D.A.M.P 2017-2021) has commenced, which will enable the new plan (2022-2025) to be in place towards the end of 2021 following the required procedural, and public consultation requirements.

The Domestic Animal Management Plan addresses topics including Authorised Officer training, promotion of responsible pet ownership including registration, minimisation of dog attacks, operation of the Municipal Pound facility and general service delivery throughout the municipality. All Officers have extensive experience in the area of animal management (Livestock & Domestic Animals) and the majority of Officers have a background in Local Laws application and enforcement.

As at 30 June 2021 there were 5,391 domestic animals registered; 4,043 dogs and 1,348 cats:

- Of the 140 dogs impounded, 121 were returned to their owner, 16 were rehoused and three were euthanised.
- Of the 171 cats impounded, 16 were returned to their owner, 88 were rehoused and 67 were euthanised. We continue to receive support through a local vet who is runs a cat adoption scheme and a reduced price de-sexing program. Feral and unhealthy cats/kittens account for the number that were euthanised.

FOOD ACT MINISTERIAL DIRECTIONS

In accordance with section 7E of the *Food Act 1984*, Council is required to publish a summary of any Ministerial Directions received during the financial year in its annual report. There were zero Ministerial Directions received by council during 2020-21.

FREEDOM OF INFORMATION

The *Freedom of Information Act 1982* gives the community the right to access certain Council documents. The Act has four basic principles:

- Local governments are required to publish information about the documents they hold, particularly those which affect members of the public in their dealings with Council.
- 2. Each person has a legally enforceable right to access information, limited only by exemptions necessary for the protection of the public interest and the private and business affairs of persons from whom information is collected by Council.
- People may appeal against a decision not to give access to information or not to amend a personal record.
- People may request inaccurate, incomplete, out of date or misleading information in their personal records be amended.

Freedom of Information (FOI) requests must be made in writing and be accompanied by a \$29.60 application fee. Applicants should also indicate how they would like to receive the information. For further information. For further information visit Council's website on the FOI page.

Applicants may appeal the decision made about their FOI request or the cost charged for access to documents, the letter containing the decision outlines the appeal process. There were zero appeals lodged through this process for 2020-21.

There were ten FOI requests received in 2020-21, of which 297 documents were released under FOI. One request resulted in no documents identified, one request was withdrawn, one request was satisfied outside FOI requirements and the remaining requests resulted in:

- Four documents under direct release
- 113 documents under part release
- 180 documents under full release.

PRIVACY AND DATA PROTECTION

The Privacy and Data Protection Act 2014 is underpinned by ten Information Privacy Principles that outline how Victorian public sector organisations must handle personal information. Council has adopted policies on information privacy that meet the requirements of the Privacy and Data Protection Act 2014. The responsible handling of personal information is a key aspect of governance and we are strongly committed to protecting an individual's right to privacy. Council's Information Privacy Policy can be downloaded from our website.

PUBLIC ACCESS TO REGISTERS AND DOCUMENTS

In accordance with section 57 of the *Local Government Act 2020* Colac Otway Shire Council adopted its Public Transparency Policy on 26 August 2020. It formalises Council's support for transparency in its decision-making processes and availability of Council Information. The following Council Information will be available on Council's website:

- Meeting Agendas
- Minutes of Meetings
- Audit and Risk Committee Charter
- Terms of Reference for Delegated Committees
- 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 Interest Returns
- Any other Registers or Records required by the Act or any other Act.

PUBLIC INTEREST DISCLOSURE PROCEDURES

The Colac Otway Shire is committed to the aims and objectives of the *Public Interest Disclosures Act* 2012 (Vic). Council has established guidelines for responding to public interest disclosures. Reports of improper conduct, corrupt conduct, criminal offences, serious professional misconduct, conduct involving a substantial mismanagement of public resources or conduct involving a substantial risk to public health and safety by Colac Otway Shire or its employees, can be made to the nominated Council staff or the independent Broad-based Anti-Corruption Commission (IBAC).

Disclosures may be made by any person including a member, officer or employee of Colac Otway Shire. There were zero public interest disclosures reported in 2020-21. A copy of the Public Interest Disclosures Policy is available from Council's website.

ROAD MANAGEMENT ACT MINISTERIAL DIRECTIONS

Council, as a road authority, is required under Section 22 of the Act to publish a copy or summary of any direction received from the Minister in its annual report. No Ministerial Directions were received during 2020-21.

Financials

Colac Otway Shire Council | Annual Report 2020-21 / 93

Financial Performance Report

We are committed to providing accurate, understandable and fair reporting on our financial performance for 2020-21 and our financial position at the end of the reporting period. The financial report enables an assessment of our ability to deliver current services and maintain existing facilities in the longer-term.

IN BRIEF

The 2020-21 results show that some critical indicators have improved yet continue an underlying forecast trend downward, specifically:

- the adjusted underlying result (excluding non-recurrent capital funding and contributions) increased to \$4.5 million due to a significant reduction in the landfill restoration provision movement by \$3.3 million (recognised as revenue) offset by a \$580,000 impairment expense for right of use assets. This would have been \$1.8 million underlying surplus if this provision movement had not been recognised. This result is higher than budgeted due to the timing of expenditure associated with operating initiatives carried forward to 2021-22 of \$1.2 million. (low-risk in 2020-21)
- The working capital ratio has increased slightly to 190% (2019-20 178%). This is positively impacted by grant funding received in advance for capital and operating projects carried forward to 2021-22 totalling \$6.7 million (lowrisk in 2020-21).
- The Internal Financing Ratio has increased from 83.3% in 2019-20 to 165.3% in 2020-21. This is also positively impacted by capital and operating projects carried forward to 2021-22 (low-risk in 2020-21).
- The capital replacement ratio has decreased from 136% in 2019-20 to 121% in 2020-21. The target is greater than 150% and measures the rate of spending on fixed assets compared with its depreciation (medium-risk in 2020-21).
- The renewal gap ratio (capital renewal and upgrade compared to depreciation) was 98% in 2020-21 (2019-20: 109%). The target is 100% and measures Council's ability to replace existing assets with the same or better quality assets (medium risk in 2020-21).

The indicators that continue to improve are:

• The debt (or borrowings) ratio (borrowings compared to rates) has reduced to 2.3% (2019-20: 3.3%). This is due to repayment of loans in 2020-21 of \$286,000 (low risk in 2020-21).

• The indebtedness ratio (non-current liabilities compared to own-source revenue) has reduced to 16.1% (2019-20: 27.1%). This is due to a significant reduction in the landfill restoration provision by \$3.3 million and repayment of loans and lease liabilities of \$391,000 (low risk in 2020-21).

An explanation and some commentary on these indicators is discussed further in this report.

Other key results include:

- Net surplus \$6.40m
- Capital works program \$9.93m, of which 94% related to asset renewal projects and \$5.51m was carried forward to 2021-22 (funded by \$3.95m grant revenue received in advance)
- Working capital \$12.93m (including \$3.95m capital grant revenue and \$1.52m operating grant revenue received in advance)
- Cash balance \$21.96m

The \$6.85 million income and expenditure favourable variance compared to budget primarily relates to the following:

- \$3.3m other income represents a reduction in the landfill restoration provision movement due to an independent expert assessment of Council's obligations for future restoration of ten closed landfill sites reducing the expected cost of works required;
- \$1.0m unbudgeted successful capital opportunities, including Central Reserve lighting and netball court redevelopment funding of \$514,000;
- \$1.0m reduced operating grants, including:
 - (\$2.62m) City Deal project funding not received for Apollo Bay harbour redevelopment as a result of renegotiating the project delivery and later timing of milestones for grant payments;
 - (\$0.53m) Forrest Mountain Bike Trail revitalisation project funding received in advance and carried forward to 2021-22;
 - \$0.98m additional Working For Victoria funding partly used for redeployment of staff to respond to the COVID-19 pandemic;
 - \$0.28m unbudgeted Elliminyt Recreation Reserve velodrome resurfacing funding carried forward 2021-22;
 - \$0.27m unbudgeted City Deal project funding for infrastructure improvements at Kennett River.

- \$0.62m additional non-monetary contributions (gifted subdivision infrastructure assets);
- \$0.70m additional reimbursements, including Barwon Water reimbursement of water mains relocation for Forest Street bridge widening, Municipal Pandemic Plan implementation and Municipal Emergency Response contractor.
- \$1.89m additional employee benefits, noting:
 - Employee benefits increased by 9.2% compared to 2019-20.
 - The COVID-19 pandemic required the continued closure of Council facilities in 2020-21 and resulted in a decrease in Council user fee revenue and associated expenses.
 Additional costs from closed facilities were offset in 2020-21 by redeployment of Council staff to activities funded by the Working for Victoria program in response to the pandemic.
 - Additional aged care (OPASS) hours delivered for increased number of home care packages available to clients (funded by additional user fees).
- \$2.54m reduced materials and services expense, noting:
 - Materials and services reduced by 11.3% compared to 2019-20.
 - Reduction in the use of contractors in 2020-21.
 - Operating projects and programs totalling
 \$1.20m were carried forward to 2021-22 mainly due to the uncertainty of the COVID-19 pandemic.
- \$0.93m reduced depreciation expense due to reassessment of longer useful lives for road infrastructure following preparation of the 2020-21 Budget.
- \$0.58m impairment expense for right of use assets relating to leased two-way radio equipment not able to be recovered from the supplier following voluntary liquidation in 2019.

For more information on the actual variances to budget please refer to the 'In Principle' Financial Statements Note 1 – Performance against budget.

Council ended the financial year with a total cash balance of \$21.96 million. This is an increase of \$5.76 million from the prior year, primarily due to:

• Increasing reserve commitments by \$6.14 million, including increased carry forwards by 4.26 million. This reflects the timing of grant funding received in advance (\$5.47 million) and associated carry forward expenditure.

OPERATING RESULTS

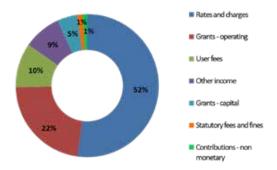
The surplus for the year totalled \$6.40 million, compared to a surplus of \$1.17 million in 2019-20.

Council's major challenge in future years remains ensuring Council is generating sufficient cash to fund infrastructure renewal requirements, whilst ensuring capacity to deliver significant carry forward projects and maintaining service levels. Rate capping and COVID-19 pandemic restrictions will continue to restrict Council's ability to raise revenue, therefore a sustainable Long Term Financial Plan and Revenue and Rating Plan is essential.

Council is undertaking further development of a more robust Long Term Financial Plan and Revenue and Rating Plan in 2021-22 that should assist in meeting these requirements.

REVENUE

Total revenue for 2020-21 is \$61.14 million (budgeted \$55.63 million) compared with \$56.75 million for 2019-20. Further detail on our income can be seen in the Comprehensive Income Statement.

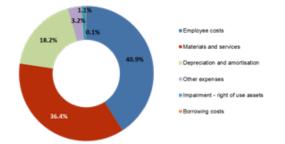


An analysis of Council's revenue sources highlights that 74% of our income is derived from two income categories:

- Rates and charges 52% (2019/-0: 55%)
- Operating grants 22% (2019-20: 23%)

EXPENDITURE

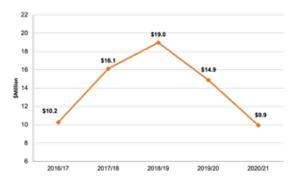
Total expenses for 2020-21 is \$54.74 million (budgeted \$56.08 million), \$0.85 million, or 1.5%, less than the \$55.59 million spent in 2019-20 (detailed in the Comprehensive Income Statement).



An analysis of expenses indicates that 95% were in the following three categories:

- Employee benefits 41%
- Materials and services 36%
- Depreciation and amortisation 18%

CAPITAL WORKS



In 2020-21 Council's Capital Works activities decreased by \$4.96 million from last year, to a total of \$9.93 million. Renewal of our existing assets accounted for \$9.34 million, new assets accounted for \$297,000 and upgrade to existing assets totalled \$297,000. Investment in capital works is a strategic approach to maintaining or renewing the community's existing assets as they age.

Activities included:

- \$4.1m on road works;
- \$1.7m on drainage and storm water;
- \$1.6m on bridge works.
- \$1.4m on renewal of Council's plant, machinery and equipment;
- \$0.7m on footpaths and cycle ways;
- \$0.2m on buildings; and
- \$0.2m on other infrastructure

ASSETS

Total assets are valued at \$399.74 million; 99% consisting of:

- Property, plant, equipment and infrastructure (land, buildings, roads, bridges etc.)
- Cash assets (mainly short-term investments)

A \$580,000 impairment expense was recognised in 2020-21 for right of use assets due to leased twoway radio equipment not able to be recovered from the supplier following voluntary liquidation in 2019. The fair value adjustment resulted in the carrying value of leased two-way radio equipment being reduced from \$680,000 to the expected recoverable amount of \$100,000.

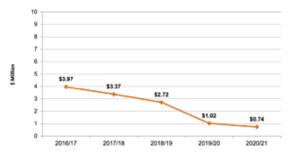
LIABILITIES

Total liabilities were \$21.46 million as at 30 June 2021. Liabilities include loans, lease obligations, amounts owed to suppliers, provisions for landfill rehabilitation and amounts owed to employees for leave entitlements. Liabilities increased by \$0.41 million, in comparison with 2019-20.

The provision for landfill restoration reduced by \$3.27 million to \$5.64 million in 2020-21. A significant reduction in the landfill restoration provision movement by \$3.27 million was recognised in 2020-21. This was due to an independent expert assessment of Council's obligations for future restoration of ten closed landfill sites reducing the expected cost of works required. Four of the closed sites were found not to pose a risk to health or the environment to warrant immediate rehabilitation. Council was provided with updated expected cost of works during the financial year for provisioning of adequate funds to address the specific management actions required for rehabilitation and aftercare of all ten closed landfill sites taking into consideration current EPA regulations and any updated risk assessments.

LOAN LIABILITY

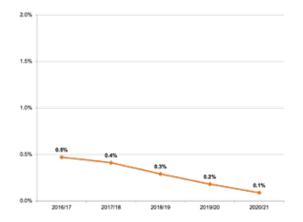
Council's borrowings liability levels reduced from \$1.02 million in 2019-20 to \$0.74 million in 2020-21.



During 2020-21 Council made total loan payments of \$339,000 (\$286,000 repayment and \$53,000 interest). Council's current borrowings are very low.

FINANCIAL INDICATORS

The financial indicators included in this report provide information on performance trends over time.

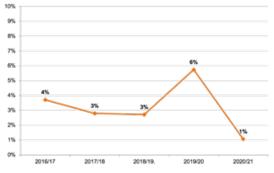


DEBT SERVICING RATIO

The Debt Servicing Ratio essentially shows how much Council spends on maintaining its outstanding debts compared with how much revenue it earns. These debt-servicing costs refer to the payment of interest on loan borrowings. The ratio expresses the amount of interest paid as a percentage of our total revenue.

The ratio of 0.1% is very low and indicates that Council is able to service existing debt levels and have further capacity to borrow if required.

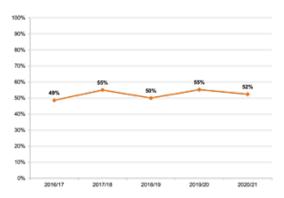
DEBT COMMITMENT RATIO



The Debt Commitment Ratio is used to illustrate how much rate revenue is used to fund existing borrowing commitments during the year. This includes the payment of principal and interest relating to loans. The rate at which the ratio either increases or decreases is a reflection of Council's debt redemption strategy. The debt repayment ratio expresses the percentage of rate revenue utilised to pay interest and redeem debt principal.

The Debt Commitment Ratio was higher in 2019-20 due to the increased repayment of loans, including a \$1 million bond repayment in November 2019, which was taken under the Local Government Funding Vehicle in 2014.

REVENUE RATIO



The Revenue Ratio shows the level of reliance on rate revenue. It is an indication of how much total revenue comes from rates and charges. It is influenced by other revenue sources such as government grants, contributions, special charges, user fees and charges. Rate income is a secure and predictable source of revenue. A low ratio can warn of undue reliance on other forms of revenue, which may or may not be sustainable, e.g. government grants. The preferred position is for a reliance on rates and other commercial revenue, with a low dependency on government grants.

FINANCIAL SUSTAINABILITY INDICATORS

Financial sustainability is defined in a number of different ways. A generally accepted definition is whether local governments have sufficient current and prospective financial capacity (inflows) to meet their current and prospective financial requirements (outflows).

To be sustainable, councils need to have some excess capacity at any point in time to be able to manage future financial risks and shocks without having to radically adjust their current revenue or expenditure policies.

The following seven indicators are utilised and published by the Victorian Auditor General annually, to assess the financial viability of councils. The figures for the financial years 2016-17 to 2019-20 are taken from the Victorian Auditor-General's Office (VAGO) report that can be found at:

https://www.audit.vic.gov.au/report/results-2019-20audits-local-government

The 2020-21 figures in the following graphs are officer calculations of the ratios.

The following table summarises Colac Otway Shire Council's result for 2020-21:

Indicators	Colac		Risk Levels	
Indicators	Otway Result	High	Medium	Low
Net Result Ratio	10.5%	Less than Negative 10%	Between negative 10% and zero	Greater than zero
Adjusted underlying result	7.6%	Less than 0%	Between 0% and 5%	Greater than 5%
Liquidity Ratio	189.7%	Less than 75%	Between 75% and 100%	Greater than 100%
Indebtedness Ratio	16.1%	Greater than 60%	Between 40% and 60%	Less than 40%
Internal Financing Ratio	165.3%	Less than 75%	Between 75% and 100%	Greater than 100%
Capital Replacement	120.9%	Less than 100%	Between 100% and 150%	Greater than 150%
Renewal Gap	97.6%	Less than 50%	Between 50% and 100%	Greater than 100%

The following information provides a definition for each indicator and the five year trend for each:

NET RESULT RATIO

This measures how much of each dollar collected as revenue translates to net result. A positive result indicates a surplus, and the larger the percentage, the stronger the result.



This ratio includes capital grants and grants received in advance that aid in generating a surplus. This can be utilised for new assets or asset renewal. This result places Council within the 'Low' risk category for financial sustainability.

ADJUSTED UNDERLYING RESULT



This measures an entity's ability to generate surplus in the ordinary course of business—excluding non-recurrent capital grants, non-monetary asset contributions, and other contributions to fund capital expenditure from the net result. A deficit suggests a reduction in the operating position.

The 2020-21 result has improved due to a reduction in the landfill restoration provision movement by \$3.27 million (recognised as revenue), which is due to an independent expert assessment of Council's obligations for future restoration of ten closed landfill sites reducing the expected cost of works required. The result has also reduced by \$580,000 due to impairment of right of use assets relating to leased two-way radio equipment not able to be recovered from the supplier following voluntary liquidation. The 2020-21 result would have been 3.24% if this provision movement and impairment had not been recognised.

WORKING CAPITAL RATIO

This measures an entity's ability to pay existing liabilities in the next 12 months. A ratio greater than 100% means there are more cash and liquid assets than short-term liabilities.



The Working Capital Ratio expresses the level of current assets, such as cash and investments, that Council has available to meet our current liabilities. This includes outstanding creditors and employee entitlements.

The current ratio of 190% is above the low risk target, but includes \$6.7 million of cash received in advance.

INDEBTEDNESS RATIO

This assesses an entity's ability to pay liabilities, as and when they fall due, from the funds it generates. The lower the ratio, the less revenue the entity is required to use to repay its total debt. Own-sourced revenue is used, rather than total revenue, because it does not include grants or contributions.



The ratio is comfortably in the low risk category, indicating that we are generating sufficient funds to cover debt without requiring outside assistance.

This indicator has decreased in 2020-21 due to a significant reduction in the landfill restoration provision by \$3.27 million and repayment of loans and lease liabilities of \$391,000.

INTERNAL FINANCING RATIO

This measures an entity's ability to finance capital works using cash generated by its operating cash flows. The higher the percentage, the greater the ability for the entity to finance capital works from its own funds.

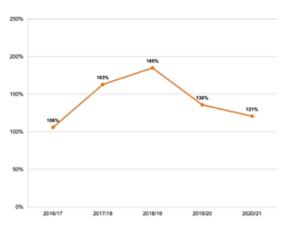


Results indicate that Council's ability to generate sufficient cash from operations to fund the renewal of existing assets has declined over the last three years.

This indicator is positively impacted by capital and operating projects carried forward to 2020-21 of \$6.72 million.

CAPITAL REPLACEMENT RATIO

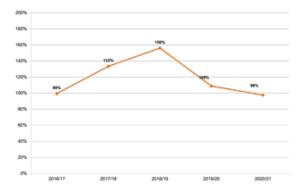
This compares the rate of spending on infrastructure, property, plant and equipment, and intangibles with its depreciation and amortisation. This is a long-term indicator, as capital expenditure can differ in the short term if there are insufficient funds available from operations or borrowings. A ratio 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. The 2020-21 result is assessed as medium risk and is impacted by the carry forward of capital projects of \$5.41 million to 2021-22.

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). The 2020-21 result is just outside the low risk category.

Understanding The Financial Statements

INTRODUCTION

The financial statements show Council's performance during 2020-21 and our overall financial position as at 30 June 2021.

We present our financial report in accordance with Australian Accounting Standards. Particular terms required by the standards may not be familiar to some readers. Our commitment is to be as transparent as possible. It is in this context that the following explanations have been developed to assist readers to understand and analyse the financial report.

The financial report comprises two sets of statements:

- Financial Statements (see page 105)
- Performance Statement (see page 147)

ANNUAL FINANCIAL REPORT

The Annual Financial Report contains the General Purpose Financial Statements. The data throughout this report includes all entities controlled by Council.

Council's financial report has two main sections, the Report and the Notes. There are five Statements and ten notes. These are prepared by Council staff, reviewed by Council and Council's Audit and Risk Committee and then given audit approval by the Victorian Auditor-General.

The five statements included in the first few pages of the report are the Comprehensive Income Statement, Balance Sheet, Statement of Changes in Equity, Statement Cash Flows and Statement of Capital Works.

The Notes detail Council's accounting policies and give further information about the make-up of the values contained in the statements.

COMPREHENSIVE INCOME STATEMENT

This statement includes all sources of income, less all operating expenses incurred in delivering Council services. It also includes depreciation of the value of buildings, roads, footpaths, drains and all other assets used to deliver Council services. These assets are depreciated over their life as they are used. Capital costs or new assets acquired or created during the year are excluded from this

statement.

Preparation of the statement is on an 'accrual' basis. This means that all income and costs for the year are recognised even though the income may not have been received (interest on bank deposits), or expenses not paid (invoices not received for goods and services already used). Similarly, income, such as grant revenue, that is received in advance is held on the Balance Sheet as a current liability and not recognised as revenue until earned (i.e. the required performance obligations have been met under the funding agreement).

The key figure to look at is the underlying surplus/ (deficit) for the year. A surplus that is positive means that recurrent revenue was greater than recurrent expenses. Continual deficits (losses) may raise questions about Council's ability to be financially viable in the longer-term.

BALANCE SHEET

The Balance Sheet is a one-page summary of our financial position as at 30 June each financial year. It shows what we own (assets) and what we owe (liabilities). The bottom line of this statement is net assets or the 'net worth' of Council.

The assets and liabilities are separated into current and non-current. Current means those assets or liabilities which will fall due or will be used in the next 12 months. The components of the balance sheet are described below.

CURRENT AND NON-CURRENT ASSETS

- Cash and cash equivalents include cash held at bank, petty cash and term deposits with an original investment period of 90 days or less.
- Other Financial Assets include investments, such as term deposits with original investment periods greater than 90 days.
- Trade and Other Receivables are monies owed to Council by ratepayers and other customers.
- Inventories include any stock being held by Council.
- Other assets include accounts which have been prepaid.
- Investment in Associates and joint ventures is the investment in the Corangamite Regional Library Corporation.

- Property, Plant and Equipment, Infrastructure is the largest component of Council's worth and represents the value of all land, buildings, roads, vehicles, equipment, and other items.
- Right-of-use assets consist of leased assets, which Council has the right to use over the life of a lease.

CURRENT AND NON-CURRENT LIABILITIES

- Trade and other payables include monies owed by Council as at 30 June each financial year and unearned income received in advance.
- Trust funds and deposits are monies received and held by Council.
- Provisions include landfill rehabilitation works and employee benefits, such as accrued long service and annual leave.
- Interest bearing loans and borrowings includes loans repaid over a set period of time.
- Lease liabilities are financial obligations to make the payments arising from leased assets, where control of the asset is transferred to Council.

NET ASSETS

This term is used to describe the difference between the value of total assets and the value of total liabilities. It represents the net worth of Council as at 30 June each financial year. The net value of Council is also synonymous with total equity.

TOTAL EQUITY

- Asset revaluation reserve is the difference between the cost of property and infrastructure assets and their current valuations.
- Other reserves are allocations of the accumulated surplus for specific funding purposes. Some are required by legislation, some are mandated under Council policy.
- Accumulated surplus is the value of all net assets accumulated over time.

STATEMENT OF CHANGES IN EQUITY

The value of total equity, as set out in the balance sheet, changes during the year. The statement shows the movement in total equity and any movement between accumulate surplus and reserves.

The main reasons for changes in equity are:

- The 'profit and loss' from operations, described in the Comprehensive Income Statement as the surplus/(deficit)) for the year.
- The use of monies from Council's reserves and transfers to Council's reserves.

• Revaluation of assets occurs to ensure that assets are correctly valued at current replacement value.

STATEMENT OF CASH FLOWS

The Statement of Cash Flows summarises Council's cash payments and cash receipts for the year. This statement is presented according to a very specific Accounting Standard and needs some care in analysis. The values may differ from those shown in the Comprehensive Income Statement because this statement is prepared on an accrual accounting basis.

The amounts disclosed in the Cash Flow Statement are our cash flows generated from, and used in, three main areas:

1. Cash Flow from Operating Activities

Receipts. All cash received into Council's bank account from ratepayers and other monies owed to Council. Receipts also include the interest assets from Council's cash investments. It does not include the costs associated with the sale of assets.

Payments. All cash paid from Council's bank account to suppliers, staff and other persons. It does not include the costs associated with the creation of assets.

2. Cash Flow from Investing Activities

The accounting term Investing Activities relates to payments for the acquisition of assets, such as new plant, roads and other long-term revenue producing assets. It also includes the proceeds from the sale of assets, such as plant, and land.

3. Cash Flow from Financing Activities

This is where the receipt and repayment of borrowed funds are recorded, as well as any movement in trust funds and deposits held by Council.

The bottom line of the Statement of Cash Flows is our total cash at the end of the financial year.

The Statement of Cash Flows is important as it shows the source of our funds and details how they are spent.

STATEMENT OF CAPITAL WORKS

The Statement of Capital Works summarises Council spending on assets for the year. The Statement of Capital Works breaks all capital expenditure incurred by Council into three broad headings – Property, Plant and Equipment, and Infrastructure, with relevant sub groups below these.

The Statement of Capital Works also shows asset spending by three categories:

- New asset expenditure spending on assets that Council has not possessed previously.
- Asset renewal expenditure spending on renewing Council's existing assets back to their original service provision capacity.
- Asset upgrade expenditure spending on improving the service capacity of Council's existing assets.

NOTES TO THE ACCOUNTS

The Notes are an important and informative section of the report. The Australian Accounting Standards are not prescriptive on a lot of issues.

Apart from the accounting policies, the Notes also give details behind many of the summary figures contained in the statements. The Note numbers are shown beside the relevant items in the Comprehensive Income Statement, Balance Sheet, Statement of Changes in Equity and the Statement of Cash Flows.

Note 1 provides for a comparison between end of year actual results and Council's adopted budget, highlighting and providing explanations for major variances.

Where Council wishes to disclose other information that cannot be incorporated in the statements, then this is shown in the Notes. Other Notes include:

- The cost of the various functions of Council.
- The breakdown of expenses, revenues, reserves and other assets.
- Transactions with persons related to Council.
- Financial performance indicators.

The Notes should be read in conjunction with the other parts of the Financial Statements to get a clear picture of the accounts.

WHAT IS THE PERFORMANCE STATEMENT?

The Performance Statement reports on Council's progress for the financial year against the Local Government Performance Reporting Framework indicators adopted as part of the annual budget. They include financial and non-financial data.

Our external auditors review the evidence and accuracy of the results.

STATEMENTS BY PRINCIPAL ACCOUNTING OFFICER AND COUNCILLORS

The Certification of the Principal Accounting Officer is made by the person responsible for the financial management of Council. It assures that, in her/his opinion, the financial statements have met all the statutory and professional reporting requirements.

The Certification of Councillors is made by two councillors on behalf of Council confirming that in their opinion the financial statements are fair and not misleading. The Chief Executive also endorses and signs the certification.

AUDITOR GENERAL'S REPORT

The Independent Auditor's Report provides an external opinion on the financial statements. The opinion covers statutory and professional requirements as well as addressing the fairness aspects of the financial statements.

Colac Otway Shire Council ANNUAL FINANCIAL REPORT

For the Year Ended 30 June 2021

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Certification of the Financial Statements

In my opinion, the accompanying financial statements have been prepared in accordance with the Local Government Act 1989, the Local Government (Planning and Reporting) Regulations 2014, the Australian Accounting Standards and other mandatory professional reporting requirements.

Amanda Barber CPA Principal Accounting Officer

27 October 2021 Colac

In our opinion the accompanying financial statements present fairly the financial transactions of Colac Otway Shire Council for the year ended 30 June 2021 and the financial position of the Council as at that date.

As at the date of signing, we are not aware of any circumstances that would render any particulars in the financial statements to be misleading or inaccurate.

We have been authorised by the Council and by the Local Government (Planning and Reporting) Regulations 2014 to certify the financial statements in their final form.

Cr Graham Coslin Councillor

27 October 2021 Colac

SLAD

Cr Stephen Hart Councillor

27 October 2021 Colac

Anne Howard

Anne Howard Chief Executive

27 October 2021 Colac

Independent Auditor's Report



To the Councillors of Colac Otway Shire Council

Opinion	I have audited the financial report of Colac Otway Shire Council (the council) which comprises the:
	 balance sheet as at 30 June 2021 comprehensive income statement for the year then ended statement of changes in equity for the year then ended statement of cash flows for the year then ended statement of capital works for the year then ended notes to the financial statements, including significant accounting policies certification of the financial statements.
	position of the council as at 30 June 2021 and their financial performance and cash flows for the year then ended in accordance with the financial reporting requirements of Part 6 of the <i>Local Government Act 1989</i> and applicable Australian Accounting Standards.
Basis for Opinion	I have conducted my audit in accordance with the <i>Audit Act 1994</i> which incorporates the Australian Auditing Standards. I further describe my responsibilities under that Act and those standards in the <i>Auditor's Responsibilities for the Audit of the Financial Report</i> section of my report.
	My independence is established by the <i>Constitution Act 1975</i> . My staff and I are independent of the council in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 <i>Code of Ethics for Professional Accountants</i> (the Code) that are relevant to my audit of the financial report in Victoria. My staff and I have also fulfilled our other ethical responsibilities in accordance with the Code.
	I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.
Councillors' responsibilities for the financial report	The Councillors of the council are responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the <i>Local Government Act 1989</i> , and for such internal control as the Councillors determine is necessary to enable the preparation and fair presentation of a financial report that is free from material misstatement, whether due to fraud or error.
	In preparing the financial report, the Councillors are responsible for assessing the council's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is inappropriate to do so.

Level 31 / 35 Collins Street, Melbourne Vic 3000 T 03 8601 7000 enquiries@audit.vic.gov.au www.audit.vic.gov.au

Auditor's responsibilities for the audit of the financial report

As required by the *Audit Act 1994*, my responsibility is to express an opinion on the financial report based on the audit. My objectives for the audit are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the council's internal control
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Councillors
- conclude on the appropriateness of the Councillors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the council's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the council to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Councillors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

MELBOURNE 4 November 2021

Sanchu Chummar as delegate for the Auditor-General of Victoria

Comprehensive Income Statement For the Year Ended 30 June 2021

	Note	2021	2020
Income		\$'000	\$'000
Rates and charges	3.1	31,914	31,366
Statutory fees and fines	3.2	740	807
User fees	3.3	6,120	5,269
Grants - operating	3.4	13,732	13,174
Grants - capital	3.4	2,789	3,902
Contributions - monetary	3.5	254	195
Contributions - non monetary	3.5	617	728
Net gain (or loss) on disposal of property, infrastructure, plant and equipment	3.6	183	(44)
Share of net profits (or loss) of associates and joint ventures	6.2	(44)	(++)
Other income	3.7	4,839	1,303
Total income		61,144	56,752
Expenses			
Employee costs	4.1	22,410	20,727
Materials and services	4.2	19,936	22,458
Depreciation and amortisation	4.3	9,868	10,944
Amortisation - right of use assets	4.4	119	95
Impairment - right of use assets	4.9	580	-
Bad and doubtful debts	4.5	34	15
Borrowing costs	4.6	53	102
Finance costs - leases	4.7	35	35
Other expenses	4.8	1,706	1,209
Total expenses		54,741	55,585
Surplus/(deficit) for the year		6,403	1,167
Other comprehensive income			
Items that will not be reclassified to surplus or deficit in future periods			
Net asset revaluation increment/(decrement)	6.2	16,453	32,113
Total comprehensive result		22,856	33,280

The above comprehensive income statement should be read in conjunction with the accompanying notes.

Balance Sheet As at 30 June 2021

S000 S000 Assets Current assets Cash and cash equivalents 5.1 21.958 16.198 Trade and other receivables 5.1 4.009 3.360 Inventories 5.2 155 215 Non-current assets classified as held for sale 6.1 715 - Other assets 5.2 496 486 Total current assets 27,333 20.259 Non-current assets 5.8 16.6 663 Total current assets 5.8 16.6 663 Total assets 372,403 357,035 377,294 Liabilities 399,736 377,294 357,035 Current iabilities 5.3 741 985 Total assets 399,736 377,294 357,035 Liabilities 5.3 8,438 5,622 Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 5,792<		Note	2021	2020
Current assets 5.1 21,958 16,198 Trade and other receivables 5.1 4,009 3,360 Inventories 5.2 155 215 Non-current assets 5.2 496 486 Total current assets 22 3357,33 20,259 Non-current assets 27,333 20,259 20,259 Non-current assets 23,233 20,259 355,731 Property, infrastructure, plant and equipment 6.2 372,238 355,731 Investments in associates, joint arrangements and subsidiaries 6.3 - 441 Right-of-use assets 5.8 165 663 Total non-current assets 337,033 3377,294 3377,294 Liabilities Current liabilities 5.3 8,438 5,622 Trust unds and deposits 5.3 8,438 5,622 101 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.4			\$'000	\$'000
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Inventories 5.2 155 215 Non-current assets classified as held for sale 6.1 715 - Other assets 5.2 496 486 Total current assets 27,333 20,259 Non-current assets 27,333 20,259 Non-current assets 2372,238 355,731 Property, infrastructure, plant and equipment 6.2 372,238 355,731 Investments in associates, joint arrangements and subsidiaries 6.3 - 441 Right-of-use assets 5.8 165 863 Total assets 372,403 357,035 377,294 Liabilities 399,736 377,294 377,294 Liabilities 5.3 8,438 5,622 Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 110 105 Total current liabilities 5.4 516 773 Non-current liabilities 5.5 5,792 9,005 Lease liabilities 5.8	•			,
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Total current assets 27,333 20,259 Non-current assets Property, infrastructure, plant and equipment investments in associates, joint arrangements and subsidiaries 6.2 372,238 355,731 Investments in associates, joint arrangements and subsidiaries 6.3 - 441 Right-of-use assets 5.8 165 863 Total assets 5.8 165 863 Total assets 3399,736 377,294 Liabilities 3399,736 377,294 Current liabilities 5.3 8,438 5,622 Trust funds and deposits 5.3 7,41 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 5.4 5.5 5,792 9,005 Lease liabilities 5.8 663 773 10,516 Total current liabilities 5.5 5,792 9,005 10,516 Total current liabilities				-
Non-current assets Image: Constraint of the system of the sy		5.2		
Property, infrastructure, plant and equipment 6.2 372,238 355,731 Investments in associates, joint arrangements and subsidiaries 6.3 - 441 Right-of-use assets 5.8 165 863 Total non-current assets 339,736 377,294 Liabilities 339,736 377,294 Current liabilities 5.3 8,438 5,622 Trust funds and deposits 5.3 7,41 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 5.8 110 105 Total current liabilities 5.4 5.5 5,792 9,005 Lease liabilities 5.8 663 7773 Total non-current liabilities 5.8 663 7773 Total non-current liabilities 5.8 663 7773 Total non-current liabilities 378,279 355,423 21,457 2	Total current assets		27,333	20,259
Investments in associates, joint arrangements and subsidiaries 6.3 - 441 Right-of-use assets 5.8 165 863 Total non-current assets 372,403 337,035 337,035 Total assets 399,736 377,294 399,736 377,294 Liabilities Current liabilities 5.3 8,438 5,622 Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 14,406 11,355 Non-current liabilities 5.4 596 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 105,516 Total non-current liabilities 7,051 105,516 Total liabilities 378,279 355,423 Net assets				
Right-of-use assets 5.8 165 863 Total non-current assets 372,403 357,035 Total assets 399,736 377,294 Liabilities 399,736 377,294 Current liabilities 5.3 8,438 5,622 Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 5.4 14,406 11,355 Non-current liabilities 5.4 5.96 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Non-current liabilities 5.8 663 773 Total non-current liabilities 5.8 663 773 Total inabilities 7,051 10,516 10,516 Total liabilities 378,279 355,423 121,457 21,871 <	Property, infrastructure, plant and equipment		372,238	355,731
Total non-current assets 372,403 357,035 Total assets 399,736 377,294 Liabilities 5.3 8,438 5,622 Trade and other payables 5.3 8,438 5,622 Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 5.4 5.5 5,792 9,005 Lease liabilities 5.5 5,792 9,005 10,516 Interest-bearing liabilities 5.8 663 773 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 10,516 Total liabilities 378,279 355,423 21,457 21,871 Net assets 378,279 355,423 376,279 355,423 Equity Accumulated surplus 130,794 130,529 224,884 <	Investments in associates, joint arrangements and subsidiaries	6.3	-	441
Total assets 399,736 377,294 Liabilities Current liabilities	Right-of-use assets	5.8		
Liabilities Current liabilities Trade and other payables 5.3 8,438 5,622 Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 5.8 110 105 Non-current liabilities 5.4 596 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.4 596 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 30,794 130,794 130,529 Reserves 9,1 247,485 224,844	Total non-current assets		372,403	357,035
Current liabilities Trade and other payables 5.3 8,438 5,622 Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 5.8 110 105 Non-current liabilities 5.4 5.96 738 Provisions 5.5 5.792 9,005 Lease liabilities 5.4 5.8 663 773 Total non-current liabilities 7,051 10,516 10,516 Total liabilities 21,457 21,871 21,871 Net assets 378,279 355,423 355,423 Equity 130,794 130,529 224,894 Reserves 9.1 247,485 224,894	Total assets		399,736	377,294
Trade and other payables 5.3 8,438 5,622 Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 14,406 11,355 Non-current liabilities 14,406 11,355 Interest-bearing liabilities 5.4 596 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total non-current liabilities 7,051 10,516 Total liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9.1 247,485 224,894	Liabilities			
Trust funds and deposits 5.3 741 985 Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 5.4 5.5 5.792 Non-current liabilities 5.4 5.5 5.792 9,005 Lease liabilities 5.4 5.96 738 Provisions 5.5 5.792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total liabilities 378,279 355,423 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9.1 247,485 224,894	Current liabilities			
Interest-bearing liabilities 5.4 142 286 Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 14,406 11,355 Non-current liabilities 14,406 11,355 Interest-bearing liabilities 5.4 596 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Provisions 5.8 663 773 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total liabilities 378,279 355,423 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9.1 247,485 224,894	Trade and other payables	5.3	8,438	5,622
Provisions 5.5 4,975 4,357 Lease liabilities 5.8 110 105 Total current liabilities 14,406 11,355 Non-current liabilities 5.4 596 738 Interest-bearing liabilities 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total liabilities 378,279 355,423 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9,1 247,485 224,894	Trust funds and deposits	5.3	741	985
Lease liabilities 5.8 110 105 Total current liabilities 14,406 11,355 Non-current liabilities 14,406 11,355 Interest-bearing liabilities 5.4 596 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 5.8 663 773 Total non-current liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9,1 247,485 224,894	Interest-bearing liabilities	5.4	142	286
Total current liabilities 14,406 11,355 Non-current liabilities Interest-bearing liabilities 5.4 596 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 5.8 663 773 10,516 Total non-current liabilities 7,051 10,516 10,516 Total liabilities 378,279 355,423 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9,1 247,485 224,894	Provisions	5.5	4,975	4,357
Non-current liabilities 5.4 596 738 Interest-bearing liabilities 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9,1 247,485 224,894	Lease liabilities	5.8	110	105
Interest-bearing liabilities 5.4 596 738 Provisions 5.5 5,792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9.1 247,485 224,894	Total current liabilities		14,406	11,355
Provisions 5.5 5.792 9,005 Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9.1 247,485 224,894	Non-current liabilities			
Lease liabilities 5.8 663 773 Total non-current liabilities 7,051 10,516 Total liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9.1 247,485 224,894	Interest-bearing liabilities	5.4	596	738
Total non-current liabilities 7,051 10,516 Total liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9.1 247,485 224,894	Provisions	5.5	5,792	9,005
Total liabilities 21,457 21,871 Net assets 378,279 355,423 Equity 130,794 130,529 Reserves 9.1 247,485 224,894	Lease liabilities	5.8	663	773
Net assets 378,279 355,423 Equity	Total non-current liabilities		7,051	10,516
Equity 130,794 130,529 Accumulated surplus 9.1 247,485 224,894	Total liabilities		21,457	21,871
Accumulated surplus 130,794 130,529 Reserves 9.1 247,485 224,894	Net assets		378,279	355,423
Reserves 9.1 247,485 224,894	Equity			
Reserves 9.1 247,485 224,894	Accumulated surplus		130,794	130,529
Total Equity 378,279 355,423		9.1	247,485	224,894
	Total Equity		378,279	355,423

The above balance sheet should be read in conjunction with the accompanying notes.

Statement of Changes in Equity For the Year Ended 30 June 2021

2021	Note	Total \$'000	Accumulated Surplus \$'000	Revaluation Reserve \$'000	Other Reserves \$'000
Balance at beginning of the financial year		355,423	130,529	208,131	16,763
Surplus/(deficit) for the year		6,403	6,403	-	-
Net asset revaluation increment/(decrement)	6.2	16,453	-	16,453	-
Transfers to other reserves	9.1	-	(18,474)	-	18,474
Transfers from other reserves	9.1	-	12,336	-	(12,336)
Balance at end of the financial year		378,279	130,794	224,584	22,901

2020		Total \$'000	Accumulated Surplus \$'000	Revaluation Reserve \$'000	Other Reserves \$'000
Balance at beginning of the financial year		323,297	124,652	176,018	22,627
Impact of change in accounting policy - AASB 15 Revenue from Contracts with Customers		(1,154)	(1,154)		
Adjusted Opening balance	6.2	322,143	123,498	176,018	22,627
Surplus/(deficit) for the year		1,167	1,167	-	-
Net asset revaluation increment/(decrement)	6.2	32,113	-	32,113	-
Transfers to other reserves	9.1	-	(13,597)	-	13,597
Transfers from other reserves	9.1	-	19,461	-	(19,461)
Balance at end of the financial year		355,423	130,529	208,131	16,763

The above statement of changes in equity should be read in conjunction with the accompanying notes.

Statement of Cash Flows For the Year Ended 30 June 2021

	Note	2021 Inflows/ (Outflows) \$'000	2020 Inflows/ (Outflows) \$'000
Cash flows from operating activities	Note	\$ 000	\$ 000
Rates and charges		32,017	30,712
Statutory fees and fines		740	807
User fees		5,115	5,981
Grants - operating		13,527	13,438
Grants - capital		6,454	4,546
Contributions - monetary		254	195
Interest received		29	272
Trust funds and deposits taken/(paid)		(244)	183
Other receipts		1,388	1,003
Net GST refund/(payment)		63	1,718
Employee costs		(22,385)	(20,340)
Materials and services		(21,159)	(25,270)
Other payments	_		(1,209)
Net cash provided by/(used in) operating activities	_	15,799	12,036
Cash flows from investing activities			
Payments for property, infrastructure, plant and equipment	6.2	(9,907)	(14,682)
Proceeds from sale of property, infrastructure, plant and equipment	3.6	347	233
Payments for investments		(6,000)	(27,000)
Proceeds from sale of investments		6,000	27,000
Net cash provided by/(used in) investing activities	_	(9,560)	(14,449)
Cash flows from financing activities			
Finance costs		(53)	(102)
Repayment of borrowings		(286)	(1,697)
Interest paid - lease liability		(35)	(35)
Repayment of lease liabilities		(105)	16
Net cash provided by/(used in) financing activities	—	(479)	(1,819)
	_		
Net increase (decrease) in cash and cash equivalents		5,760	(4,326)
Cash and cash equivalents at the beginning of the financial year		16,198	20,524
	_	<u> </u>	
Cash and cash equivalents at the end of the financial year	_	21,958	16,198
Restrictions on cash assets	5.1		
Financing arrangements	5.6		

The above statement of cash flows should be read in conjunction with the accompanying notes.

Statement of Capital Works			
For the Year Ended 30 June 2021			
	Note	2021 \$'000	2020 \$'000
Property			
Land		-	22
Total land			22
Buildings		224	1,082
Total buildings		224	1,082
Total property	_	224	1,104
Plant and equipment			
Plant, machinery and equipment		1,171	2,176
Fixtures, fittings and furniture		96	599
Computers and telecommunications		123	147
Total plant and equipment	_	1,390	2,921
Infrastructure			
Roads		4,094	4,464
Bridges		1,587	548
Footpaths and cycleways		648	478
Drainage		1,743	2,860
Other infrastructure	_	243	2,510
Total infrastructure	-	8,316	10,859
Total capital works expenditure	6.2	9,929	14,885
Represented by:			
New asset expenditure		297	2,977
Asset renewal expenditure		9,335	11,164
Asset upgrade expenditure		297	744
Total capital works expenditure	_	9,929	14,885

The above statement of capital works should be read in conjunction with the accompanying notes.

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

OVERVIEW

Introduction

The Colac Otway Shire Council was established by an Order of the Governor in Council on 23 September 1994 and is a body corporate. The Council's main office is located at 2-6 Rae Street Colac Victoria 3250.

Statement of compliance

These financial statements are a general purpose financial report that consists of a Comprehensive Income Statement, Balance Sheet, Statement of Changes in Equity, Statement of Cash Flows, Statement of Capital Works and Notes accompanying these financial statements. The general purpose financial report complies with the Australian Accounting Standards (AAS), other authoritative pronouncements of the Australian Accounting Standards Board, the Local Government Act 1989, and the Local Government (Planning and Reporting) Regulations 2014.

Significant accounting policies

(a) Basis of accounting

The accrual basis of accounting has been used in the preparation of these financial statements, whereby assets, liabilities, equity, income and expenses are recognised in the reporting period to which they relate, regardless of when cash is received or paid.

Judgements, estimates and assumptions are required to be made about the carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and associated judgements are based on professional judgement derived from historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

Revisions to accounting estimates are recognised in the period in which the estimate is revised and also in future periods that are affected by the revision. Judgements and assumptions made by management in the application of AAS's that have significant effects on the financial statements and estimates relate to:

- the fair value of land, buildings, infrastructure, plant and equipment (refer to Note 6.2)
- the determination of depreciation for buildings, infrastructure, plant and equipment (refer to Note 6.2)
- the determination of employee provisions (refer to Note 5.5)
- the determination of landfill provisions (refer to Note 5.5)

- the determination of whether performance obligations are sufficiently specific so as to determine whether an arrangement is within the scope of AASB 15 Revenue from Contracts with Customers or AASB 1058 Income of Not-for-Profit Entities (refer to Note 3)

- the determination, in accordance with AASB 16 Leases, of the lease term, the estimation of the discount rate when not implicit in the lease and whether an arrangement is in substance short-term or low value (refer to Note 5.8)

- other areas requiring judgements

Unless otherwise stated, all accounting policies are consistent with those applied in the prior year. Where appropriate, comparative figures have been amended to accord with current presentation (except where transitional requirements of AASB 15 Revenue from Contracts with Customers, AASB 16 Leases and AASB 1058 Income of Not-for-Profit Entities do not require restatement of comparatives under the modified retrospective approach adopted by the Council), and disclosure has been made of any material changes to comparatives.

(b) Impact of Covid-19

On 16 March 2020 a state of emergency was declared in Victoria due to the global pandemic COVID-19 virus, known as coronavirus. A state of disaster was subsequently declared on 2 August 2020. While the impacts of the pandemic have abated somewhat through the 2020-21 year, Council has noted the following significant impacts on its financial operations:

 Additional revenue – Grants received from State Government for Working for Victoria, Outdoor Dining, and Local Roads and Community Infrastructure Programme (LRCI).

• Revenue reductions - User Fees & Charges generated from leisure and performing arts centres reduced due to closures during lockdown.

- Revenue foregone Non-charging of interest on rates, waived street furniture permits, and reduction of leases on community facilities.
- · Additional costs Additional cleaning expenses and increased provisions for doubtful debts and bad debts expenditure.

(c) Rounding

Unless otherwise stated, amounts in the financial report have been rounded to the nearest thousand dollars. Figures in the financial statement may not equate due to rounding.

(d) Abbreviation

The letter 'k' has been used to represent thousands ('000's) and the letter 'm' has been used to represent millions ('000,000's).

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 1 Performance against budget

The performance against budget notes compare Council's financial plan, expressed through its annual budget, with actual performance. The *Local Government (Planning and Reporting) Regulations 2014* requires explanation of any material variances. Council has adopted a materiality threshold of the lower of 10 percent or \$500,000 where further explanation is warranted. Explanations have not been provided for variations below the materiality threshold unless the variance is considered to be material because of its nature.

The budget figures detailed below are those adopted by Council on 22 July 2020. The Budget was based on assumptions that were relevant at the time of adoption of the Budget. Council sets guidelines and parameters for income and expense targets in this budget in order to meet Council's planning and financial performance targets for both the short and long-term. The budget did not reflect any changes to equity resulting from asset revaluations, as their impacts were not considered predictable.

These notes are prepared to meet the requirements of the Local Government Act 1989 and the Local Government (Planning and Reporting) Regulations 2014.

1.1 Income and expenditure

income and e	xpenditure					
		Budget	Actual	Variance	Variance	
		2021	2021	2021	2021	
		\$'000	\$'000	\$'000	%	Ref
Income						
Rates and cha	irges	31,902	31,914	12	0	
Statutory fees	and charges	598	740	142	24	1
User fees and	charges	5,818	6,120	302	5	2
Grants - Opera	ating	14,720	13,732	(988)	(7)	3
Grants - Capita	al	1,800	2,789	989	55	4
Contributions -	- monetary	19	254	235	1,237	5
Contributions -	- non-monetary	-	617	617	100	6
Net gain/(loss)) on disposal of property, infrastructure, plant					
and equipmen	ıt	232	183	(49)	(21)	7
Share of net p	rofits/(losses) of associates and joint ventures	30	(44)	(74)	(247)	
Other income		515	4,839	4,324	840	8
Total income	_	55,634	61,144	5,510		
Expenses						
Employee cos	ts	20,520	22,410	(1,890)	(9)	9
Materials and	services	22,480	19,936	2,544	11	10
Bad and doub	tful debts	2	34	(32)	(1,600)	11
Depreciation a	and amortisation	10,800	9,868	932	9	12
Fair value adju	ustments for right of use assets	-	580	(580)	100	13
Amortisation -	right of use assets	115	119	(4)	(3)	
Borrowing cos	ts	53	53	-	-	
Finance costs	- leases	49	35	14	29	14
Other expense	es	2,063	1,706	357	17	15
Total expense	es	56,082	54,741	1,341		
Surplus/(defi	cit) for the year	(448)	6,403	6,851	(1,529)	
		,			(1,529)

Colac Otway Shire Council 2020/2021 Financial Report		Notes to the Financial Report For the Year Ended 30 June 2021
	ce against budget d expenditure (cont'd) ion of material variations	
Variance Ref	Item	Explanation
1	Statutory fees and charges	A higher than expected amount of fees were recovered from the Planning service of council. These fees relate to planning applications.
2	User fees and charges	An increase in the number of Home Care Packages available to clients in 2020/21 contributed increased Home Care Package user fees above budget by \$0.80m, which is partly offset by increase cost of services. This increase is offset by reduced user fees for closed facilities in response to the COVID-19 pandemic lockdowns relating to Bluewater Leisure Centre, Great Ocean Road Visitor Centre and COPACC.
3	Grants - Operating	 \$1.0m reduced operating grants including: (\$2.62m) City Deal project funding not received for Apollo Bay harbour redevelopment as a result of rescoping of the project and late timing of milestones for grant payments; \$0.98, additional Working For Victoria funding partly used for redeployment of staff to respond to the COVID-19 pandemic
4	Grants - Capital	There were a number of Capital Grant opportunities that council were successful in applying for these include: Local Roads and Community Infrastructure (LRCI) Program Rounds 1 and 2 which were released after the budget was completed.
5	Contributions - monetary	There are a number of Contributions relating to project work which were received from groups. These projects relate to works commenced in the 2019-20 and were unbudgeted in the 2020-21 year.
6	Contributions - non-monetary	These are developer contributions relating to Gifted Subdivision Infrastructure not budgeted for.
7	Net gain/(loss) on disposal of property, infrastructure, plant and equipment	The favourable variance relates to the market being better than expected in relation to the disposal of Plant and Equipment. The main factor for this is the lack of new plant available due to shipping restrictions as a result of COVID-19.
8	Other income	This relates to the movement in the provision relating to the Landfill. The reduction in the provision is shown as income in the Comprehensive Income Statement. The value of this movement is \$3.382m.

Colac Otway Shire Council 2020/2021 Financial Report		Notes to the Financial Report or the Year Ended 30 June 2021
	ce against budget I expenditure (cont'd) iion of material variations	
Variance Ref	ltem	Explanation
9	Employee benefits	The unfavourable variance relates to a number of items. There were a number of funded initiatives which council received funding for. These programmes include Working for Victoria and additional Home Care Packages. There was also a reduction in the amounts of leave taken throughout the year. This is shown in the movement within the employee provisions.
10	Materials and services	The favourable variance relates to the reduction in the use of contractors along with a number of operating projects that were delayed due the uncertainty of COVID-19. There are a number of projects that will be carried over into the 2021-22 year. There has also been the conscious effort to reduce the number of contractors and replace them with permanent staff.
11	Bad and doubtful debts	These are related to the impacts of COVID-19 across the shire plus a set of building fees removed.
12	Depreciation and Amortisation	As a result of councils review of useful lives and depreciation there has been a conscious decision to adjust these to reflect the actual consumption of councils infrastructure assets.
13	Fair value adjustments for right of use asset	This is the Impairment of councils right of use assets which directly relates to the lease of the 2 way radios.
14	Finance costs - leases	In the original budget there was a provision for a new lease. This new lease was not undertaken by council.
15	Other expenses	This favourable variance relates to a number of projects which have not been undertaken in the 2020-21 year. The implementation of these will continue into the 2021-22 financial year.

lac Otway Shire Council 20/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021				
Note 1 Performance against budget					
1.2 Capital works					
	Budget	Actual	Variance	Variance	
	2021	2021	2021	2021	
	\$'000	\$'000	\$'000	%	Re
Property					
Land	-	-	-	-	
Buildings	356	224	(132)	(37)	1
Total property	356	224	(132)	(37)	
Plant and equipment					
Plant, machinery and equipment	2,425	1,171	(1,254)	(52)	2
Fixtures, fittings and furniture	-	96	96	100	3
Computers and telecommunications	21	123	102	486	4
Total plant and equipment	2,446	1,390	(1,056)	(43)	
Infrastructure					
Roads	5,082	4,094	(988)	(19)	5
Bridges	620	1,587	967	156	6
Footpaths and cycleways	413	648	235	57	7
Drainage	340	1,743	1,403	413	8
Other infrastructure	914	243	(671)	(73)	9
Total infrastructure	7,369	8,316	947		
Total capital works expenditure	10,171	9,929	(242)		
Represented by:					
New asset expenditure	507	297	(210)		
Asset renewal expenditure	9,504	9,335	(169)		
Asset upgrade expenditure	160	297	137		
Total capital works expenditure	10,171	9,929	(242)		

(i) Explanation of material variations

Variance Ref	Item	Explanation
1	Buildings	Due to the effects of COVID-19 there have been a number of projects that have been delayed. These projects are expected to commence during the 2021-22 year.
2	Plant, machinery and equipment	Due to shipping constraints associated with COVID-19 there are a number of items which are on order and due for delivery in the 2021-22 year.
3	Fixtures, fittings and furniture	This relates to carry over works from the 2019-20 year. Which includes works from councils playground programme.
4	Computers and telecommunications	The additional works are associated with carry over projects from the 2019-20 year. These relate to works on councils network infrastructure.
5	Roads	Due to the effects of COVID-19 there have been a number of projects that have been delayed. The remainder of these projects are expected to be completed in the 2021-22 year subject to State Government Restrictions.
6	Bridges	This relates to the completion of the Forest Street Bridge reconstruction. This project was carried forward from the 2019-20 year,
7	Footpaths and cycleways	The original footpath programme was completed as scheduled. There was additional funding received with the Federal Governments LRCI programme. These additional works relate to this programme.
8	Drainage	The original drainange programme was completed as scheduled. Overall there is an overspend which is related to works that were not completed in the 2019-20 year and carried forward along with items budgeted within other asset classes.
9	Other Infrastructure	There are a number of projects that were not completed within the 2020-21 year which have been carried forward. There are also items which have been budgeted for within the other infrastructure area but are costed against other asset classes.

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 2 Analysis of Council

2.1 Analysis of Council results by program

Council delivers its functions and activities through the following programs.

(a) Chief Executive

Chief Executive provides efficient, effective and proactive support services to include the Mayor and Councillors. Chief Executive provides effective governance oversight of the organisation. Service areas include governance, enterprise risk and legal services.

Corporate Services

Corporate Services Management provides efficient, effective and proactive support services across council to enable the delivery of policy commitments, council vision and mission. The provision of these services includes finance services, digital information and technology, property and procurement, strategy and program delivery and program integration and development. Human resource management provides support to the organisation and ensures councils customer focus includes communication and community engagement processes.

Development and Community Services

Development and Community Services Management provides high quality community focused programs, service delivery and communication to residents. Development and Community Services Management is comprised of community care, connected communities, family services, health communities and is responsible for arts an culture. The planning services area includes the assessment of town development, health, planning strategy and urban growth. Economic Development supports local festivals and events and advocates on behalf of the community for major events, tourism, cultural opportunities, leisure management and arts and culture.

Environment and Infrastructure Services

Environment and Infrastructure Services Management is responsible for constructing new infrastructure and maintaining existing infrastructure across a very diverse range of assets that underpin the wellbeing of the community. These assets include capital works engineering services, waste, parks and gardens, emergency management and municipal resources. Environment and Infrastructure Services Management is responsible for Port of Apollo Bay, local laws and services and operations of council assets.

(b) Summary of revenues, expenses, assets and capital expenses by program

	Income	Expenses	Surplus/ (Deficit)	Grants included in income	Total assets
2021	\$'000	\$'000	\$'000	\$'000	\$'000
Chief Executive	11	1,768	(1,757)	-	1,492
Corporate Services Management	45,781	20,203	25,579	8,454	5,623
Development and Community Services Management	8,843	14,357	(5,515)	3,093	13,906
Environment and Infrastructure Services Management	6,510	18,413	(11,904)	4,974	378,715
-	61,144	54,741	6,403	16,521	399,736

	Income	Expenses	Surplus/ (Deficit)	Grants included in income	Total assets
2020	\$'000	\$'000	\$'000	\$'000	\$'000
Chief Executive	6	1,569	(1,563)	-	1,485
Corporate Services Management	41,313	19,841	21,472	11,248	27,159
Development and Community Services Management	6,786	13,025	(6,239)	2,537	13,735
Infrastructure and Leisure Services Management	8,646	21,150	(12,503)	3,291	334,917
-	56,751	55,585	1,167	17,076	377,295

Colac Otway Shire Council 2020/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021		
Note 3 Funding for the deliv	ery of our services	2021	2020
3.1 Rates and charges		\$'000	\$'000
	nproved Value as the basis of valuation of all properties w e of a property is its value of the land plus buildings and ot		ict. The

The valuation base used to calculate general rates for 2020/21 was \$7,096 million (2019/20 \$6,619 million).

	40 770	10.000
General rates residential	16,779	16,223
General rates farm / rural	5,754	5,666
General rates commercial / industrial	3,204	3,215
Municipal charge	2,843	2,787
Garbage charge	3,089	3,196
Interest on rates and charges	-	81
Special rates and charges	22	22
Revenue in lieu of rates	223	176
Total rates and charges	31,914	31,366

The date of the latest general revaluation of land for rating purposes within the municipal district was 1 January 2021, and the valuation will be first applied in the rating year commencing 1 July 2021.

Annual rates and charges are recognised as revenues when Council issues annual rates notices. Supplementary rates are recognised when a valuation and reassessment is completed and a supplementary rates notice issued.

3.2 Statutory fees and fines

Town planning fees	417	329
Health regulations	72	225
Building permits	118	90
Infringements and costs	88	84
Engineering fees	8	45
Land information certificates	36	33
Freedom of information	1	1
Total statutory fees and fines	740	807

Statutory fees and fines (including parking fees and fines) are recognised as revenue when the service has been provided, the payment is received, or when the penalty has been applied, whichever first occurs.

3.3 User fees

Total user fees	6,120	5,269
Town planning and building services fees	3	40
Child care childrens programs	59	82
Apollo bay harbour fees	112	111
Other fees and charges	147	187
Council properties fees and rental	175	213
Waste disposal fees	238	215
Colac Otway performing arts & cultural centre fees	77	212
Visitor information centre fees	105	230
Parking, animal control and local laws fees	217	238
Colac livestock selling centre fees	432	462
Leisure centre fees	598	1,096
Aged services fees	3,957	2,183

User fees are recognised as revenue when the service has been provided or council has otherwise earned the income.

312

249

124

1,165

2,789

-

1,001

750

64

2,149

3,902

21 Financial Report	For the Year Ended 30 June	2021	
Note 3 Funding for the o	lelivery of our services	2021	202
	ner levels of government	\$'000	\$'00
	ved in respect of the following :	÷ 000	Ų ŪŪ
Summary of gran			
Commonwealth fu		11,258	9,799
State funded gran	-	5,263	7,277
Total grants rece		16,521	17,076
(a) Operating Gra			
	- Commonwealth Government		
	Assistance Grant - untied base grant	4,648	3,926
	Assistance Grant - local roads	2,689	2,726
	I community services	288	538
	ate scheme	-	97
	disabilty services	93	78
Public Hea	-	2	2
	- State Government	2	4
		1,089	1,254
-	disabilty services	878	86
Port mana	•	398	397
	nd child health		
	and culture	114 147	216 91
	I community services		
	ssing supervisors	41	68
	e Property Levy	-	4
Public Hea		40	18
Environme	nt and protection services	32	12
Total recu	rrent operating grants	10,459	10,333
Non-recu	rrent - Commonwealth Government		
Environme	ent and protection services	-	200
City Deal		1,041	90
Family and	I community services	93	
Recreation	and culture	300	54
Non-recu	rent - State Government		
Port Mana	gement	-	1,943
Recreation	and culture	35	109
Family and	community services	199	107
Corporate	-	983	
Environme		269	106
Roads		24	100
Project De	livery	34	
Strategic F	-	94	5
Civic Prec			40
		_	26
	ecovery - Bushfire	201	1
		3,273	2,84
Total operating o	recurrent operating grants	13,732	13,174
		· <u> </u>	
*Relates to the We	orking for Victoria program funding for resources to re	espond to the COVID-19 pander	nic.
(b) Capital Grant			
	- Commonwealth Government	4.004	4 70
Roads to r		1,624	1,703
	and culture		50
	rrent capital grants	1,624	1,753
Non-recu	rrent - Commonwealth Government		
Roads		97	334
Recreation	and culture	383	
Non-recu	rent - State Government		
Poade		312	1.00

Roads

Total capital grants

Recreation and culture

Family and community services

Total non-recurrent capital grants

Page 16

Port manangement

2020

\$'000

Colac Otway Shire Council Notes to the Financial Report 2020/2021 Financial Report For the Year Ended 30 June 2021 Note 3 Funding for the delivery of our services 2021 3.4 Funding from other levels of government (cont'd) \$'000 (c) Unspent grants received on condition that they be spent in a specific manner 1,690 2.682 Balance at start of year Received during the financial year and 5,470 remained unspent at balance date 1,690 Received in prior years and spent during the financial year (1,690) (2,682) 5,470 1,690 Balance at year end

Grant income is recognised at the point in time when the council satisfies its performance obligations as specified in the underlying agreement.

3.5 Contributions

Nonetary Non-monetary	254 617	195 728
Total contributions	871	923
Contributions of non monetary assets were received in relation to th	e following asset classes.	
Contributions of non monetary assets were received in relation to th Drainage	e following asset classes. 41	381
	0	381 290
Drainage	41	

Monetary and non monetary contributions are recognised as revenue when Council obtains control over the contributed asset.

3.6 Net gain/(loss) on disposal of property, infrastructure, plant and equipment

Proceeds of sale	347	233
Written down value of assets disposed	(164)	(277)
Total net gain/(loss) on disposal of property, infrastructure, plant and equipment	183	(44)

The profit or loss on sale of an asset is determined when control of the asset has passed to the buyer.

3.7 Other income

Total other income	4,839	1,303
Landfill rehabilitaion provision movement (Note 5.5)	3,382	-
Scheme Interest Received	2	2
Rates Legal Costs Recovered	2	3
Interest	27	150
Reimbursements	881	181
Other income	545	968

Interest is recognised as it is earned.

Other income is measured at the fair value of the consideration received or receivable and is recognised when Council gains control over the right to receive the income.

94 94

1,017

628

1,646

145

Colac Otway Shire Council 2020/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021		
Note 4 The cost of delivering se	ervices	2021	2020
4.1 (a) Employee costs		\$'000	\$'000
Wages and salaries		16,401	15,027
Employee leave		2,297	2,115
Superannuation		1,900	1,739
Casual staff		674	832
Sick leave		602	524
WorkCover		330	247
Fringe benefits tax		97	148
Other employee benefits		109	93
Total employee costs	=	22,410	20,727

Refer to note 1.1 for further information relating to employee costs.

(b) Superannuation Council made contributions to the following funds: Defined benefit fund Employer contributions to Local Authorities Superannuation Fund (Vision Super) 86 86 Employer contributions payable at reporting date. Accumulation funds Employer contributions to Local Authorities Superannuation Fund (Vision 1,063 Super) 751 Employer contributions - other funds 1,814 Employer contributions payable at reporting date. 237

Refer to note 9.3 for further information relating to Council's superannuation obligations.

4.2 Materials and services

Page 18		
Total materials and services	19,936	22,458
Permits	1	-
Hire costs	1	2
Other	10	38
Training costs	252	261
Legal costs	153	496
Insurances	610	508
Plant and equipment maintenance	286	533
Agency staff	1,643	918
Utilities	941	977
Consultants	1,577	1,048
Expensed Capital Works		
Subscriptions and memberships	1,894	2,007
Materials	4,280	4,296
Contract Payments	8,288	11,375

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Colac Otway Shire Council 2020/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021		
Note 4 The cost of deliverin	g services	2021	2020
4.3 Depreciation and amortisation		\$'000	\$'000
Infrastructure		6,768	7,932
Plant and equipment		1,525	1,310
Property		1,574	1,702
Total depreciation an	nd amortisation	9,868	10,944

Refer to note 6.2 for a more detailed breakdown of depreciation and amortisation charges and accounting policy.

4.4 Amortisation - Right of use assets

Plant and Equipment	119	95
Total Amortisation - Right of use assets	119	95

Refer to note 5.8 for furthuer information relating to amortisation - right of use assets.

4.5 Bad and doubtful debts

Other debtors	34	15
Total bad and doubtful debts	34	15
Movement in provisions for doubtful debts		
Balance at the beginning of the year	57	44
New provisions recognised during the year	76	37
Amounts already provided for and written off		
as uncollectible	(50)	(2)
Amounts provided for but recovered during		
the year		(22)
Balance at end of year	83	57

Provision for doubtful debt is recognised based on an expected credit loss model. This model considers both historic and forward looking information in determining the level of impairment.

4.6 Borrowing costs

Interest - Borrowings	53	102
Total borrowing costs	53	102

Borrowing costs are recognised as an expense in the period in which they are incurred, except where they are capitalised as part of a qualifying asset constructed by Council.

4.7 Finance Costs - Leases

Interest - Lease Liabilities	35	35
Total finance costs	35	35

Refer to note 5.8 for furthuer information relating to finance costs - leases.

4.8 Other expenses

Total other expenses	1,706	1,209
Royalties and commissions	2	13
Animal registration levy	20	22
Auditors remuneration	46	45
Fire services levy	59	61
Rates and charges written off	32	65
Other	593	267
Councillors' allowances	258	262
Community grants and donations	696	474

Impairment - right of use assets	580	
Total finance costs	580	

Refer to note 5.8 for furthuer information relating to impairment - right of use assets.

Colac Otway Shire Council 2020/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021		
Note 5 Our financial position		2021	2020
5.1 Financial assets		\$'000	\$'000
(a) Cash and cash equivalen	ts		
Cash on hand		5	5
Cash at bank		6,995	1,146
Term deposits		14,958	15,047
Total cash and cash equival	ents	21,958	16,198
Total financial assets	—	21,958	16,198

Councils cash and cash equivalents are subject to external restrictions that limit amounts available for discretionary use. These include:

- Trust funds and deposits	741	985
- Statutory reserves	1,086	936
 Conditional grants unspent (Excludes Port of Apollo Bay) 	5,360	1,580
- Port of Apollo Bay reserve cash held	555	565
- Disaster recovery reserve	6	6
Total restricted funds	7,748	4,072
Total unrestricted cash and cash equivalents	14,210	12,126

Intended allocations

Total funds subject to intended allocations	21,253	15,259
- Carried forward works committed	6,717	2,466
future purposes .		
- Other reserve funds allocated for specific	14,536	12,793
Although not externally restricted the following amounts have been allocated for	r specific future purpose	es by Council:

Cash and cash equivalents include cash on hand, deposits at call, and other highly liquid investments with original maturities of 90 days or less, net of outstanding bank overdrafts.

Other financial assets are valued at fair value, at balance date. Term deposits are measured at original cost. Any unrealised gains and losses on holdings at balance date are recognised as either a revenue or expense.

Colac Otway Shire Council 2020/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021		
Note 5 Our financial position 5.1 Financial assets (cont'd) (b) Trade and other receivables		2021 \$'000	2020 \$'000
Current			
Statutory receivables			
Rates Debtor		2,233	2,336
Government operating grants		463	143
Net GST receivable		119	182
Special rate assessment		42	42
Parking infringement debtor		69	60
Other infringements		129	124
Provision for doubtful debts - infrin	gements	(14)	(14)
Other debtors		1,037	530
Provision for doubtful debts - other del	btors	(69)	(43)
Total current trade and other receivab	les	4,009	3,360
Total trade and other receivables		4,009	3,360

Short term receivables are carried at invoice amount. A provision for doubtful debts is recognised when there is objective evidence that an impairment has occurred. Long term receivables are carried at amortised cost using the effective interest rate method.

(c) Ageing of Receivables		
The ageing of the Council's trade and other receivables (excluding st	atutory receivables) that are not impaired wa	S:
Current (not yet due)	521	379
Past due by up to 30 days	2	12
Past due between 31 and 180 days	10	43
Past due between 181 and 365 days	7	28
Past due by more than 1 year	163	24
Total trade and other receivables	703	487

(d) Ageing of individually impaired Receivables

The ageing of receivables that have been individually determined as	impaired at reporting date was:	
Current (not yet due)	-	-
Past due by up to 30 days	-	-
Past due between 31 and 180 days	-	-
Past due between 181 and 365 days	-	-
Past due by more than 1 year	69	43
Total trade & other receivables	69	43

olac Otway Shire Council)20/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021	
Note 5 Our financial position		
5.2 Non-financial assets	2021	2020
(a) Inventories	\$'000	\$'000
Inventories held for distribution	22	53
Inventories held for sale	132	162
Total inventories	155	215

Inventories held for distribution are measured at cost, adjusted when applicable for any loss of service potential. All other inventories, including land held for sale, are measured at the lower of cost and net realisable value. Where inventories are acquired for no cost or nominal consideration, they are measured at current replacement cost at the date of acquisition.

(b) Other assets		
Prepayments	496	134
Accrued income	-	352
Total other assets	496	486
5.3 Payables		
(a) Trade and other payables		
Trade payables	2,418	2,327
Accrued expenses	542	822
Unearned Income	5,477	2,473
Total trade and other payables	8,438	5,622
Unearned income		
Grants received in advance - operating	1,516	1,401
Grants received in advance - capital	3,954	289
Other	8	783
Total unearned income	5,477	2,473
(b) Trust funds and deposits		
Refundable deposits	453	409
Fire services levy	113	349
Retention amounts	175	228
Total trust funds and deposits	741	985

Amounts received as deposits and retention amounts controlled by Council are recognised as trust funds until they are returned, transferred in accordance with the purpose of the receipt, or forfeited. Trust funds that are forfeited, resulting in council gaining control of the funds, are to be recognised as revenue at the time of forfeit.

Purpose and nature of items

Refundable deposits - Deposits are taken by council as a form of surety in a number of circumstances, including in relation to building works, tender deposits, contract deposits and the use of civic facilities.

Fire Service Levy - Council is the collection agent for fire services levy on behalf of the State Government. Council remits amounts received on a quarterly basis. Amounts disclosed here will be remitted to the state government in line with that process.

Retention Amounts - Council has a contractual right to retain certain amounts until a contractor has met certain requirements or a related warrant or defect period has elapsed. Subject to the satisfactory completion of the contractual obligations, or the elapsing of time, these amounts will be paid to the relevant contractor in line with Council's contractual obligations.

Otway Shire Council Notes to the Financial Report 2021 Financial Report For the Year Ended 30 June 2021		
Note 5 Our financial position		
5.4 Interest-bearing liabilities	2021 \$'000	2020 \$'000
Current		
Borrowings - secured	142	286
	142	286
Non-current		
Borrowings - secured	596	738
	596	738
Total	738	1,024
Borrowings are secured by council rates and charges		
(a) The maturity profile for Council's borrowings is:		
Not later than one year	142	286
Later than one year and not later than five years	596	738
Later than five years	-	-
	738	1,024

Borrowings are initially measured at fair value, being the cost of the interest bearing liabilities, net of transaction costs. The measurement basis subsequent to initial recognition depends on whether the Council has categorised its interest-bearing liabilities as either financial liabilities designated at fair value through the profit and loss, or financial liabilities at amortised cost. Any difference between the initial recognised amount and the redemption value is recognised in net result over the period of the borrowing using the effective interest method.

The classification depends on the nature and purpose of the interest bearing liabilities. The Council determines the classification of its interest bearing liabilities at initial recognition.

5.5 Provisions

0004	Employee	Landfill restoration	Total
2021	\$ '000	\$ '000	\$ '000
Balance at beginning of the financial year	4,459	8,903	13,362
Change in provisions	1,703	(3,270)	(1,567)
Amounts used	(1,276)	(112)	(1,388)
Change in the discounted amount arising because of time and the			
effect of any change in the discount rate	243	117	360
Balance at the end of the financial year	5,129	5,638	10,767
2020			
Balance at beginning of the financial year	4,240	9,265	13,505
Change in provisions	1,391	-	1,391
Amounts used	(1,415)	(201)	(1,616)
Change in the discounted amount arising because of time and the			
effect of any change in the discount rate	243	(161)	82
Balance at the end of the financial year	4,459	8,903	13,362
	2021	2020	
(a) Employee provisions	\$'000	\$'000	
Current provisions expected to be wholly settled within 12 months			
Annual leave	1,242	1,167	
Long service leave	280	202	
Time in lieu	110	99	
—	1,632	1,468	
Current provisions expected to be wholly settled after 12 months			
Annual leave	536	243	
Long service leave	2,556	2,399	
	3,092	2,642	
Total current employee provisions	4,724	4,110	
Non-current			
Long service leave	405	349	
Total non-current employee provisions	405	349	
Aggregate carrying amount of employee provisions:			
Current	4,724	4,110	
Non-current	405	349	
Total aggregate carrying amount of employee provisions	5,129	4,459	

The calculation of employee costs and benefits includes all relevant on-costs and are calculated as follows at reporting date.

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 5 Our financial position 5.5 Provisions (cont'd)

(a) Employee provisions

Wages and salaries and annual leave

Liabilities for wages and salaries, including non-monetary benefits, annual leave and accumulated sick leave expected to be wholly settled within 12 months of the reporting date are recognised in the provision for employee benefits in respect of employee services up to the reporting date, classified as current liabilities and measured at their nominal values.

Liabilities that are not expected to be wholly settled within 12 months of the reporting date are recognised in the provision for employee benefits as current liabilities, measured at the present value of the amounts expected to be paid when the liabilities are settled using the remuneration rate expected to apply at the time of settlement.

Long service leave

Liability for long service leave (LSL) is recognised in the provision for employee benefits. LSL is measured at present value. Unconditional LSL is disclosed as a current liability. Conditional LSL that has been accrued, where an employee is yet to reach a qualifying term of employment, is disclosed as a non - current liability.

Key assumptions:		
- discount rate	0.2%	0.2%
- index rate	1.75%	1.75%
	2021	2020
(b) Landfill restoration	\$'000	\$'000
Current	251	247
Non-current	5,387	8,656
	5,638	8,903

Council is obligated to restore various landfill sites to a particular standard. The forecast life of the sites are based on current estimates of remaining capacity and the forecast rate of infill. The provision for landfill restoration has been calculated based on the present value of the expected cost of works to be undertaken. The expected cost of works has been estimated based on current understanding of work required to reinstate the site to a suitable standard. Accordingly, the estimation of the provision required is dependent on the accuracy of the forecast timing of the work, work required and related costs.

EHS Support Pty Itd, an independent expert, completed risk assessments of a number of closed Council landfills in 2020 and 2021. Four of the closed sites were found not to pose a risk to health or the environment to warrant immediate rehabilitation. Council subsequently engaged EHS Support Pty Ltd to provide Council with updated expected cost of works during the financial year for provisioning of adequate funds to address the specific management actions required for rehabilitation and aftercare of all ten sites taking into consideration current EPA regulations and any updated risk assessments. Significant reductions in the expected cost of works resulted for two closed landfill sites, including removal of \$2.48 million rehabilitation works no longer required at Barwon Downs (\$1.66 million) and Birregurra (\$0.82 million) and removal of expected costs for aftercare of closed sites of \$1.82 million. A further significant increase in expected cost of works resulted for Alvie, including an increase in rehabilitation works by \$0.81 million to \$2.30 million due mainly to meet EPA regulations applicable to an operating Green Waste and Transfer Station/Resource Recovery facility at this site.

Key assumptions:		
- discount rate	0.18%	0.58%
- index rate	2.00%	1.50%

5.6 Financing arrangements

The Council has the following funding arrangements in place as at	30 June 2021.	
Business Card Facility (balance cleared monthly)	50	50
Total facilities	50	50
Used facilities	-	-
Unused facilities	50	50

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 5 Our financial position

5.7 Commitments

The Council has entered into the following commitments. Commitments are not recognised in the Balance Sheet. Commitments are disclosed at their nominal value and presented inclusive of the GST payable.

2021	Not later than 1 year	Later than 1 year and not later than 2 years	Later than 2 years and not later than 5 years	Later than 5 years	Tota
	\$'000	\$'000	\$'000	\$'000	\$'000
Operating					
Garbage collection	3,000	3,150	6,330	-	12,480
Consultancies	195	216	-	-	411
Information Technology	84	77	108	-	269
Total	3,279	3,443	6,438		13,160

Capital

oupitui					
Civil Works	2,788	2,248	-	-	5,036
Total	2,788	2,248	-	-	5,036

	Not later than 1	Later than 1 year and not later than 2	Later than 2 years and not later than 5	Later than 5	
2020	year	years	years	years	Total
	\$'000	\$'000	\$'000	\$'000	\$'000
Operating					
Garbage collection	565	-	-	-	565
Consultancies	252	-	-	-	252
Street Lighting	933	-	-	-	933
Information Technology	41	41	24	-	105
Total	1,791	41	24	·	1,856
Capital					
Civil Works	1,617	1,350	-	-	2,967
Plant and Equipment	250	250	-	-	500
Total	1,867	1,600	-	-	3,467

5.8 Leases

At inception of a contract, all entities would assess whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To identify whether a contract conveys the right to control the use of an identified asset, it is necessary to assess whether:

- The contract involves the use of an identified asset;

- The customer has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and

- The customer has the right to direct the use of the asset.

This policy is applied to contracts entered into, or changed, on or after 1 July 2019.

As a lessee, Council recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost which comprises the initial amount of the lease liability adjusted for:

· any lease payments made at or before the commencement date less any lease incentives received; plus

· any initial direct costs incurred; and

• an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located. The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property, plant and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain measurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, an appropriate incremental borrowing rate. Generally, Council uses an appropriate incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise the following:

- Fixed payments
- Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
 Amounts expected to be payable under a residual value guarantee; and
- The exercise price under a purchase option that Council is reasonably certain to exercise, lease payments in an optional renewal period if Council is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless Council is reasonably certain not to terminate early.

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 5 Our financial position

5.8 Leases (cont'd)

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Council has elected to apply the temporary option available under AASB 16 Leases which allows not-for-profit entities to not measure right-of-use assets at initial recognition at fair value in respect of leases that have significantly below-market terms.

Right-of-Use Assets	Plant and Equipment	Total
	\$'000	\$'000
Balance at 1 July 2019	869	869
Additions	89	89
Amortisation charge	(95)	(95)
Balance at 30 June 2020	863	863
Balance at 1 July 2020	863	863
Fair value adjustments	(580)	(580)
Amortisation charge	(118)	(118)
Balance at 30 June 2021	165	165

Council applied AASB 136 Impairment of Assets to remeasure the fair value of right of use assets at the reporting date. The recoverable amount is the higher of its fair value less costs to sell and its value in use.

The fair value adjustment resulted in the carrying value of leased two way radio equipment being reduced by \$579,642 from \$679,642 to the expected recoverable amount of \$100,000.

Lease Liabilities	2021	2020
Maturity analysis - contractual undiscounted cash	\$'000	\$'000
Less than one year	140	140
One to five years	490	521
More than five years	264	373
Total undiscounted lease liabilities as at 30 June:	894	1,034

Lease liabilities included in the Balance Sheet at 30 June:

Current	110	105
Non-current	663	773
Total lease liabilities	773	879

Short-term and low value leases

Council has elected not to recognise right-of-use assets and lease liabilities for short-term leases of machinery that have a lease term of 12 months or less and leases of low-value assets (individual assets worth less than existing capitalisation thresholds for a like asset up to a maximum of AUD\$10,000), including IT equipment. Council recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

	2021	2020
Expenses relating to:	\$'000	\$'000
Short-term leases	35	81
Total	35	81
Note 6 Assets we manage	2021	2020
6.1 Non-Current assets classified as held for sale	\$'000	\$'000
Cost of land acquisition	439	-
Library Book Stock from wind up of Corangamite Regional Library Corporation	276	-
Total Non-current assets classified as held for sale	715	-

Non-current assets classified as held for sale (including disposal groups) are measured at the lower of its carrying amount and fair value less costs of disposal, and are not subject to depreciation. Non-current assets, disposal groups and related liabilities and assets are treated as current and classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset's sale (or disposal group sale) is expected to be completed within 12 months from the date of classification.

	F	or the Year I	Ended 30 Jun	e 2021					
e 6 Assets we manage									
6.2 Property, infrastructure, plant and equipr	ment								
Summary of property, infrastructure, plan	nt and equipment								
	At Fair Value								At Fair V
	30 June 2020 \$'000	Additions \$'000	Contributions \$'000	Revaluation \$'000	Depreciation \$'000	Disposal \$'000	Write-off \$'000	Transfers \$'000	30 June 2 \$
	· · · ·								
Property Plant and equipment	68,849 7,423	161 1,294		2,718	(1,574) (1,525)	(17) (168)	-	(439) 184	69, 7,
Infrastructure	271,076	7,638	617	13,735	(6,768)	-	-	6,362	292,
Work in progress	8,383	837	-	-	-	-	-	(6,546)	2,
	355,731	9,929	617	16,453	(9,868)	(185)	-	(439)	372,
Summary of Work in Progress	Opening WIP \$'000	Additions \$'000	Write-off \$'000	Transfers \$'000	Closing WIP \$'000				
Property	16	62			78				
Plant and equipment	210	232		(184)	258				
Infrastructure	8,157	543	-	(6,362)	2,338				
Total	8,383	837	-	(6,546)	2,674				
(a) Property			Land under	Total Land &	Duildings	Buildings -	Total	Work In	
	Land - specialised	Land - non specialised	Land under roads	Land	Buildings - specialised	non	Total Buildings	Work In Progress	Total Prop
	\$'000	-		Improvements	\$'000	specialised	\$'000	-	
At fair value 1 July 2020	3,383	\$'000 21,784	\$'000 224	\$'000 25,391	73,273	\$'000 16,532	\$ 000 89,805	\$'000 16	\$'
Accumulated depreciation at 1 July 2020	-	- 21,704	-	-	(39,307)	(7,040)	(46,347)	-	(46,
······································	3,383	21,784	224	25,391	33,966	9,492	43,458	16	68,
Movements in fair value Additions					139	22	161	62	
Revaluation	372	2,346		2,718	-	-	-	-	2,
Disposal	-	(17)	-	(17)	-	-	-	-	
Transfers	-	(439)	-	(439)	-	-	•	-	(
Movements in accumulated depreciation	372	1,890	-	2,262	139	22	161	62	2,
Depreciation and amortisation	-			-	(1,338)	(236)	(1,574)		(1,
· · · · · · · · · · · · · · · · · · ·	-	-	-	•	(1,338)	(236)	(1,574)	•	(1,
At fair value 30 June 2021	3,756	23,674	224	27,653	73,412	16,554	89,966	78	117,
Accumulated depreciation at 30 June 2021	-	-	-	-	(40,645)	(7,276)	(47,921)	-	(47,
	3,756	23,674	224	27,653	32,767	9,278	42,045	78	69,
(b) Plant and Equipment									
(b) Plant and Equipment	Plant machinery	Fixtures	Computers and	Work in	Total plant				
	and	fittings and	telecomms	Progress	and				
	equipment	furniture			equipment				
	\$'000	\$'000	\$'000	\$'000	\$'000				
At fair value 1 July 2020 Accumulated depreciation at 1 July 2020	11,175 (6,156)	10,570 (8,226)	1,350 (1,290)	210	23,305 (15,672)				
Accumulated depreciation at 1 July 2020	5,019	2,343	61	210	7,633				
Movements in fair value					· · ·				
Additions	1,171	-	123	232	1,525				
Disposal	(653)	-	-	-	(653)				
	-								
Transfers	519	-	184	(184)					
Transfers	518	-	184 307	(184) 48	872				
	-								
Transfers Movements in accumulated depreciation	(1,154) 485	- (325)	307 (46)	- -	872 (1,525) 485				
Transfers Movements in accumulated depreciation Depreciation and amortisation	(1,154)	- (325)	307 (46)		872 (1,525)				
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021	(1,154) 485 (669) 11,692	- (325) - (325) 10,570	307 (46) - (46) 1,657	48 - - - 258	872 (1,525) 485 (1,040) 24,177				
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals	(1,154) 485 (669) 11,692 (6,825)	- (325) - (325) 10,570 (8,551)	307 (46) - (46) 1,657 (1,336)	48 - - - 258 -	872 (1,525) 485 (1,040) 24,177 (16,713)				
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021	(1,154) 485 (669) 11,692	- (325) - (325) 10,570	307 (46) - (46) 1,657	48 - - - 258	872 (1,525) 485 (1,040) 24,177				
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021	(1,154) 485 (669) 11,692 (6,825) 4,867	- (325) - (325) 10,570 (8,551) 2,018	307 (46) - (46) 1,657 (1,336) 321 Footpaths and	48 - - - 258 - 258	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Other	Work In	Total		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads	- (325) - (325) 10,570 (8,551) 2,018 Bridges	307 (46) - (46) 1,657 (1,336) 321 Footpaths and cycleways	48 - - - 258 - 258 Drainage	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Other Infrastructure	Progress	Infrastructure		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000	- (325) - (325) 10,570 (8,551) 2,018 Bridges \$'000	307 (46) - (46) 1,657 (1,336) 321 Footpaths and cycleways \$'000	48 - - 258 - 258 Drainage \$'000	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Other Infrastructure \$'000	Progress \$'000	Infrastructure \$'000		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020	(1,154) 485 (669) 11,692 (6,825) (6,825) 4,867 Roads \$'000 268,669	- (325) - (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884	307 (46) - (46) (1,336) 321 Footpaths and cycleways \$'000 28,501	48 - - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - - - - - - - - - - - - - - - - - - -	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Other Infrastructure \$'000 9,821	Progress	Infrastructure \$'000 368,634		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000	- (325) - (325) 10,570 (8,551) 2,018 Bridges \$'000	307 (46) - (46) 1,657 (1,336) 321 Footpaths and cycleways \$'000	48 - - 258 - 258 Drainage \$'000	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Other Infrastructure \$'000	Progress \$'000	Infrastructure \$'000		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000 288,669 (64,375) 204,294	- (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148) 13,735	307 (46) - (1,336) 321 Footpaths and cycleways \$'000 28,501 (9,074) 19,427	48 - - 258 - 2 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 2 - 258 - 2 - 258 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Uther Infrastructure \$'000 9,821 (2,752) 7,070	Progress \$'000 8,157 - 8,157	Infrastructure \$'000 368,634 (89,403) 279,231		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions	(1,154) 485 (669) 11,692 (6,825) (6,825) 4,867 Roads \$'000 268,669 (64,375) 204,294 3,799	- (325) - (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148)	307 (46) - (46) 1.657 (1.336) 321 Footpaths and cycleways \$'000 28,501 (9.074) 19,427 406	48 - - - 258 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Uther Infrastructure \$000 9,821 (2,752) 7,070 243	Progress \$'000 8,157 -	Infrastructure \$'000 368,634 (89,403) 279,231 8,181		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions Contributions	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000 268,669 (64,375) 204,294 3,799 495	- (325) 10,570 (8,551) 2,018 Bridges \$000 17,884 (4,148) 13,735 1,503	307 (46) - (1,336) 321 Footpaths and cycleways \$000 28,501 (9,074) 19,427 406 81	48 - - 258 - 2 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 258 - 2 - 258 - 2 - 258 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Other Infrastructure \$'000 9,821 (2,752) 7,070 243	Progress \$'000 8,157 - 8,157	Infrastructure \$'000 368,634 (89,403) 279,231 8,181 617		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions Contributions Revaluation	(1,154) 485 (669) 11,692 (6,825) (6,825) 4,867 Roads \$'000 268,669 (64,375) 204,294 3,799	- (325) - (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148) 13,735 1,503 - 36,044	307 (46) - (46) 1,657 (1,336) 321 Footpaths and cycleways \$'000 28,501 (9,074) 19,427 406 81	48 - - 258 - 258 - 258 - 258 - 258 - 258 - 26,849 26,549 26,549 1,687 41	872 (1,525) (485 (1,040) 24,177 (16,713) 7,465 0ther Infrastructure \$'000 9,821 (2,752) 7,070 243 -	Progress \$'000 8,157 - 8,157 543 - -	Infrastructure \$'000 368,634 (89,403) 279,231 8,181		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions Contributions	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000 286,669 (64,375) 204,294 3,799 495 -	- (325) - (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148) 13,735 1,503 - 36,044 74	307 (46) - (1,336) 321 Footpaths and cycleways \$'000 28,501 (9,074) 19,427 406 81 -	48 - - 258 - 2 - 258 - 2 - 25 - 25	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Uther Infrastructure \$'000 9,821 (2,752) 7,070 243 - - 203	Progress \$'000 8,157 - 8,157 543 - 543 - (6,362)	Infrastructure \$'000 368,634 (89,403) 279,231 8,181 617 36,044 -		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions Contributions Revaluation Transfers Movements in accumulated depreciation	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000 268,669 (64,375) 204,294 3,799 495 - -	- (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148) 13,735 1,503 - 36,044 74 37,621	307 (46) - (45) 1,657 (1,336) 321 Footpaths and cycleways \$'000 28,501 (9,074) 19,427 406 81 - - - 487	48 - - - 258 - 258 - 258 - 258 - 258 - 258 - 26,604 (9,054) 26,549 1,687 41 - 6,085 7,813	872 (1,525) (455 (1,040) 24,177 (16,713) 7,465 Other Infrastructure \$'000 9,821 (2,752) 7,070 243 - - - 203 446	Progress \$'000 8,157 - 8,157 543 - -	Infrastructure \$'000 368,634 (89,403) 279,231 8,181 617 36,044 - - 44,842		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions Contributions Revaluation Transfers Movements in accumulated depreciation Depreciation and amortisation	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000 268,669 (64,375) 204,294 3,799 495 - -	- (325) - (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148) 13,735 1,503 - 36,044 74 37,621 (404)	307 (46) - (1,336) 321 Footpaths and cycleways \$'000 28,501 (9,074) 19,427 406 81 -	48 - - 258 - 2 - 258 - 2 - 25 - 25	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 Uther Infrastructure \$'000 9,821 (2,752) 7,070 243 - - 203	Progress \$'000 8,157 - 8,157 543 - 543 - (6,362)	Infrastructure \$'000 (88,634 (89,403) 279,231 8,181 617 36,044 - 44,842 (6,768)		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions Contributions Revaluation Transfers Movements in accumulated depreciation	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000 268,669 (64,375) 204,294 3,799 495 - - - - 4,294 (4,598) -	- (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148) 13,735 1,503 - 1,503 - 36,044 74 37,621 (404) (22,309)	307 (46) - (46) 1,657 (1,336) 321 Footpaths and cycleways \$'000 28,501 (9,074) 19,427 406 81 - - - - - -	48 - - - 258 - 269 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 0ther Infrastructure \$'000 9,821 (2,752) 7,070 243 - - 203 446 (911) -	Progress \$'000 8,157 - 8,157 - - - (6,362) (5,819) - - -	Infrastructure \$'000 368,634 (89,403) 279,231 8,181 617 36,044 - 44,842 (6,768) (22,309)		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions Contributions Revaluation Transfers Movements in accumulated depreciation Depreciation and amortisation Revaluation	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000 268,669 (64,375) 204,294 3,799 495 - -	- (325) - (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148) 13,735 1,503 - 36,044 74 37,621 (404)	307 (46) - (45) 1,657 (1,336) 321 Footpaths and cycleways \$'000 28,501 (9,074) 19,427 406 81 - - - 487	48 - - - 258 - 258 - 258 - 258 - 258 - 258 - 26,604 (9,054) 26,549 1,687 41 - 6,085 7,813	872 (1,525) (455 (1,040) 24,177 (16,713) 7,465 Other Infrastructure \$'000 9,821 (2,752) 7,070 243 - - - 203 446	Progress \$'000 8,157 - 8,157 543 - - (6,362) (5,819)	Infrastructure \$'000 (88,634 (89,403) 279,231 8,181 617 36,044 - 44,842 (6,768)		
Transfers Movements in accumulated depreciation Depreciation and amortisation Accumulated depreciation of disposals At fair value 30 June 2021 Accumulated depreciation at 30 June 2021 (c) Infrastructure At fair value 1 July 2020 Accumulated depreciation at 1 July 2020 Movements in fair value Additions Contributions Revaluation Transfers Movements in accumulated depreciation Depreciation and amortisation	(1,154) 485 (669) 11,692 (6,825) 4,867 Roads \$'000 268,669 (64,375) 204,294 3,799 495 - - - - 4,294 (4,598) -	- (325) 10,570 (8,551) 2,018 Bridges \$'000 17,884 (4,148) 13,735 1,503 - 1,503 - 36,044 74 37,621 (404) (22,309)	307 (46) - (46) 1,657 (1,336) 321 Footpaths and cycleways \$'000 28,501 (9,074) 19,427 406 81 - - - - - -	48 - - - 258 - 269 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	872 (1,525) 485 (1,040) 24,177 (16,713) 7,465 0ther Infrastructure \$'000 9,821 (2,752) 7,070 243 - - 203 446 (911) -	Progress \$'000 8,157 - 8,157 - - - (6,362) (5,819) - - -	Infrastructure \$'000 368,634 (89,403) 279,231 8,181 617 36,044 - 44,842 (6,768) (22,309)		

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 6 Assets we manage

6.2 Property, infrastructure, plant and equipment (cont'd)

Acquisition

The purchase method of accounting is used for all acquisitions of assets, being the fair value of assets provided as consideration at the date of acquisition plus any incidental costs attributable to the acquisition. Fair value is the price that would be received to sell an asset (or paid to transfer a liability) in an orderly transaction between market participants at the measurement date.

Where assets are constructed by Council, cost includes all materials used in construction, direct labour, borrowing costs incurred during construction, and an appropriate share of directly attributable variable and fixed overheads.

In accordance with Council's policy, the threshold limits have applied when recognising assets within an applicable asset class and unless otherwise stated are consistent with the prior year.

stated are consistent with the phoryear.		
	Depreciation Period	Threshold Limit
Asset recognition thresholds and depreciation periods	renou	\$'000
Land		
land	-	-
land under roads	-	-
land improvements	-	5
Buildings		°,
heritage buildings	90 - 180 years	5
buildings	10 - 120 years	5
shelters	10 - 90 years	5
	10 - 180 years	5
building improvements	10 - 180 years	5
leasehold improvements	10 - 100 years	5
Plant and Equipment		
Furniture	0.400	
art work	0 - 100 years	4
indoor furniture	5 - 30 years	4
playground equipment	10 - 40 years	4
Plant		
heritage plant and equipment	-	10
fixed plant, machinery and equipment	3 - 50 years	10
fleet (vehicles)	3 - 30 years	10
major plant	3 - 50 years	10
minor plant	3 - 10 years	4
Equipment		
appliances	3 - 60 years	4
fixed equipment / fixtures and fittings	5 - 55 years	4
computers and telecommunications	3 - 21 years	4
leased plant and equipment	-	4
Infrastructure_		
Roads		
road and tarmac formation and earthworks	-	10
road and tarmac pavements	10 - 100 years	10
road and tarmac seals	10 - 80 years	10
road and tarmac kerb, channel and minor culverts	45 - 80 years	2.5
footpaths and cycleways	15 - 50 years	2.5
Bridges	,	
bridges deck	10 - 90 years	10
bridges substructure	10 - 90 years	10
bridges major culverts	50 - 90 years	10
Drainage		10
open drainage network	10 - 100 years	10
pit and pipe network	40 - 100 years	10
water retention structures	80 - 100 years	10
Other Infrastructure		
gardens and landscaping	5 - 25 years	10
playing surfaces	10 - 70 years	10
retaining structures	10 - 45 years	
off street car parks	25 - 100 years	
aerodromes	25 - 100 years	10
Intangible assets	-	
software	5 years	4

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 6 Assets we manage

6.2 Property, infrastructure, plant and equipment (cont'd)

Land under roads

Council recognises land under roads it controls at fair value.

Depreciation and amortisation

Buildings, land improvements, plant and equipment, infrastructure, and other assets having limited useful lives are systematically depreciated over their useful lives to the Council in a manner which reflects consumption of the service potential embodied in those assets. Estimates of remaining useful lives and residual values are made on a regular basis with major asset classes reassessed annually. Depreciation rates and methods are reviewed annually.

Where assets have separate identifiable components that are subject to regular replacement, these components are assigned distinct useful lives and residual values and a separate depreciation rate is determined for each component.

Road earthworks are not depreciated on the basis that they are assessed as not having a limited useful life. Straight line depreciation is charged based on the residual useful life as determined each year.

Depreciation periods used are listed above and are consistent with the prior year unless otherwise stated.

Repairs and maintenance

Where the repair relates to the replacement of a component of an asset and the cost exceeds the capitalisation threshold the cost is capitalised and depreciated. The carrying value of the replaced asset is expensed.

Valuation of land and buildings

Valuation of land and buildings were undertaken 2017-2018 by a qualified independent valuer Mr Les Speed – Certified Practising Valuer – API Member No. 623379 of Preston Paterson Rowe. The valuation of land and buildings is at fair value, being market value based on highest and best use permitted by relevant land planning provisions. Where land use is restricted through existing planning provisions the valuation is reduced to reflect this limitation. This adjustment is an unobservable input in the valuation. The adjustment has no impact on the comprehensive income statement.

As a part of councils assesment of the fair value of its assets there has been an indexation applied to the valuation of the Land category. The indexation is based on the Victorian Valuer Generals offices indicies which for the past 3 years have increased by 11%. This index has been applied to Land - Specialised and Land - Non Specialised. The value of land under roads and land held for resale have been excluded.

Specialised land is valued at fair value using site values adjusted for englobo (undeveloped and/or unserviced) characteristics, access rights and private interests of other parties and entitlements of infrastructure assets and services. This adjustment is an unobservable input in the valuation. The adjustment has no impact on the comprehensive income statement.

Any significant movements in the unobservable inputs for land and land under roads will have a significant impact on the fair value of these assets.

Details of the Council's land and buildings and information about the fair value hierarchy as at 30 June 2021 are as follows:

	Level 1	Level 2	Level 3	Revaluation Date
Land	-	23,674	-	30/06/2021
Specialised land	-	-	3,607	30/06/2021
Buildings	-	9,278	32,767	30/06/2018
Total	-	32,952	36,375	

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 6 Assets we manage

6.2 Property, infrastructure, plant and equipment (cont'd)

Valuation of infrastructure

Valuation of infrastructure assets has been determined in accordance with an internal valuation undertaken by Robert Uebergang (B.Eng). An index and condition based revaluation was conducted in the current year.

The valuation is at fair value based on replacement cost less accumulated depreciation as at the date of valuation.

Details of the Council's infrastructure and information about the fair value hierarchy as at 30 June 2021 are as follows:

	Level 1	Level 2	Level 3	Revaluation Date
	-	-	203,991	30/06/2020
lges	-	-	28,643	30/06/2021
otpaths and cycleways	-	-	19,442	30/06/2020
ainage	-	-	33,979	30/06/2020
ner infrastructure	-	-	6,604	N/A
tal	-	-	292,659	

Description of significant unobservable inputs into level 3 valuations

Specialised land and land under roads is valued using a market based direct comparison technique. Significant unobservable inputs include the extent and impact of restriction of use and the market cost of land per square metre. The extent and impact of restrictions on use varies and results in a reduction to surrounding land values between 5% and 95%. The market value of land varies significantly depending on the location of the land and the current market conditions. Currently land values range between \$1 and \$270 per square metre.

Specialised buildings are valued using a depreciated replacement cost technique. Significant unobservable inputs include the current replacement cost and remaining useful lives of buildings. Current replacement costs is calculated on a square metre basis and ranges from \$200 to \$2,250 per square metre. The remaining useful lives of buildings are determined on the basis of the current condition of buildings and vary from 40 years to 100 years. Replacement cost is sensitive to changes in market conditions, with any increase or decrease in cost flowing through to the valuation. Useful lives of buildings are sensitive to changes in expectations or requirements that could either shorten or extend the useful lives of buildings.

Infrastructure assets are valued based on the depreciated replacement cost. Significant unobservable inputs include the current replacement cost and remaining useful lives of infrastructure. The remaining useful lives of infrastructure assets are determined on the basis of the current condition of the asset and vary from 5 years to 100 years. Replacement cost is sensitive to changes in market conditions, with any increase or decrease in cost flowing through to the valuation. Useful lives of infrastructure are sensitive to changes in use, expectations or requirements that could either shorten or extend the useful lives of infrastructure assets.

	2021	2020
Reconciliation of specialised land	\$'000	\$'000
Land under roads	224	224
Parks and reserves	3,756	3,405
Total specialised land	3,980	3,629

c Otway Shire Council /2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021	
Note 6 Assets we manage	2021	202
6.3. Investments in associates, joint arrangements an	nd subsidiaries \$'000	\$'00
(a) Investments in associates		
Investments in associates accounted for by the equit	ty method are:	
 Corangamite Regional Library Corporation 		
- Colac Community Library and Learning Centre		
Corangamite Regional Library Corporation		
Background		on its Ohim
	corporation owned by four (4) councils: Colac Otway Shire, Corang hire has a 29.54% equity interest. (2019/2020 24.04%.)	amite Shire,
At the 30th June 2021 the Corangamite Regional Lib member councils, the result of this is shown below.	rary Corporation has been wound up and dispanded on agreement	t of the four
Fair value of Council's investment in Corangamit	e Regional Library Corporation	
• ··· · · · · · · · · · · · · · · · · ·		
Council's share of accumulated surplus/(deficit)		
Council's share of accumulated surplus/(deficit) Council's share of accumulated surplus(deficit) a	t start of year 426	37
• • •	t start of year 426 (44)	
Council's share of accumulated surplus(deficit) a		
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year		5
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves	(44) (382)	5
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation	(44) (382)	5
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at	(44) (382)	37: 5
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at Council's share of reserves	(44) (382) end of year	
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at Council's share of reserves Council's share of reserves at start of year	(44) (382) end of year 0 15 (15)	42
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at Council's share of reserves Council's share of reserves at start of year Transfers (to) from reserves	(44) (382) end of year 0 15 (15) 0 0	5
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at Council's share of reserves Council's share of reserves at start of year Transfers (to) from reserves Council's share of reserves at end of year (based Movement in carrying value of specific investmen Carrying value of investment at start of year	(44) (382) end of year 0 15 (15) 0 0	42 1
Council's share of accumulated surplus(deficit) at Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at Council's share of reserves Council's share of reserves at start of year Transfers (to) from reserves Council's share of reserves at end of year (based Movement in carrying value of specific investment	(44) (382) end of year 0 15 (15) 0 nt	5
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at Council's share of reserves Council's share of reserves at start of year Transfers (to) from reserves Council's share of reserves at end of year (based Movement in carrying value of specific investmen Carrying value of investment at start of year	(44) (382) end of year 0 15 (15) 0 nt 441	5 42 1 <u>1</u> 39
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at Council's share of reserves Council's share of reserves at start of year Transfers (to) from reserves Council's share of reserves at end of year (based Movement in carrying value of specific investmen Carrying value of investment at start of year Share of surplus(deficit) for year	(44) end of year 0 15 (15) 0 nt 441 (44)	5 42 1 <u>1</u> 39
Council's share of accumulated surplus(deficit) a Reported surplus(deficit) for year Transfers (to) from reserves Loss transfered on wind up of corporation Council's share of accumulated surplus(deficit) at Council's share of reserves Council's share of reserves at start of year Transfers (to) from reserves Council's share of reserves at end of year (based Movement in carrying value of specific investmen Carrying value of investment at start of year Share of surplus(deficit) for year Share of asset revaluation	(44) (382) end of year 0 15 (15) 0 nt 441 (44) (15)	5 42 1 <u>1</u> 39

(b) Investments in joint ventures

Colac Community Library and Learning Centre

Background

The Colac Community Library and Learning Centre is a joint venture between the Colac Otway Shire and Victorian Department of Education and Early Childhood Development and the Colac Secondary College, which results in Colac Otway Shire legally owning 50% of the assets.

The venture's purpose is to construct and operate a joint use library facility.

Council's commitment to the venture is limited to providing a contribution to the construction and fitout costs. Council's share is 50% of costs

Council accounts for its interests in the joint venture by applying the proportionate consolidation method and by combining Council's share of each of the assets, liabilities, incomes and expenses of the jointly controlled entity with similar items line by line in council's financial statements

Council's share of accumulated surplus/(deficit)

Council is not entitled to a share of any accumulated surplus or deficit.

Council's share of reserves

Council is not entitled to a share of any reserves

Movement in carrying value of specific investment

Carrying value of investment at start of year	2,800	2,840
Depreciation	(40)	(40)
Carrying value of investment at end of year	2,760	2,800

Council's share of expenditure commitments

Council is not exposed to any further expenditure commitments.

Council's share of contingent liabilities and contingent assets

There are no known contingencies outstanding as at 30 June 2021.

Significant restrictions

The joint venture is not required to repay dividends, loans or advances to Council.

/2021 Financial Report		Notes to the Financial Report For the Year Ended 30 June 2021		
			2021	202
	and relationships and key managem	ent remuneration	No.	N
	ed Parties			
Parent e Colac Ot	<i>ntity</i> tway Shire Council is	s the parent entity.		
	ries and Associates			
		associates are detailed in Note 6.3.		
(b) Kev i	Management Perso	onnel		
	-	e position of Councillor or other members of key management personnel	at any time during the year a	are:
Councill	lors	Councillor Kate Hanson (01/07/20 to 24/10/20 & Mayor 24/10/20 to 3	30/06/21)	
		Councillor Chris Potter (01/07/20 to 30/06/21)		
		Councillor Stephen Hart (01/07/20 to 30/06/21) Councillor Joe McCracken (01/07/20 to 30/06/21)		
		Councillor Graham Costin (24/10/20 to 30/06/21)		
		Councillor Margaret White (24/10/20 to 30/06/21)		
		Councillor Jamie Bell (24/10/20 to 30/06/21)		
		Councillor Jason Schram (Mayor 01/07/20 to 24/10/20)		
		Councillor Brian Crook (01/07/20 to 24/10/20) Councillor Chris Smith (01/07/20 to 24/10/20)		
Chief Ex	ecutive Officer and	d other Key Management Personnel		
		Chief Executive		
		General Manager Corporate Services		
		General Manager Environment and Infrastructure Services General Manager Development & Community Services		
	mber of Councillo		10	
		ficer and other Key Management Personnel gement Personnel	<u> </u>	1
(c) Rem	uneration of Key M	anagement Personnel	2021	20
-			\$'000	\$'0
	nuneration of key ma m benefits	anagement personnel was as follows:	1,047	1,02
	m benefits		19	1,02
•	ployment benefits		111	7
Total			1,177	1,11
	bers of key manage ntities, fall within the	ment personnel whose total remuneration from Council and any following bands:		
\$10,000	- \$19,999		4	-
	- \$29,999		3	
	- \$39,999 - \$69,999		2 1	
	- \$89,999		-	
) - \$199,999		-	
) - \$209,999		-	
) - \$219,999) - \$229,999		1 2	-
) - \$229,999) - \$239,999		-	-
) - \$259,999		1	-
(d) Seni	or Officer Remune	ration	14	1
A Senior	Officer is an officer	of Council, other than Key Management Personnel, who:		
		ibilities and reports directly to the Chief Executive; or		
,	•	eration exceeds \$151,000		
The num	ber of Senior Office	rs are shown below in their relevant income bands:		
			2021	20
Income F	-		No.	N
	- \$79,999 - \$89,999		1	-
	- \$89,999) - \$159,999		4	
) - \$169,999		2	-
\$170,000) - \$179,999		1	
) - \$189,999		1	
\$190,000) - \$199,999		<u> </u>	-
		eporting year for Senior Officers included above, amounted to:	1,702	83

Colac Otway Shire Council 2020/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021		
Note 7 People and relationshi 7.2 Related party disclosu (a) Transactions with r	re	2021 \$'000	2020 \$'000
	il entered into the following transactions with related parties.		
	Employee benefit	52	46
	Materials & Services	-	35
	Other Expenses	-	6
The following is the aggr	regate amount of transactions with Investments in associates.		
	- Payments made to Corangamite Regional Library Corporation	846	727
	Payments received from Corangamite Regional Library	11	1
All transactions Council	enter into with related parties are undertaken on commercial terms, within Counc	il Policy.	
(b) Outstanding balance The following balances a	es with related parties are outstanding at the end of the reporting period in relation to transactions with re	elated parties.	

Accounts Receivable	-	-
Accounts Payable	-	2

(c) Loans to/from related parties

There are no loans in existence at balance date that have been made, guaranteed or secured by the council to any related parties.

(d) Commitments to/from related parties

There are no commitments in existence at balance date that have been made, guaranteed or secured by the council to a related party.

Colac Otway Shire Council Notes to the Financial Report 2020/2021 Financial Report For the Year Ended 30 June 2021

Note 8 Managing uncertainties 8.1 Contingent assets and liabilities

(a) Contingent liabilities

Superannuation

Council has obligations under a defined benefit superannuation scheme that may result in the need to make additional contributions to the scheme, matters relating to this potential obligation are outlined in Note 9.3. As a result of the volatility in financial markets the likelihood of making such contributions in future periods exists.

Financial Assurances

Council is obligated under Section 194 (2A) and 21 of the Environment Protection Act 1970 to provide financial assurance for any remedial action, rehabilitation and site aftercare costs in relation to the Alvie tip site. The purpose of this provision is to ensure that Council does not impose any undue burden on Council's ratepayers to address any of these costs during the operation or after the closure of its operating landfill sites. The amount of the financial assurance provided to the Environment Protection Authority (EPA) is \$322,500.

(b) Guarantees for loans to other entities

Council has no guarantees in place for loans to other entities.

8.2 Change in accounting standards

Certain new Australian Accounting Standards and interpretations have been published that tare not mandatory for the 30 June 2021 reporting period. Council assesses the impact of these new standards. As at 30 June 2021 there were no new accounting standards or interpretations issued by the AASB which are applicable for the year ending 30 June 2022 that are expected to impact Council.

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 8 Managing uncertainties

8.3 Financial instruments

(a) Objectives and policies

The Council's principal financial instruments comprise cash assets, term deposits, receivables (excluding statutory receivables), payables (excluding statutory payables) and bank borrowings. Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised, in respect of each class of financial asset, financial liability and equity instrument is disclosed in the notes of the financial statements. Risk management is carried out by senior management under policies approved by the Council. These policies include identification and analysis of the risk exposure to Council and appropriate procedures, controls and risk minimisation.

(b) Market risk

Market risk is the risk that the fair value or future cash flows of council financial instruments will fluctuate because of changes in market prices. The Council's exposure to market risk is primarily through interest rate risk with only insignificant exposure to other price risks and no exposure to foreign currency risk.

Interest rate risk

Interest rate risk refers to the risk that the value of a financial instrument or cash flows associated with the instrument will fluctuate due to changes in market interest rates. Council does not hold any interest bearing financial instruments that are measured at fair value, and therefore has no exposure to fair value interest rate risk. Cash flow interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Council has minimal exposure to cash flow interest rate risk through its cash and deposits that are at floating rates.

Investment of surplus funds is made with approved financial institutions under the Local Government Act 1989. Council manages interest rate risk by adopting an investment policy that ensures:

- diversification of investment product;
- monitoring of return on investment; and
- benchmarking of returns and comparison with budget.

There has been no significant change in the Council's exposure, or its objectives, policies and processes for managing interest rate risk or the methods used to measure this risk from the previous reporting period.

Interest rate movements have not been sufficiently significant during the year to have an impact on the Council's year end result.

(c) Credit risk

Credit risk is the risk that a contracting entity will not complete its obligations under a financial instrument and cause Council to make a financial loss. Council have exposure to credit risk on some financial assets included in the balance sheet. Particularly significant areas of credit risk exist in relation to outstanding fees and fines as well as loans and receivables from sporting clubs and associations. To help manage this risk:

- council have a policy for establishing credit limits for the entities council deal with;

- council may require collateral where appropriate; and

- council only invest surplus funds with financial institutions which have a recognised credit rating specified in council's investment policy.

Receivables consist of a large number of customers, spread across the ratepayer, business and government sectors. Credit risk associated with the council's financial assets is minimal because the main debtor is secured by a charge over the rateable property.

There are no material financial assets which are individually determined to be impaired.

Council may also be subject to credit risk for transactions which are not included in the balance sheet, such as when council provide a guarantee for another party. Details of our contingent liabilities are disclosed in Note 8.1(b).

The maximum exposure to credit risk at the reporting date to recognised financial assets is the carrying amount, net of any provisions for impairment of those assets, as disclosed in the balance sheet and notes to the financial statements. Council does not hold any collateral.

Colac Otway Shire Council 2020/2021 Financial Report

Notes to the Financial Report For the Year Ended 30 June 2021

Note 8 Managing uncertainties

8.3 Financial instruments (cont'd)

(d) Liquidity risk

Liquidity risk includes the risk that, as a result of council's operational liquidity requirements it will not have sufficient funds to settle a transaction when required or will be forced to sell a financial asset at below value or may be unable to settle or recover a financial asset.

- To help reduce these risks Council:
- have a liquidity policy which targets a minimum and average level of cash and cash equivalents to be maintained;
- have readily accessible standby facilities and other funding arrangements in place;
- have a liquidity portfolio structure that requires surplus funds to be invested within various bands of liquid instruments;
- monitor budget to actual performance on a regular basis; and
- set limits on borrowings relating to the percentage of loans to rate revenue and percentage of loan principal repayments to rate revenue.

The Council's maximum exposure to liquidity risk is the carrying amounts of financial liabilities as disclosed on the face of the balance sheet and the amounts related to financial guarantees disclosed in Note 8.1(c), and is deemed insignificant based on prior periods' data and current assessment of risk.

There has been no significant change in Council's exposure, or its objectives, policies and processes for managing liquidity risk or the methods used to measure this risk from the previous reporting period.

With the exception of borrowings, all financial liabilities are expected to be settled within normal terms of trade. Details of the maturity profile for borrowings are disclosed at Note 5.4.

Unless otherwise stated, the carrying amounts of financial instruments reflect their fair value.

(e) Sensitivity disclosure analysis

Taking into account past performance, future expectations, economic forecasts, and management's knowledge and experience of the financial markets, Council believes the following movements are 'reasonably possible' over the next 12 months:

- A parallel shift of + 0.25% and -0.25% in market interest rates (AUD) from year-end rates of 0.81%.

These movements will not have a material impact on the valuation of Council's financial assets and liabilities, nor will they have a material impact on the results of Council's operations.

8.4 Fair value measurement

Fair value hierarchy

Council's financial assets and liabilities are not valued in accordance with the fair value hierarchy, Council's financial assets and liabilities are measured at amortised cost.

Council measures certain assets and liabilities at fair value where required or permitted by Australian Accounting Standards. AASB 13 Fair value measurement, aims to improve consistency and reduce complexity by providing a definition of fair value and a single source of fair value measurement and disclosure requirements for use across Australian Accounting Standards.

AASB 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value under AASB 13 is an exit price regardless of whether that price is directly observable or estimated using another valuation technique.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within a fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities

Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable; and Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For the purpose of fair value disclosures, Council has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

In addition, Council determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

Impairment of assets

At each reporting date, the Council reviews the carrying value of its assets to determine whether there is any indication that these assets have been impaired. If such an indication exists, the recoverable amount of the asset, being the higher of the asset's fair value less costs of disposal and value in use, is compared to the assets carrying value. Any excess of the assets carrying value over its recoverable amount is expensed to the comprehensive income statement, unless the asset is carried at the revalued amount in which case, the impairment loss is recognised directly against the revaluation surplus in respect of the same class of asset to the extent that the impairment loss does not exceed the amount in the revaluation surplus for that same class of asset.

Colac Otway Shire Council	Notes to the Financial Report
2020/2021 Financial Report	For the Year Ended 30 June 2021

Note 8 Managing uncertainties

8.4 Fair value measurement (cont'd)

Revaluation

Subsequent to the initial recognition of assets, non-current physical assets, other than plant and equipment, are measured at their fair value, being the price that would be received to sell an asset (or paid to transfer a liability) in an orderly transaction between market participants at the measurement date. At balance date, the Council reviewed the carrying value of the individual classes of assets measured at fair value to ensure that each asset materially approximated its fair value. Where the carrying value materially differed from the fair value at balance date, the class of asset was revalued.

Fair value valuations are determined in accordance with a valuation hierarchy. Changes to the valuation hierarchy will only occur if an external change in the restrictions or limitations of use of an asset result in changes to the permissible or practical highest and best use of the asset. In addition, Council undertakes a formal revaluation of land, buildings, and infrastructure assets on a regular basis ranging from 2 to 5 years. The valuation is performed either by experienced council officers or independent experts.

Where the assets are revalued, the revaluation increments are credited directly to the asset revaluation reserve except to the extent that an increment reverses a prior year decrement for that class of asset that had been recognised as an expense in which case the increment is recognised as revenue up to the amount of the expense. Revaluation decrements are recognised as an expense except where prior increments are included in the asset revaluation reserve for that class of asset in which case the decrement is taken to the reserve to the extent of the remaining increments. Within the same class of assets, revaluation increments and decrements within the year are offset.

8.5 Events occurring after balance date

No other matters have occurred after balance date that require disclosure in the financial report.

Note 9 Other matters 9.1 Reserves

1 Reserves	Balance at beginning of	Increment	Balance at end of
	reporting period	(decrement)	reporting period
(a) Asset revaluation reserves	\$'000	\$'000	\$'000
2021			
Property			
Land	16,529	2,718	19,247
Buildings	8,570	-	8,570
	25,099	2,718	27,817
Plant and Equipment			
Fixed plant, furniture and equipment	293	-	293
	293	-	293
Infrastructure			
Roads	140,676	-	140,676
Bridges	7,914	13,735	21,649
Footpaths and cycleways	7,697	-	7,697
Kerb and channelling	11,619	-	11,619
Drainage	14,833	-	14,833
	182,739	13,735	196,475
Total asset revaluation reserves	208,131	16,453	224,585
2020			
Property			
Land	16,529	-	16,529
Buildings	8,570	-	8,570
,	25,099	-	25,099
Plant and Equipment			
Fixed plant, furniture and equipment	293	-	293
	293	-	293
Infrastructure			
Roads	109,441	31,235	140,676
Bridges	7,914	-	7,914
Footpaths and cycleways	7,311	386	7,697
Kerb and channelling	11,619	-	11,619
Drainage	14,341	492	14,833
-	150,626	32,113	182,739
Total asset revaluation reserves	176,019	32,113	208,131

The asset revaluation reserve is used to record the increased (net) value of Council's assets over time.

Colac Otway Shire Council 2020/2021 Financial Report

Notes to the Financial Report For the Year Ended 30 June 2021

Note 9	Other mat	ters
9.1	Reserves	(cont'd)

9 Other matters 1 Reserves (cont'd)	Balance at beginning of	Transfer from accumulated	Transfer to accumulated	Balance at end of
	reporting period	surplus	surplus	reporting period
(b) Other reserves	\$'000	\$'000	\$'000	\$'000
2021				
Carried Forward Projects	2,465	4,252	-	6,717
Port of Apollo Bay	565	1,339	(1,349)	555
Waste Management	2,307	3,089	(2,864)	2,532
Long Service Leave	2,652	3,175	(2,886)	2,941
Landfill rehabilitation (Alvie)	980	57	-	1,037
Recreational lands	892	150	-	1,042
Colac livestock selling centre	-	432	(554)	(122)
Rehabilitation	932	143	(35)	1,040
Plant replacement	1,856	1,766	(1,187)	2,435
Tirrengower Drainage Scheme	24	22	(23)	23
Unallocated Surplus	-	163	-	163
Water Saving Urban Design	44	-	-	44
Strategic Projects	602	80	-	682
Financial Assistance Grants received in				
advance	3,438	3,805	(3,438)	3,805
Disaster Recovery	6	-	-	6
Total Other reserves	16,763	18,473	(12,336)	22,900
2020				
Carried Forward Projects	3,372	2,466	(3,373)	2,465
Port of Apollo Bay	2,022	1,499	(2,956)	565
Waste Management	2,004	3,199	(2,896)	2,307
Long Service Leave	2,572	332	(252)	2,652
Landfill rehabilitation (Alvie)	923	57	-	980
Recreational lands	768	124	-	892
Colac livestock selling centre	26	462	(488)	-
Rehabilitation	789	143	-	932
Plant replacement	2,441	1,591	(2,176)	1,856
Tirrengower Drainage Scheme	11	22	(9)	24
Local Government Financial Vehicle				
Sinking Funds	1,000	-	(1,000)	-
Water Saving Urban Design	-	44	-	44
Contingent Liability	500	-	(500)	-
Strategic Projects	382	220		602
Financial Assistance Grants received in				002
n manolar / looistance Crante received in	0.000	0.400	(2,000)	0.400

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3,438

13,597

(3,662)

(2,149)

(19,461)

3,438

16,763

6

3,662

2,155

22,627

advance

Disaster Recovery

Total Other reserves

Colac Otway Shire Council 2020/2021 Financial Report

Notes to the Financial Report For the Year Ended 30 June 2021

Note 9 Other matters

9.1 Reserves (cont'd)

Purposes for Reserves

Carried forward projects reserve

This reserve is to recognise the funds allocated and received in prior financial periods that are committed to unfinished projects. This includes grants received in advance for specific projects and funds allocated from prior financial years for projects that are still incomplete at the end of the current financial year.

Port of Apollo Bay reserve

These funds are bound by an agreement with the Department of Transport concerning the operations of the Port of Apollo Bay and are the value of cash assets owed.

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 Tip. The rehabilitation reserve will continue to grow until the Tip closes, at which time, the funds will be utilised to meet this obligation.

Recreational lands reserve

Statutory reserve to be used for the development of recreational reserves and public open space.

Colac livestock selling centre reserve

This reserve is for the purpose of funding works at the Colac Livestock Selling Centre and all funds are derived from any surplus made from the operations of the Colac Livestock Selling Centre.

Rehabilitation reserve

This reserve is to fund the rehabilitation of the various 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.

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.

Local Government Financing Vehicle Sinking Fund

This reserve has been established to set aside monies to fund the repayment of the Local government Financing Vehicle (LGFV) bonds as the bonds come due for payment.

Unallocated Surplus reserve

The purpose of this reserve is to set aside funds to match any unforeseen grant opportunities that arise post the setting of the budget.

Water Saving Urban Design reserve

Statutory reserve to be used for the construction of Future Water Quality Infrastructure.

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.

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.

Disaster Recovery reserve

The purpose of this reserve is to set aside funds received in advance for use in the recovery of Disaster events. The reserve may only be used in accordance with the terms of the disaster relief funding agreements.

Colac Otway Shire Council 2020/2021 Financial Report	Notes to the Financial Report For the Year Ended 30 June 2021		
Note 9 Other matters		2021	2020
9.2 Reconciliation of cash	n flows from operating activities to surplus/(deficit)	\$'000	\$'000
Surplus/(deficit) for the	year	6,403	1,261
Revenue adjustment - i	mpact of AASB 15 Revenue from Contracts with Customers	-	(1,153)
Landfill rehabilitation pr	esent value movement	(3,382)	-
Fair value adjustments	for right of use assets	580	-
Depreciation/amortisati	on	9,987	10,944
Finance costs		88	137
Share of result of assoc	ziate	44	(51)
Profit/(loss) on disposa	of property, infrastructure, plant and equipment	(183)	44
Wind up of Corangamit	e Regional Library Corporation	119	-
Contributions - non mor	netary assets	(617)	(728)
Change in assets and I	iabilities:		
(Increase)/decrease in	trade and other receivables	(649)	(55)
(Increase)/decrease in	prepayments	(362)	104
(Increase)/decrease in	accrued income	352	(160)
(Decrease)/increase in	trade and other payables	2,933	1,722
(Increase)/decrease in	inventories	60	(67)
(Increase)/decrease in	trust funds & deposits	(244)	183
(Decrease)/increase in	provisions	670	(145)
Net cash provided by/(used in) operating activities	15,799	12,036

9.3 Superannuation

Council makes the majority of its employer superannuation contributions in respect of its employees to the Local Authorities Superannuation Fund (the Fund). This Fund has two categories of membership, accumulation and defined benefit, each of which is funded differently. Obligations for contributions to the Fund are recognised as an expense in Comprehensive Income Statement when they are made or due.

Accumulation

The Fund's accumulation categories receive both employer and employee contributions on a progressive basis. Employer contributions are normally based on a fixed percentage of employee earnings (for the year ended 30 June 2021, this was 9.5% as required under Superannuation Guarantee (SG) legislation).

Defined Benefit

Council does not use defined benefit accounting for its defined benefit obligations under the Fund's Defined Benefit category. This is because the Fund's Defined Benefit category is a pooled multi-employer sponsored plan. There is no proportional split of the defined benefit liabilities, assets or costs between the participating employers as the defined benefit obligation is a floating obligation between the participating employers and the only time that the aggregate obligation is allocated to specific employers is when a call is made. As a result, the level of participating employers. Therefore, the Fund Actuary is unable to allocate benefit liabilities, assets and costs between employers for the purposes of AASB 119.

Funding Arrangements

Council makes employer contributions to the Defined Benefit category of the Fund at rates determined by the Trustee on the advice of the Fund Actuary. A triennial actuarial review is currently underway for the Defined Benefit category as at 30 June 2020 and is expected to be completed by 31 December 2020.

The vested benefit index (VBI) of the Defined Benefit category of which Colac Otway Shire Council is a contributing employer was 104.6%. The financial assumptions used to calculate the VBI were:

Net investment returns	5.6% pa
Salary inflation	2.5% pa for two years and
	2.75% pa thereafter
Price inflation (CPI)	2.0% pa.

As at 30 June 2021, an interim actuarial investigation is underway as the Fund provides lifetime pensions in the Defined Benefits category.

Vision Super has advised that the VBI at 30 June 2021 was 109.7%. The financial assumptions used to calculate this VBI

Net investment returns	4.8% pa
Salary inflation	2.75% pa
Price inflation (CPI)	2.25% pa.

The VBI issued as the primary funding indicator. Because the VBI was above 100%, the 30 June 2020 actuarial investigation determined the Defined Benefit category was in a satisfactory financial position and that no change was necessary to the Defined Benefit category's funding arrangements from prior years.

Colac Otway Shire Council 2020/2021 Financial Report

Notes to the Financial Report For the Year Ended 30 June 2021

Note 9 Other matters

9.3 Superannuation (cont'd)

Employer Contributions

Regular Contributions

On the basis of the results of the 2020 full actuarial investigation conducted by the Fund Actuary, Council makes employer contributions to the Fund's Defined Benefit category at rates determined by the Fund's Trustee. For the year ended 30 June 2021, this rate was 9.5% of members' salaries (9.5% in 2019/2020). This rate will increase in line with any increases in the SG contribution rate. In addition, Council reimburses the Fund to cover the excess of the benefits paid as a consequence of retrenchment above the funded resignation or retirement benefit.

Funding Calls

If the Defined Benefit category is in an unsatisfactory financial position at an actuarial investigation or the Defined Benefit category's VBI is below its shortfall limit at any time other than the date of the actuarial investigation, the Defined Benefit category has a shortfall for the purposes of SPS 160 and the Fund is required to put a plan in place so that the shortfall is fully funded within three years of the shortfall occurring. The Fund monitors its VBI on a quarterly basis and the Fund has set its shortfall limit at 97%.

In the event that the Fund Actuary determines that there is a shortfall based on the above requirement, the Fund's participating employers (including Council) are required to make an employer contribution to cover the shortfall.

Using the agreed methodology, the shortfall amount is apportioned between the participating employers based on the pre-1 July 1993 and post-30 June 1993 service liabilities of the Fund's Defined Benefit category, together with the employer's payroll at 30 June 1993 and at the date the shortfall has been calculated.

Due to the nature of the contractual obligations between the participating employers and the Fund, and that the Fund includes lifetime pensioners and their reversionary beneficiaries, it is unlikely that the Fund will be wound up.

If there is a surplus in the Fund, the surplus cannot be returned to the participating employers. In the event that a participating employer is wound-up, the defined benefit obligations of that employer will be transferred to that employer's successor.

The 2020 interim actuarial investigation surplus amounts

An actuarial investigation is conducted annually for the Defined Benefit category of which Colac Otway Shire is a contributing employer. Generally, a full actuarial investigation conducted every three years and interim actuarial investigations are conducted for each intervening year. A full investigation was conducted as at 30 June 2020.

The Fund's actuarial investigations identified the following for the Defined Benefit category of which Colac Otway Shire Council is a contributing employer:

	2020	2019 (Interim)	
	(Triennial)		
	\$'000	\$'000	
A VBI surplus	100,000	151,300	
A total service liability surplus	200,000	233,400	
A discounted accrued benefits surplus	217,800	256,700	

The VBI surplus means that the market value of the fund's assets supporting the defined benefit obligations exceed the vested benefits that the defined benefit members would have been entitled to if they had all exited on 30 June 2020. The total service liability surplus means that the current value of the assets in the Fund's Defined Benefit category plus expected future contributions exceeds the value of expected future benefits and expenses as at 30 June 2020. The discounted accrued benefit surplus means that the current value of the assets in the Fund's Defined Benefit category exceeds the value of benefits payable in the future but accrued in respect of service to 30 June 2020. Council was notified of the 30 June 2021 VBI during August 2021.

The 2020 interim actuarial investigation

A interim actuarial investigation is being conducted for the Fund's position as at 30 June 2021 as the Fund provides lifetime pensions in the Defined Benefit category. It is anticipated that this actuarial investigation will be completed by October 2021. Council was notified of the 30 June 2021 VBI during August 2021.

Colac Otway Shire Council	Notes to the Financial Report	
2020/2021 Financial Report	For the Year Ended 30 June 2021	

Note 10 Change in accounting policy

Council has adopted AASB 1059 Service Concession Arrangements: Grantors, AASB 2018-7 Amendments to Australian Accounting Standards - Definition of Material, and AASB 2019-1 Amendments to Australian Accounting Standards - References to the Conceptual Framework, from 1 July 2020. These standards have not resulted in adjustments to the amounts recognised in the financial statements.

a) AASB 1059 Service Concession Arrangements: Grantors

AASB 1059 Service Concession Arrangements: Grantors applies to a service concession arrangement by a grantor that is a public sector entity by prescribing the accounting for the arrangement from the grantor's perspective in a public-to-private service concession arrangement.

Council did not operate any service concession arrangements on adoption of AASB 1059 Service Concession Arrangements: Grantors.

AASB 1059 Service Concession Arrangements: Grantors has not resulted in adjustments to the amounts recognised in the financial statements.

b) AASB 2018-7 Amendments to Australian Accounting Standards - Definition of Material

AASB 2018-7 Amendments to Australian Accounting Standards - Definition of Material refines the definition of 'material' in AASB 101 Presenttion of Financial Statements. The amendments clarify the definition of 'material' and its application by improving the wording and aligning the definition across AASB Standards and other publications.

AASB 2018-7 Amendments to Australian Accounting Standards - Definition of Material has not resulted in adjustments to the amounts recognised or disclosed in the financial statements.

c) AASB 2019-1 Amendments to Australian Accounting Standards - References to the Conceptual Framework

AASB 2019-1 Amendments to Australian Accounting Standards - References to the Conceptual Framework makes amendments to the Australian Accounting Standards, Interpretations and other pronouncements to reflect the issuance of the Conceptual Framework for Financial Reporting by the AASB.

AASB 2019-1 Amendments to Australian Accounting Standards - References to the Conceptual Framework has not resulted in adjustments to the amounts recognised or disclosed in the financial statements.

It is not expected that these standards will have any significant impact on Council.

Performance Statement

For the year ended 30 June 2021

Description of Municipality

Colac Otway Shire is situated about 160 kilometres south-west of the Melbourne CBD and approximately an hour's drive to the large regional cities of Geelong to the east, Ballarat to the north and Warrnambool to the west. Colac Otway Shire has a unique and precious natural environment containing some of the most picturesque scenery in the State. A large proportion is Forest Park and National Park but it also includes beaches, rugged coastline, rainforests, waterfalls, volcanic lakes and craters.

Our resident population is estimated at 21,662 as at 30 June 2020. The forecast through to 2041 is for growth of 23.39%, this significant increase is expected in part due to the completion of the dual highway to Geelong. The duplication opens up the region, making commuting an attractive option for both the local population and for those seeking a lifestyle change. With the attraction of affordable housing and great lifestyle, we are ideally located for those looking for a rural idyll within a comfortable commuting distance to major centres.

The five major industry sectors are (number of people)

- Manufacturing 1,440
- Healthcare & Social Assistance 1,341
- Agriculture, Forestry & Fishing 1,284
- Retail Trade 936
- Tourism 876

In combination, these five industries employed 56.5% of the employed resident population. Colac Otway Shire Council provides 49 high quality services and facilities across a wide range of areas from, community services, environmental management, customer services, health and wellbeing, family and children's services, open spaces, waste management, tourism, parks and gardens; to business development, planning for appropriate development and ensuring accountability for Council's budget.

Sustainability Capacity Indicators - For the year ended 30 June 2021

Indicator / measure [formula]	Results 2018	Results 2019	Results 2020	Results 2021	Comments
Population Expenses per head of municipal population [Total expenses / Municipal population]	\$2,341.46	\$2,539.11	\$2,577.70	\$2,527.05	
Infrastructure per head of municipal population [Value of infrastructure / Municipal population]	\$12,203.77	\$13,558.14	\$15,319.07	\$15,917.69	
Population density per length of road [Municipal population / Kilometres of local roads]	13.22	13.20	13.28	13.34	
Own-source revenue Own-source revenue per head of municipal population [Own-source revenue / Municipal population]	\$1,677.98	\$1,777.87	\$1,797.15	\$2,019.76	
Recurrent grants Recurrent grants per head of municipal population [Recurrent grants / Municipal population]	\$617.03	\$596.29	\$560.47	\$557.80	
Disadvantage Relative Socio-Economic Disadvantage [Index of Relative Socio-Economic Disadvantage by decile]	3.00	3.00	3.00	3.00	
Workforce turnover Percentage of staff turnover [Number of permanent staff resignations and terminations / Average number of permanent staff for the financial year] x100	17.9%	17.3%	11.2%	12.0%	

Definitions

"adjusted underlying revenue" means total income other than -

- (a) Non-recurrent grants used to fund capital expenditure; and
- (b) Non- monetary asset contributions; and
- (c) Contributions to fund capital expenditure from sources other than those referred to in paragraphs
 (a) and (b)

"infrastructure" means non-current property, plant and equipment excluding land

"**local road**" means a sealed or unsealed road for which the council is the responsible road authority under the *Road Management Act 2004*

"population" means the resident population estimated by council

"**own-source revenue**" means adjusted underlying revenue other than revenue that is not under control of council (including government grants)

"relative socio-economic disadvantage" in relation to a municipality, means the relative socialeconomic disadvantage, expressed as a decile for the relevant financial year, of the area in which the municipality is located according to the index of Relative Socio-Economic Disadvantage (Catalogue Number 2033.0.55.001) of SEIFA

"SEIFA" means the Socio-Economic Indexes for Areas published from time to time by the Australian Bureau of Statistics on its website

"unrestricted cash" means all cash and cash equivalents other than restricted cash

Service Performance Indicators Service/indicator/measure	Results 2018	Results 2019	Results 2020	Results 2021	Comments
Aquatic Facilities Utilisation AF6 Utilisation of aquatic facilities [Number of visits to aquatic facilities / Municipal population]	5.01	4.60	5.17	1.68	Bluewater Leisure Centre was closed for a total of 121 days due to COVID-19 restrictions in Victoria in the 2020/21 financial year. Additionally, when the centre reopened on multiple occasions, visitation to the centre was often limited due to COVID-19 restrictions. Further, Bluewater changed point of sale & membership software providers in October of 2020, data was not captured on casual or multipass visits to the centre from 1 July 2020 to 27 October 2020 (noting the centre was only open 20 days in July during this period due to COVID-19 closures).
Animal Management Health and safety AM7 Animal management prosecutions [Number of successful animal management prosecutions / Number of animal management prosecutions] x 100	New in 2020	New in 2020	100%	100%	
Food Safety Health and safety FS4 Critical and major non- compliance outcome notifications [Number of critical non- compliance outcome notifications and major non- compliance notifications about a food premises followed up / Number of critical non-compliance outcome notifications and major non-compliance notifications about a food premises] x100	100.00%	94.74%	97.50%	90.00%	Result remains high despite a lower result than previous year.
Governance Satisfaction G5 Satisfaction with council decisions [Community satisfaction rating out of 100 with how council has performed in making decisions in the interest of the community]	49	52	50	58	The increase in this measure compared to the 2019/20 result may be attributed to Council's response to the COVID-19 pandemic and public optimism towards the newly elected Council.

Service Performance Indicators - For the year ended 30 June 2021

Service Performance Indicators Service/indicator/measure	Results 2018	Results 2019	Results 2020	Results 2021	Comments
Libraries Participation LB4 Active library borrowers in municipality [Number of active library borrowers in the last three years / The sum of the population for the last three years] x100	16.04%	14.99%	15.45%	No Data	Unable to remove non-active borrowers from figures, advice from KYC is to remove figures and change to No Data.
Maternal and Child Health (MCH) Participation MC4 Participation 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	70.85%	74.44%	55.23%	75.83%	Data cleansing has assisted in cleaning up old histories and bringing data back to previous years participation rates. We have also worked on our overdue KAS reporting which allowed us to contact and re- engage with some families.
Participation MC5 Participation in the MCH service by Aboriginal children [Number of Aboriginal children who attend the MCH service at least once (in the year) / Number of Aboriginal children enrolled in the MCH service] x100	66.67%	58.33%	55.26%	72.00%	Small numbers but the Maternal Child Health service has been participating in a new program to increase participation rates for Aboriginal children in early years services and emphasis on more active engagement.
Roads Satisfaction R5 Satisfaction with sealed local roads [Community satisfaction rating out of 100 with how council has performed on the condition of sealed local roads]	39	42	44	53	Rolling resealing program implemented 2019/20 and 100% Road Management Plan inspections completed, 85% rectified within timeframes.
Statutory Planning Decision making SP4 Council planning decisions upheld at VCAT [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	100.00%	0.00%	50.00%	0.00%	No Council decisions were set aside by VCAT.

Service Performance Indicators Service/indicator/measure	Results 2018	Results 2019	Results 2020	Results 2021	Comments
Waste Collection Waste diversion WC5 Kerbside collection waste 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	47.79%	52.06%	60.38%	57.53%	

Definitions

"Aboriginal child" means a child who is an Aboriginal person

"Aboriginal person" has the same meaning as in the Aboriginal Heritage Act 2006

"active library member" means a member of a library who has borrowed a book from the library

"annual report" means an annual report prepared by a council under sections 131, 132 and 133 of the *Local Government Act 1989*

"class 1 food premises" means food premises, within the meaning of the *Food Act 1984*, that have been declared as class 1 food premises under section 19C of that Act

"class 2 food premises" means food premises, within the meaning of the *Food Act 1984*, that have been declared as class 2 food premises under section 19C of that Act

"Community Care Common Standards "means the Community Care Common Standards for the delivery of HACC services, published from time to time by the Commonwealth

"critical non-compliance outcome notification" means a notification received by council under section 19N(3) or (4) of the *Food Act 1984*, or advice given to council by an authorized officer under that Act, of a deficiency that poses an immediate serious threat to public health

"food premises" has the same meaning as in the Food Act 1984

"local road" means a sealed or unsealed road for which the council is the responsible road authority under the *Road Management Act 2004*

"major non-compliance outcome notification" means a notification received by a council under section 19N(3) or (4) of the *Food Act 1984*, or advice given to council by an authorized officer under that Act, of a deficiency that does not pose an immediate serious threat to public health but may do so if no remedial action is taken

"MCH" means the Maternal and Child Health Service provided by a council to support the health and development of children within the municipality from birth until school age

"population" means the resident population estimated by council

"target population" has the same meaning as in the Agreement entered into for the purposes of the *Home Community Care Act 1985* of the Commonwealth

"WorkSafe reportable aquatic facility safety incident" means an incident relating to a council aquatic facility that is required to be notified to the Victorian WorkCover Authority under Part 5 of the *Occupational Health and Safety Act 2004*

Indicators	
Performance	
Financial	Lauthor in the second

For the year ended 30 June 2021

	Material Variations and			Working capital is forecast to continually decrease over the coming years as increases in revenue are not sufficient to cover the increases in operating costs associated with delivering the current level of services. Council is reviewing its Revenue and Rating Plan and Long Term Financial Plan to address this concern.
	2025	\$3,483.71	\$1,891.32	31.29%
Corocacte	616BJ	\$3,414.90	\$1,879.88	77.93%
	2023	\$3,363.63	\$1,868.42	118.30%
	2022	\$3,395.64	\$1,865.52	145.12%
	Results 2021	\$3,500.51	\$1,827.60	189.73%
	Results 2020	\$3,609.44	\$1,811.10	178.40%
	Results 2019	\$3,546.50	New in 2020	204.46%
	Results 2018	\$3,279.64	New in 2020	254.66%
	Dimension/indicator/measure	Efficiency Expenditure level E2 Expenses per property assessment [Total expenses / Number of property assessments]	Revenue level E4 Average rate per property assessment [Total rate revenue (general rates and municipal charges) / Number of property assessments]	Liquidity Working capital U.1 Current assets compared to current liabilities [Current assets / Current liabilities] x100

Dimension/indicator/measure	Results	Results	Results	Results		Fore	Forecasts		Material Variations and
	0107	6102	2020	1707	2022	2023	2024	2025	COMMENTS
Unrestricted cash L2 Unrestricted cash compared to current liabilities [Unrestricted cash / Current liabilities] x100	9.42%	119.98%	104.93%	93.11%	97.96%	80.76%	40.65%	4.55%	This indicator has continued to reduce and is forecast to reduce further, primarily due to increases in revenue not being sufficient to cover the increases in operating costs associated with delivering the current level of services. The 2020/21 result has been impacted by increased expenditure/reduced revenue resulting from the COVID- 19 pandemic and average rate increases below the rate cap (2019/20: 0.5% compared to 2.5% rate cap; 2020/21: 0.5% compared to 2.5% rate cap), which is insufficient to meet increasing costs. Council is reviewing its Revenue and Rating Plan and Long Term Financial Plan to address this concern.
Obligations Loans and borrowings O2 Loans and borrowings compared to rates [Interest bearing loans and borrowings / Rate revenue] x100	11.36%	8.92%	3.27%	2.31%	1.82%	0.00%	0.00%	0.00%	This indicator improved significantly in 2019/20 due to a \$1m bond repayment, which was taken under the Local Government Funding Vehicle in 2014. No new debt is forecast.
O3 Loans and borrowings repayments compared to rates [Interest and principal repayments on interest bearing loans and borrowings / Rate revenue] x100	2.79%	2.71%	5.74%	1.06%	0.55%	1.90%	0.00%	0.00%	This indicator improved significantly in 2019/20 due to a \$1m bond repayment, which was taken under the Local Government Funding Vehicle in 2014. No new debt is forecast.

Times and the second	Results	Results	Results	Results		Fore	Forecasts		Material Variations and
Dimension/marcator/measure	2018	2019	2020	2021	2022	2023	2024	2025	Comments
Indebtedness O4 Non-current liabilities compared to own source revenue [Non-current liabilities / Own source revenue] x100	30.33%	23.52%	27.14%	16.12%	23.56%	22.47%	21.26%	20.06%	Non-current liabilities reduced by \$3.5m in 2020/21 due to an independent expert assessment of Council's obligations for future restoration of ten closed landfill sites reducing the expected cost of works required by \$3.3m, which was recognised as revenue in 2020/21.
Asset renewal and upgrade O5 Asset renewal and upgrade compared to depreciation [Asset renewal and asset upgrade expense / Asset depreciation] x100	New in 2020	New in 2020	108.81%	97.61%	150.99%	147.79%	149.87%	151.98%	This indicator significantly reduced in 2020/21 due to a reduced capital works program and a one- off reduction in renewal projects. This reduction in renewal expenditure has been reallocated to support the community in the recovery from the COVID-19 pandemic.

Dimonsion / in disates / mosceneo	Results	Results	Results	Results		Fore	Forecasts		Material Variations and Comments
	2018	2019	2020	2021	2022	2023	2024	2025	
Operating position Adjusted underlying result OP1 Adjusted underlying surplus (or deficit) [Adjusted underlying (deficit)/ Adjusted underlying revenue] x100	0.97%	4.15%	-3.55%	7.60%	-2.10%	0.91%	0.35%	-0.62%	This indicator has improved in 2020/21 but is forecast to be in deficit by 2021-22, primarily due to increases in revenue not being sufficient to cover the increases in operating costs associated with delivering the current level of services. The 2020/21 result has improved by a reduction in the landfill restoration provision movement by \$3.3m and recognised as revenue, which is due to an independent expert assessment of Council's obligations for future restoration of ten closed landfill sites reducing the expected cost of works required. The result has also reduced by \$580,000 due to impairment of right of use assets relating to leased two-way radio equipment not able to be recovered from the supplier following voluntary liquidation. The 2020/21 result would have been 3.24% if this provision movement and impairment had not been recognised. Council is reviewing its Revenue and Rating Plan and Long Term Financial Plan to address this concern.

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Attachment 10.7.1 Colac Otway	Shire Annual Report 2020-21 - Final
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	Results	Results	Results	Results		Forecasts	casts		Material Variations and
Dimension/indicator/measure	2018	2019	2020	2021	2022	2023	2024	2025	Comments
Stability Rates concentration S1 Rates compared to adjusted underlying revenue [Rate revenue / Adjusted underlying revenue] x100	58.51%	53.55%	58.39%	53.83%	62.97%	61.88%	61.72%	61.53%	This indicator has decreased due to a significant increase in adjusted underlying revenue in 2020/21. The 2020/21 figure includes a landfill restoration provision movement of \$3.2m and recognised in adjusted underlying revenue.
Rates effort S2 Rates compared to property values [Rate revenue / Capital improved value of rateable properties in the municipality] x100	0.51%	0.46%	0.47%	0.44%	0.41%	0.42%	0.42%	0.43%	This indicator is forecast to continue to decrease as property values are expected to increase at a greater rate than rate revenue, which has been increasing below the rate cap (2019/20: 0.5% compared to 2.5% rate cap; 2020/21: 0.5% compared to 2.5% rate cap).

Retired indicators	Results	Results	Results		
Service / indicator / measure	2018	2019	2020		Comments
Animal Management Health and safety AM4 Animal management prosecutions [Number of successful animal management prosecutions]	9	4	Retired in 2020	Retired in 2020	This measure was replaced by AM7 from 1 July 2019.
Efficiency Revenue level E1 Average residential rate per residential property assessment [Residential rate revenue / Number of residential property assessments]	\$1,664.15	\$1,788.98	Retired in 2020	Retired in 2020	This measure was replaced by E4 from 1 July 2019.
Obligations Asset renewal O1 Asset renewal compared to depreciation [Asset renewal expense / Asset depreciation] x100	115.56%	125.63%	Retired in 2020	Retired in 2020	This measure was replaced by O5 in 1 July 2019.

Definitions

(a) non-recurrent grants used to fund capital expenditure; and

(b) non-monetary asset contributions; and

(c) contributions to fund capital expenditure from sources other than those referred to in paragraphs (a) and (b)

"adjusted underlying surplus (or deficit)" means adjusted underlying revenue less total expenditure

"asset renewal expenditure" means expenditure on an existing asset or on replacing an existing asset that returns the service capability of the asset to its original capability

'current assets" has the same meaning as in the AAS

"current liabilities" has the same meaning as in the AAS

non-current assets" means all assets other than current assets

"non-current liabilities" means all liabilities other than current liabilities

non-recurrent grant" means a grant obtained on the condition that it be expended in a specified manner and is not expected to be received again during he period covered by a council's Strategic Resource Plan

'own-source revenue" means adjusted underlying revenue other than revenue that is not under the control of council (including government grants

"population" means the resident population estimated by council

rate revenue" means revenue from general rates, municipal charges, service rates and service charges

"recurrent grant" means a grant other than a non-recurrent grant

residential rates" means revenue from general rates, municipal charges, service rates and service charges levied on residential properties

<u>.</u>0 "restricted cash" means cash and cash equivalents, within the meaning of the AAS, that are not available for use other than for a purpose for which it estricted, and includes cash to be used to fund capital works expenditure from the previous financial year

'unrestricted cash" means all cash and cash equivalents other than restricted cash

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Other Information

For the year ended 30 June 2021

1. Basis of preparation

Council is required to prepare and include a performance statement within its annual report. The performance statement includes the results of the prescribed sustainable capacity, service performance and financial performance indicators and measures together with a description of the municipal district and an explanation of material variations in the results. This statement has been prepared to meet the requirements of the *Local Government Act 1989* and Local Government (Planning and Reporting) Regulations 2014 (as per the transitional provisions of the *Local Government Act 2020*).

Where applicable the results in the performance statement have been prepared on accounting bases consistent with those reported in the Financial Statements. The other results are based on information drawn from Council information systems or from third parties (e.g. Australian Bureau of Statistics).

The performance statement presents the actual results for the current year and for the prescribed financial performance indicators and measures, the results forecast by the Council's strategic resource plan. The Local Government (Planning and Reporting) Regulations 2014 requires explanation of any material variations in the results contained in the performance statement. Council has adopted materiality thresholds relevant to each indicator and measure and explanations have not been provided for variations below the materiality thresholds unless the variance is considered to be material because of its nature.

The forecast figures included in the performance statement are those adopted by Council in its strategic resource plan on 22 July 2020 and which forms part of the Council Plan. The strategic resource plan includes estimates based on key assumptions about the future that were relevant at the time of adoption and aimed at achieving sustainability over the long term. Detailed information on the actual financial results is contained in the General Purpose Financial Statements. The strategic resource plan can be obtained by contacting Council.

Certification of the Performance Statement

In my opinion, the accompanying performance statement has been prepared in accordance with the Local Government Act 1989 and the Local Government (Planning and Reporting) Regulations 2014 (as per the transitional provisions of the Local Government Act 2020).

Amanda Barber CPA Principal Accounting Officer

Dated: 27 October 2021

Colac

In our opinion, the accompanying performance statement of the Colac Otway Shire Council for the year ended 30 June 2021 presents fairly the results of Council's performance in accordance with the *Local Government Act 1989* and the Local Government (Planning and Reporting) Regulations 2014 (as per the transitional provisions of the *Local Government Act 2020*).

The performance statement contains the relevant performance indicators, measures and results in relation to service performance, financial performance and sustainable capacity.

At the date of signing, we are not aware of any circumstances that would render any particulars in the performance statement to be misleading or inaccurate.

We have been authorised by the Council and by the Local Government (Planning and Reporting) Regulations 2014 to certify this performance statement in its final form.

Cr Graham Costin Councillor Dated: 27 October 2021 Colac

SLACE

Cr Stephen Hart Councillor Dated: 27 October 2021

Anne Howard Chief Executive Officer Dated: 27 October 2021

Independent Auditor's Report



To the Councillors of Colac Otway Shire Council

I have audited the accompanying performance statement of Colac Otway Shire Council (the council) which comprises the:
 description of the municipality for the year ended 30 June 2021 sustainable capacity indicators for the year ended 30 June 2021 service performance indicators for the year ended 30 June 2021 financial performance indicators for the year ended 30 June 2021 other information and certification of the performance statement.
In my opinion, the performance statement presents fairly, in all material respects, the performance of the council for the year ended 30 June 2021 in accordance with the performance reporting requirements of Part 6 of the <i>Local Government Act 1989</i> .
I have conducted my audit in accordance with the <i>Audit Act 1994</i> which incorporates the Australian Standards on Assurance Engagements. I further describe my responsibilities under that Act and those standards in the <i>Auditor's Responsibilities for the Audit of the performance statement</i> section of my report.
My independence is established by the <i>Constitution Act 1975</i> . I and my staff are independent of the council in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 <i>Code of</i> <i>Ethics for Professional Accountants</i> (the Code) that are relevant to my audit of the performance statement in Victoria and have also fulfilled our other ethical responsibilities in accordance with the Code.
I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.
The Councillors are responsible for the preparation and fair presentation of the performance statement in accordance with the performance reporting requirements of the <i>Local Government Act 1989</i> and for such internal control as the Councillors determines is necessary to enable the preparation and fair presentation of the statement of performance that is free from material misstatement, whether due to fraud or error.
As required by the <i>Audit Act 1994</i> , my responsibility is to express an opinion on the performance statement based on the audit. My objectives for the audit are to obtain reasonable assurance about whether the performance statement as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that

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Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of this performance statement.

As part of an audit in accordance with the Australian Standards on Assurance Engagements, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

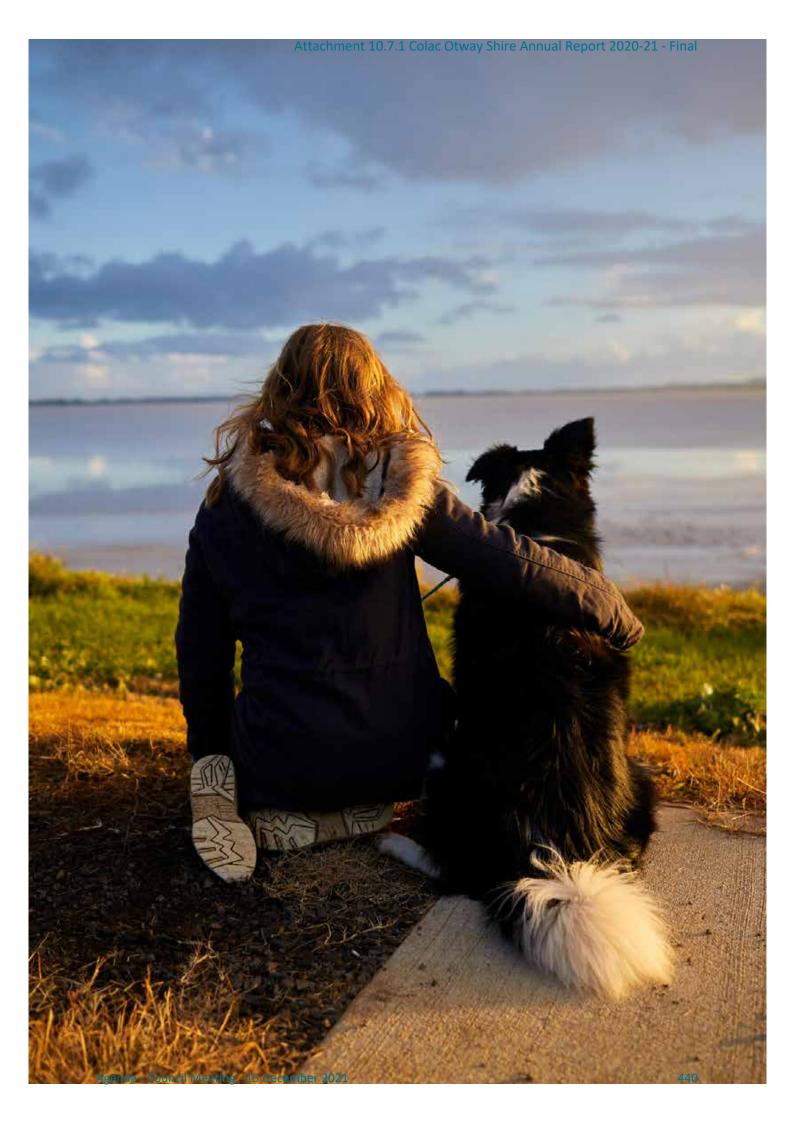
- identify and assess the risks of material misstatement of performance statement, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the council's internal control
- evaluate the overall presentation, structure and content of the performance statement, including the disclosures, and whether performance statement represents the underlying events and results in a manner that achieves fair presentation.

I communicate with the Councillors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

MELBOURNE 4 November 2021 Sanchu Chummar as delegate for the Auditor-General of Victoria

Acronyms and Definitions

AMP	Asset Management Plan
CBD	Central Business District
ССТУ	Video surveillance in real time
CE0	Chief Executive Officer
CFA	Country Fire Authority
COPACC	Colac Otway Performing Arts and Cultural Centre
CR	Councilor
COVID-19	Coronavirus Pandemic
DELWP	Department Environment, Land, Water and Planning
EDRMS	Electronic Document and Record Management System
EE0	Equal Employment Opportunity
EFT	Equivalent Full Time
EM	Emergency Management
EMT	Executive Management Team
EPA	Environment Protection Agency
FOI	Freedom of Information
G21	Geelong Regional Alliance
GIS	Graphic Information System
GORVIC	Great Ocean Road Visitor Information Centre
HEAL	Healthy Eating and Active Living
IBAC	Independent Broad-based Anti-Corruption Commission
ICT	Information Communication Technology
LG	Local Government
LGA	Local Government Area
LGPRO	Local Government Professionals
LMS	Learning Management System
MCH	Maternal Child Health
OHS	Occupational health and Safety
SLT	Senior Leadership Team
VAGO	Victorian Auditor-Generals Office
VCAT	Victorian Civil and Administrative Authority
VIC	Visitor Information Centre
VICPOL	Victorian Police
WAN	Wide Area Network



Contact us

PO Box 283, Colac 3250 Email: inq@colacotway.vic.gov.au **Phone:** 03 5232 9400

Colac Customer Service Centre 2-6 Rae Street, Colac Open: Monday - Friday 8:30am - 5pm

Apollo Bay Customer Service Centre 100 Great Ocean Road, Apollo Bay Open: 7-days a week, 9am - 5pm



For callers who have a hearing, speech or communication impairment, and for text telephone or modem callers, use our National Relay Service on 133677



Item: 10.8

Domestic Animal Management Plan 2021-2025

OFFICER	ora Novak	
GENERAL MANAGER	ony McGann	
DIVISION	nvironment & Infrastructure	
ATTACHMENTS	Colac Otway Shire - Domestic Animal Management 2022 - 2025 - Final Draft - Updated [10.8.1 - 38 pag	
PURPOSE	o present the Domestic Animal Management Plan 2 DAMP) to Council for endorsement.	.021-2025

1. EXECUTIVE SUMMARY

A Domestic Animal Management Plan (DAMP) is a Council document that focuses on the management of dogs and cats, and outlines the key issues, objectives and priorities for how these will be managed.

Under the provisions of the *Domestic Animals Act 1994* each Victorian Council is required to prepare a domestic animal management plan at four-yearly intervals. A Domestic Animal Management Plan outlines the services, programs and policies the Council has established to address the administration of the Act and the management of cats and dogs in the community.

The aim of the domestic animal management plan is to promote responsible pet ownership and the welfare of cats and dogs in the community, while protecting the community and environment from nuisance cats and dogs.

The attached (Attachment 1) Draft Colac Otway Shire Domestic Animal Management Plan 2021-2025 (DAMP) outlines the legislative requirements for Council in relation to domestic animal management and provides detail on existing controls and services along with statistics on historical performance. The DAMP also identifies local issues in domestic animal management and includes an Action Plan that details the works to be undertaken to address them over the next four years.

The plan also provides information on the daily operation of the Council's animal management services, and the programs Council will adopt for the following standards of animal management to:

- Promote and encourage the responsible ownership of dogs and cats.
- Ensure that people comply with this Act, the regulations and any related legislation.
- Minimise the risk of attacks by dogs on people and animals.
- Address any over-population and high euthanasia rates for dogs and cats.

- Encourage the registration and identification of dogs and cats.
- Minimise the potential for dogs and cats to create a nuisance.
- Effectively identify all dangerous dogs, menacing dogs and restricted breed dogs in that district and to ensure that those dogs are kept in compliance with the Act and the Regulations.

The purpose of presenting the draft DAMP 2021-2025 to Council is to seek approval and endorsement of the plan following the 6-week public consultation period.

2. RECOMMENDATION

That Council:

- 1. Thanks submitters for their feedback on the draft Domestic Animal Management Plan 2021-25 and acknowledges the comments provided.
- 2. Adopts the Domestic Animal Management Plan 2021-25 (as at Attachment 1).
- 3. Approves the submission of the Domestic Animal Management Plan 2021-25 to the Secretary of the Department of Economic Development, Jobs, Transport and Resources in accordance with the provisions of the Domestic Animals Act 1994.

3. KEY INFORMATION

Council Officers have updated the DAMP with relevant legislation changes and statistics in line with the process set out by Animal Welfare Victoria (Department of Jobs, Precincts and Regions). The DAMP identifies the nine key priority areas that will be addressed through a series of actions that will be undertaken over the next four years. The actions identified in the draft DAMP will be implemented through Council's Community Safety Unit. No increase to the existing resourcing for the Community Safety Unit is required to achieve the actions identified in the draft DAMP.

The DAMP is focused on the following nine key priorities:

- Training of Compliance Officers;
- Registration and identification of animals;
- Nuisance animals;
- Dog attacks;
- Dangerous, menacing and restricted breed dogs;
- Overpopulation and euthanasia rates;
- Domestic animal businesses;
- Other matters; and
- Annual review of plan and annual reporting.

Training:

All Compliance Officers that undertake animal management duties are required to have a Certificate IV in Animal Control and Regulation and a Certificate IV in Statutory Compliance. Ongoing training will be required over the next four years to ensure all Officers maintain/obtain the required certification in animal control and regulation.

Animal Registration & Identification:

Registration of animals in 2017 to 2020 shows an increase in the number of dogs of 5%. The number of registered cats has also increased by 5%.

The ongoing challenge for Council's Animal Management Officers, particularly for cats, is to effectively seek out those animal owners who fail to register their animals in accordance with the statutory requirements of the *Domestic Animals Act 1994*.

To continue our rate of animal registration is increasing of 5% per year, we will undertake random door knocks to ensure compliance with pet registrations. We propose to offer free cat registrations for the first registration period for all microchipped and desexed cats. This program will likely see an increase in cat registrations and ultimately result in decreasing the number of cats being euthanised.

Nuisance Animals:

The majority of complaints received by Council relate to dogs at large, and barking dog complaints. These complaints are monitored through the Council Merit system. The issue of barking dogs is difficult to police, requires an extensive investigation and quite often the complainant/s are reluctant to become involved in a Court process. Many complainants do not wish to be identified and the penalty by way of infringement is minimal. Council has developed a barking dog package that requires the complainant to keep a diary detailing the date/time that the dog has barked and any obvious reason that the barking is occurring. This diary is usually compiled over a 14-day period so that Council Officers can assess the results in order to best develop a strategy that can be discussed with the owner to achieve an acceptable level of noise.

Cats are very difficult to manage, particularly the feral/abandoned cat population. Council receives a large number of complaints about feral cats. While every effort is made to catch feral cats, it is often very difficult to find them. When feral cats are caught, they are euthanised because they cannot be safely rehoused. Unfortunately, the problems associated with feral cats are a national problem that cannot be easily rectified by Council. However, Council officers will continue to provide a cat trapping program, with a particular focus on feral and stray cats within the Shire.

Dog Attacks:

During 2019-2020 there were six reported dog attacks resulting in five infringements being issued and one prosecution. It is believed that the number of reported dog attacks is significantly lower than the actual number which could be attributed to a number of things including the victim knowing the animal owner or attacks on livestock where the property owner cannot find the source of the attack.

The number of dog attacks within Colac Otway Shire has remained relatively low due in part to Council's ongoing enforcement of wandering dogs and education of the public in relation to confining of dogs to their property. A de-sexed animal is statistically less likely to wander and Council will therefore continue to encourage and educate in relation to de-sexing.

Dangerous, Menacing & Restricted Breed Dogs:

Within the Colac Otway Shire there are currently no restricted breed dog registered but records indicate there is one dangerous and 12 menacing dogs registered.

Council treats all dangerous, menacing and restricted breed dogs very seriously. Council Officers review and update the Victorian Declared Dog Register and monitor the animals recorded on same to ensure compliance (e.g. suitable containment and signage). Council also undertakes awareness raising activities to help achieve compliance in line with the relevant State legislation.

Euthanasia Rates:

The lower level of cat registration means many cats are not identifiable and are unable to be returned to an owner. Although these figures are disappointing, they have improved by working in partnership with a Local Vet who runs a cat adoption program. These efforts have seen the rehousing of cats improve over the past 9 years (18 in 2011 and 62 in 2017 and 75 in 2020). The number of cats euthanised remains steady at 75 cats in 2020.

The level of dog euthanasia was very low in 2020 (3 dogs). Unfortunately, these three dogs were not suitable for rehousing due to behavioural and health issues. During this period Council rehoused 18 dogs. Council also utilises local media and face book in advertising animals requiring re-housing, this continues to be successful program.

Domestic Animal Businesses:

Domestic animal business registration is controlled by the *Domestic Animal Act 1994*. Council has a zero-tolerance of non-compliance in domestic animal businesses, and will continue to investigate all reports on domestic animal breeding businesses and seek compliance for any non-registered domestic animal business. In the 2020-2021 period Council conducted inspections on all registered animal business establishments in the municipality and found that they all met the required standards.

Other Matters:

Members of our community and visitors to our region, generally don't differentiate between Council and the Great Ocean Road Authority (GORA), the expectation is that a similar service to GORA managed land is applied. To enable this, Council officers will adopt a collaborative approach with the GORA to discuss a shared service approach relating to animal management issues on the foreshore area.

DAMP Review:

The Domestic Animal Management Plan is internally reviewed on an annual basis to ensure the plan is being implemented effectively to address the legislative requirements along with the local issues in our community. If and when the DAMP is adopted it will be subject to another full review in 2025.

The draft DAMP was presented to the Ordinary Meeting of Council in September 2022 seeking approval for it to be released for a six-week public consultation period. Council approved the release of the document and the public consultation period began on 27 September and closed on 8 November 2021. As part of the public consultation, submitters were given the opportunity to speak at a Submissions Committee meeting in support of their written submission, prior to a final version of the DAMP being presented to Council for adoption in December 2021.

Council received 3 submissions during the consultation period, which are outlined below:

1. <u>Submission by the Animal Justice Party (Attachment 2):</u>

The Animal Justice Party submitted a lengthy submission that refers to six key themes including three initiatives from the Pound & Shelter Reform that was introduced to Parliament in October 2020. A summary of the submission and officer responses (in italics) to issues raised are as follows:

- Broaden the scope to include all companion animals *This proposal is currently outside the scope and direction of the DAMP and no changes are recommended or proposed to the Draft DAMP.*
- Kill counts (Initiative 1 in the Pound and Shelter Reform) This information is already recorded and provided by Council in annual reports and monthly figures. May be subject to changes to State Government legislation following full review of Pound & Shelter Reform and will be addressed

through the annual review process of the DAMP if required and no changes are recommended or proposed to the Draft DAMP.

- Breeding Blitz (Initiative 2 in the Pound & Shelter Reform) relates to Mandatory desexing and Research that shows this approach is less effective than reduced fee desexing. Mandatory desexing is not proposed in our DAMP. May be subject to changes to State Government legislation following full review of Pound & Shelter Reform and will be addressed through the annual review process of the DAMP if required and no changes are recommended or proposed to the Draft DAMP.
- Reuniting Rights (Initiative 3 in the Pound & Shelter Reform) Proposal to bypass the Pound system and allow Veterinarians to return animals direct to their owners – Not an option that has received support from Councils operating their own Pounds. May be subject to changes to State Government legislation following full review of Pound & Shelter Reform and will be addressed through the annual review process of the DAMP if required and no changes are recommended or proposed to the Draft DAMP.
- Helping the victims of Family & Domestic Violence (Keeping Animals and People together) *Proposal to include companion animals as "Family Members" under the provisions of the Family Violence Protection Act 2008. This is not within the scope of a Council DAMP and no changes are recommended or proposed to the Draft DAMP.*
- Addressing Dog Guardianship challenges in the Community Relates to animal welfare issues that can be addressed under the provisions of existing legislation (Prevention of Cruelty to Animals Act) and is not within the scope of the guidelines applied to the DAMP and no changes are recommended or proposed to the Draft DAMP.

2. <u>Submission 2 (Attachment 3):</u>

Submission relating to the perceived number of cats in Apollo Bay and the introduction of mandatory desexing of all cats with a \$10,000 fine for non-compliance. Issues relating to dogs on leash on foreshore areas.

- Worldwide research into the mandatory desexing of cats indicate that such mandates are not as successful as programs that promote desexing through affordable and accessible programs. The fine amount suggested is inappropriately excessive.
- Council at the current time is not the responsible authority for the foreshore areas, but continues to work collaboratively with DELWP and GORCAPA to explore joint service delivery options in the future.
- Council officers will further investigate and deliver community education and awareness raising to address these issues in the future.
- *no changes are recommended or proposed to the Draft DAMP.*

3. Submission 3 (Attachment 4):

Submission related to matters of dog on leash areas and general control of dogs and protection of wildlife in Skenes Creek.

- All properties where a dog is housed be required to have a fenced area (Dog run) to contain the dog This is outside the scope of the DAMP The Domestic Animals Act 1994 stipulates that dogs/cats must be effectively contained to the owner's premises no changes are recommended or proposed to the Draft DAMP.
- Blanket Ban on dogs being allowed in holiday rental properties This suggestion is based on the protection of native wildlife in coastal areas. Council will discuss "education" methods for visitors to the area who may not realise the damage their dogs can do to native wildlife. The Domestic Animals Act 1994 stipulates that dogs/cats must be effectively contained to the owner's premises

- no changes are recommended or proposed to the Draft DAMP - no changes are recommended or proposed to the Draft DAMP.

- Dogs to be confined to "on leash" at Skenes Creek and the foreshore areas at all times *Council at* the current time is not the responsible authority for the foreshore areas, but continues to work collaboratively with DELWP and GORCAPA to explore joint service delivery options in the future no changes are recommended or proposed to the Draft DAMP.
- Have designated no dog beach areas, especially in areas where wildlife, including the hooded plovers are nesting *Council at the current time is not the responsible authority for the foreshore areas, but continues to work collaboratively with DELWP and GORCAPA to explore joint service delivery options in the future. Council will also develop some community education material that could be provided to accommodation providers and local Estate Agents etc. no changes are recommended or proposed to the Draft DAMP.*

None of the submitters wished to speak to their submissions at a Submissions Committee meeting.

4. COMMUNITY CONSULTATION & ENGAGEMENT

The draft DAMP was released for public consultation for a period of six weeks between 27 September and 8 November 2021.

Community consultation sought written submissions in relation to the draft DAMP and provided an opportunity for any person to be heard in support of their written submission. Hard copies of the document were available at Council Offices, Public Libraries and was available for viewing on Council's website.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021 - 2025:

Theme 3 – Healthy and Inclusive Community

3.2 People are active and socially connected through engaging quality spaces and places.

In particular it helps provide safe environments which promote social connection opportunities and community safety. The proposal is also consistent with Colac Otway Shire's long-standing commitment to the values of animal welfare.

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

The impact of feral cats on the natural environment is well documented. While this challenge is very complex the draft DAMP does strive to implement actions that will not help protect domestic animals while also protecting the natural environment

Dogs and cats have been shown to have a clear benefit for people's general health and well-being. They are also shown to be valuable in building social connectedness. The effective management of domestic animals through the implementation of the actions identified in the draft DAMP will only help further the social benefits of domestic animals in our community. The draft DAMP does not set or propose to increase fees, charges or penalties associated with domestic animal management. Therefore, there are no direct economic loss associated with the draft DAMP for the community.

However, the DAMP sets to waive the first-year registration fee for cats, this will encourage cat owners to register their cat and enable Council to have direct communication with cat owner.

LEGAL & RISK

Each Council in Victoria is required to submit a DAMP to the Secretary of DJPR every 4 years. The legal requirement to submit the plan is found at Section 68A of the *Domestic Animals Act 1994*. In order to meet this obligation within the necessary timeframe Council is required to submit a revised version by 30 December 2021. However, if necessary, an extension of time can be sought to enable the plan to be finalised in an appropriate manner.

FINANCIAL & BUDGETARY

The actions identified in the draft DAMP have been developed on the assumption that current resources for Council's Community Safety Unit will be maintained. Development of the draft DAMP has taken into consideration the resource implications for each action and can be delivered with the resources currently allocated for the operations of Council's Community Safety Unit.

However, the implementation of a free cat registration for desexed cats during the first-year registration period (10 April) will have a financial implication, by the way of loss of revenue. The average number of new cat registrations is around 90 per year, assuming an even spread of registrations coming into Council during the year and 20% of these are discounted pensioner fees, we would see a reasonable financial implication of \$1500 in the first year. This is likely to be fully recouped in the proceeding years with an increase in the number of cat registrations.

7. IMPLEMENTATION STRATEGY

As part of the public consultation, submitters were given the opportunity to speak at a Submissions Committee meeting in support of their written submission, prior to a final version of the DAMP being presented to Council for adoption in December 2021. None of the submitters wished to speak to their submissions at a Submissions Committee meeting. If the DAMP is formally adopted by Council, it will then be sent to the Secretary of DJPR. The actions set out in the DAMP will then be implemented through Council's Community Safety Unit's ongoing operations over the next 4 years.

COMMUNICATION

Once approved the DAMP will be sent the Secretary of DJPR and placed on Council's website. Hard copies will also be placed in Council and offices and in the public libraries in Apollo Bay and Colac. A media release will also be made upon formal adoption of the DAMP along with advertising in the Victoria Government Gazette.

TIMELINE

- 22 September 2021: DAMP presented to Council Meeting seeking approval to be released for consultation.
- 27 September 2021: Public consultation period opened
- 8 November 2021: Public consultation period closes.
- 15 December 2021: Council considers adoption of the DAMP 2021-2025 at Council Meeting.

• 16 December 2021: DAMP submitted to DJPR secretary for approval (subject to Council approval on 15 December 2021).

8. OFFICER DIRECT OR INDIRECT INTEREST

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

Domestic Animal Management Plan

2021 - 2025





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COLAC OTWAY SHIRE - About Us



The Colac Otway Shire is a richly diverse area located less than two hours west of Melbourne, linked by rail and a dual highway.

Colac Otway is one of the most picturesque municipalities in Victoria, from its volcanic lakes, craters and plains in the north, to the lush forests of the Otway Ranges to the iconic Great Ocean Road coastline.

A large proportion of the southern half of the shire is National Park, boasting waterfalls, bushwalking and some of the most significant environmental assets found in Australia.

The northern area of Colac Otway features equally significant environmental features including Lake Colac, Lake Corangamite and the surrounding Ramsar wetlands, overlooked by Red Rock Reserve. Over 21,000 people currently live in the Colac Otway Shire, with about 13,000 people living in the shire's major industrial, commercial and service centre of Colac (Colac and Elliminyt).

The City of Colac population is forecast to reach 20,000 by 2050, and Colac Otway Shire has a strategic plan to guide sustainable residential growth and infrastructure development.

More than 15 small towns and rural communities are spread across Colac Otway and provide a lifestyle choice for those looking for a quieter life through either a sea change or tree change.

During the summer months and holiday periods, the coastal areas experience an influx of tourists and holiday makers. Many are accompanied by their beloved pets.

Diverse industries range from tourism and hospitality, to key agriculture ventures such as dairy, beef and boutique farming and food enterprises, to sustainable timber production.

Colac Otway Shire has a land area of 3,433 square kilometres with a population density of 0.6 people to 2.5 acres. In 2020 the number of registered dogs were 4,380 and registered cats were 1,476.

The Colac Otway Shire is a neighbour to Surf Coast Shire, Corangamite Shire and Golden Plains Shire.

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

03

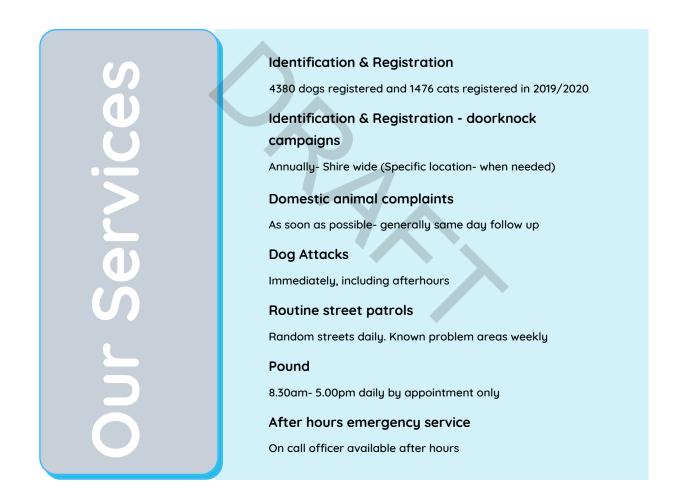
Acknowledgement of Traditional Custodians

Colac Otway Shire Council respectfully acknowledges the Gulidjan and Gadubanud peoples as the traditional owners of the Colac Otway region, the land on which the activities of the Colac Otway Shire Council is conducted upon.

We pay our respects to their ancestors and elders, past, present and emerging. We recognise and respect their unique cultural heritage, beliefs and uphold their continuing relationship to this land.

Our Current Situation

Being a smaller rural council, Colac Otway Shire animal management services continue to be under pressure due to resourcing issues. In addition to domestic animal management, responsibilities include Local Laws, parking control, litter enforcement, street furniture/ footpath permits, infringement prosecutions, administration duties, pound operations and numerous other activities. This can significantly impact the ability to attend to all animal management related matters promptly.



Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

05

Statis estic Anim

YEAR - 2019/2020		
Registered Dogs	4380	
De-sexed Dogs	3666	
Dogs returned home without impoundment	117	
Dogs Impounded	163	
Dogs returned to owner	142	
Dogs rehoused	18	
Dogs euthanised	3	
Dogs declared menacing	12	
Dogs declared dangerous	1	
Restricted breed dogs	0	
Registered Cats	1476	
De-sexed Cats	1342	
Cats impounded	163	
Cats returned to owner	15	
Cats rehoused	75	
Cats euthanised	73	
Registered Domestic Animal Businesses	3	
Number of dog related complaints	274	
Number of cat related complaints	144	

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

06

Why do we need a plan?

68A Councils to prepare domestic animal management plans

(1) Every Council must, in consultation with the Secretary, prepare at four year intervals a domestic animal management plan.

(2) A domestic animal management plan prepared by a Council must-

(a) set out a method for evaluating whether the animal control services provided by the Council in its municipal district are adequate to give effect to the requirements of this Act and the regulations; and

(b) Outline programs for the training of authorised officers to ensure that they can properly administer and enforce the requirements of this Act in the Council's municipal district; and

(c) Outline programs, services and strategies which the Council intends to pursue in its municipal district-

- (i) To promote and encourage the responsible ownership of dogs and cats; and
- (ii) To ensure that people comply with this Act, the regulations and any related legislation; and
- (iii) To minimise the risk of attacks by dogs on people and animals; and
- (iv) To address any over-population and high euthanasia rates for dogs and cats; and
- (v) To encourage the registration and identification of dogs and cats; and
- (vi) To minimise the potential for dogs and cats to create a nuisance; and

(vii) to effectively identify all dangerous dogs, menacing dogs and restricted breed dogs in that district and to ensure that those dogs are kept in compliance with this Act and the regulations; and

(d) provide for the review of existing orders made under this Act and local laws that relate to the Council's municipal district with a view to determining whether further orders or local laws dealing with the management of dogs and cats in the municipal district are desirable; and

(e) provide for the review of any other matters related to the management of dogs and cats in the Council's municipal district that it thinks necessary; and

(f) provide for the periodic evaluation of any program, service, strategy or review outlined under the plan.

- (3) Every Council must-
- (a) review its domestic animal management plan annually and, if appropriate, amend the plan; and
- (b) provide the Secretary with a copy of the plan and any amendments to the plan; and
- (c) publish an evaluation of its implementation of the plan in its annual report.

DOMESTIC ANIMAL MANAGEMENT PLANS - DAMP

The purpose of this plan is to assist Council with setting future guidelines and implementing changes surrounding domestic animal management.

This includes educating the community to improve responsible pet ownership and also provide the community with a clear understanding of Council's expectations of pet owners. In doing so, Council hopes to achieve a higher rate of compliance in relation to animal registrations and a reduction in nuisance animals.

The Plan will also set out Council's current policies surrounding domestic animal ownership and documents any planned changes over the next four years to best address community needs.

This will include the training of the Local Laws Officers so that they can best administer the requirements of the Domestic Animals Act 1994 and reduce the impact of nuisance animals of the community.

OUR PLAN

This Domestic Animal Management Plan has been developed in accordance with the requirements set out under the Domestic Animals Act 1994. The information contained herein was compiled from a number of resources including discussions with Council's Local Laws Officers, consultation with stakeholders such as the RSPCA and local veterinary clinics and a review of the previous plan.

A draft Plan will be reviewed by Colac Otway Shire Councillors and a copy will also be released for public consultation prior to finalisation.

All objectives of this current DAMP are reported annually to the State Government and published in Council's annual report as required by the Act.



Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

Our People

Colac Otway Shire Local Laws - Community Safety currently comprises of a Coordinator, four full time Officers and an administrator. Duties of all officers include a vast range of responsibilities and all officers operate under a large variety of legislation. Three of the full time officers commenced employment in late 2019. Due to COVID 19 restrictions throughout 2020 and the ongoing restrictions in 2021, the ability to undertake training has been restricted and this is an ongoing issue as many training courses are not currently running.

The following table sets out the current training and qualifications of the animal management officers:

Authorised Officer	Current	Planned
Certificate IV in Animal Control and Regulation (RUV40104) Officer 1, 2 & 3	Qualified	
Certificate IV in Government (Statutory Compliance) PSP 41404 Officer 1, 2 & 3	Qualified	
OH&S training – dealing with aggressive customers, working in remote areas & defensive driving All Officers	Provided to all staff	Annually

Industry Training – animal handling, animal assessment, prosecutions, statement taking & evidence gathering		
Officers 1 & 2	Provided	Ongoing and provided when available
Officers 3, 4 & 5		By December 2022
Industry training – time management		
Officers 1 & 2	Provided	Ongoing and provided when available
Officers 3, 4 & 5		By December 2022
Customer Service Training – conflict resolution, telephone protocols	Provided to all staff	Ongoing and provided when available
Bureau of Animal Welfare – training and information days	Training and Information days attended by selected staff	When available
Induction program for new staff		
Officers 3, 4 & 5	Provided to all staff	When Offered
Canine Anatomy and Identification Training Day		
Officer 1 & 2	Provided	Completed
Officers 3, 4 & 5		When Available
First Aid and CPR		First Aid – every 3 years
All Officers	Provided to all staff	CPR - Annually

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

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OUR PLAN

Objective 1:

Develop a training plan that clearly identifies minimum training requirements and any additional training needs that should be undertaken by animal management officers.

Activity	When	Evaluation
Identify minimum training requirements by consultation with management and staff	Bi-annually	Documentation to be finalised and incorporated into an approved council training policy by December each year
Identify additional training requirements by consultation with management and staff	Bi-Annually	Documentation to be finalised and incorporated into an approved council training policy by December each year

Objective 2:

Develop and maintain a training register for individual officers detailing completed and proposed training by December each year

Registration and Identification of our Animals

This section outlines programs, services and strategies to encourage the registration and identification of dogs and cats.

Compliant with Section 68A(2)(c)(v) of the Domestic Animals Act (1994), - also addresses 68A(2)(a),(c)(i),(c)(ii),(d),(f)

All cats and dogs over the age of three months must be registered with the Colac Otway Shire as per State legislation. Newly registered animals must also be microchipped before registration can be accepted. Registrations must be renewed annually by the 10th of April.

Under the Domestic Animals Act 1994, animal registration periods expire on the 10th of April each year.

Animal renewal notices are sent out every year, allowing pet owners to renew their pet's registration via the internet or in person. Council audits the registration renewal process every year to ensure animal registration is renewed.

Animals found unsecured or at large from their property that are identifiable by means of an allocated Colac Otway Shire identification tag have a higher chance of being reunited with their owners and therefore not impounded.

When dogs and cats are outside of the owner's premises, Colac Otway Shire identification tags must be worn as outlined in Section 20 of the Domestic Animals Act (1994).

The registration of animals provides Colac Otway Shire with an understanding of the level of pet ownership in the community and in turn helps the Shire plan for services, information and programs associated with pets in particular areas of the community



Our Fees

Dogs	Full Fee	Pensioner Reduced Fee
Microchipped ONLY	\$130	\$65.00
Microchipped and De-Sexed	\$25	\$12.50
Over 10 years of age	\$41	\$20.50
Dogs kept for breeding by the proprietor of a domestic animal business conducted on a registered premises	\$41	\$20.50
Dogs registered with an applicable organisation, if their owners are members of the applicable organisation with which the dogs are registered (proof required)	\$41	\$20.50
Dogs that have undergone obedience training which complies with the regulations	\$41	\$20.50
Dogs kept for working stock	\$25	\$12.50
Declared dangerous & menacing dog		no reduction available

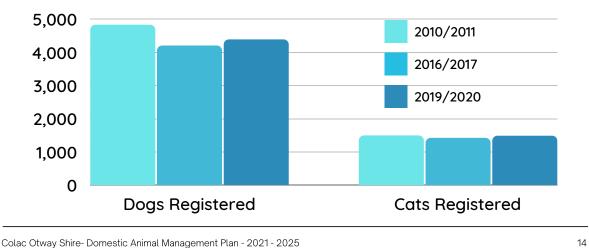
Our Fees

Cats	Full Fee	Pensioner Reduced Fee
Microchipped ONLY	\$115	\$57.50
Microchipped and De-Sexed	\$20	\$10
Over 10 years of age	\$36	\$18
Cats kept for breeding by the proprietor of a domestic animal business conducted on a registered premises	\$36	\$18
Cats registered with an applicable organisation, if their owners are members of the applicable organisation with which the dogs are registered (proof required)	\$36	\$18

All fees and charges are approved by Council as part of the annual budget adoption process.

Registered Animals

Colac Otway Shire	2010/2011	2016/2017	2019/2020
Dogs Registered	4821	4196	4380
Cats Registered	1485	1412	1476



Our Policies and Procedures

Council has no Orders or Local Laws relevant to the registration of cats and dogs. Council's current controls are under the Domestic Animals Act (1994), Council currently provides:

- Registration and identification for dogs and cats, including renewal follow ups
- Registration and identification of menacing and restricted breed dogs including renewal and random inspections

Council currently provides education and information services in the following manner

- Advertisements in the local print media and local radio
- Animal information pamphlets made available at local events/shows/fairs
- Information pamphlets including maps available at Council Offices
- Direct communication and interaction by Authorised Officers with the Community
- Colac Otway Shire Web Page can raise/discuss relevant issues
- Provision of online registration and a range of registration payment methods

Council's Current Compliance Activities

- Renewal follow-ups for registration and identification for domestic dogs and cats
- Vehicle patrols re dogs at large
- Nuisance complaint response and investigation
- Domestic animal pound facility
- Cat trap hire services
- Infringement notice system
- Prosecution service for infringement offences

Our Plan Objective 1:

Increase the number of dog and cat registrations within the municipality by 5%

Activity	When	Evaluation
Increase registration by conducting annual random door knocks throughout the municipality to ensure dogs and cats are registered.	June – August annually	Document new registrations after inspection period
Cat Registration Promotion – Offer 1st year free with every newly desexed cat (until end of 1st year registration period).	Immediately	Data after promotion period
Increase awareness among culturally and linguistically diverse communities of pet registration requirements	July – August annually	Document new registrations after inspection period

Objective 2:

Improve the Community Education on registration

Ensure community understands the difference between registration and microchipping	Ongoing	Council's website to contain information clarifying the difference between microchipping and registration
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Nuisance Animals

The majority of complaints received by Council relate to dogs at large and barking dogs. In 2019/ 2020, Council received 274 dog related complaints which have been documented and monitored through Council's Merit system.

In previous years, dog excrement in public areas was also a common complaint. Since the installation of bag dispensers in many popular dog areas, these have largely been reduced.

While nuisance cats are also a large problem within the Shire, those number of complaints totalled 144. These mainly relate to cats wandering from their own properties causing issues with other cats and leaving excrement in yards, and feral cats which pose a threat to our natural environment.

Council has an order made under Section 26 of the Domestic Animals Act (1994), requiring dogs to be under effective control by means of a chain, cord or leash in a specified area. The areas are listed in the notice in the Government Gazette G 49 dated 8 December 2005 (page 2851).



Local Law number 2. (General) addresses animals at section 78 (Part 5) and this section requires person not to allow dog excrement to remain on a road or Council land and further requires persons to carry a suitable device to collect same when in charge of a dog on a road or Council land. Section 128 to 130 (Part 7) deals with the keeping of animals and section 128 specifically deals with the smell or noise that is created by animals that may be a nuisance.

While a cat curfew has previously been raised by members of the public, Council believes that Section 25(1) of the Domestic Animals Act (1994) which states:

"(1) If a cat is found at large outside the premises of the owner or not securely confined to the owner's premises, in a municipal district or a specified part of a municipal district in respect of which an order under this section has been made, during the hours specified in the order, the owner is guilty of an offence and liable to a penalty of not more than 1 penalty unit for a first offence and 3 penalty units for a second or subsequent offence"

This legislative requirement mandating that cats must be confined to their property is sufficient. While many Councils have introduced a cat curfew, these are predominantly Councils located within the metropolitan areas and would be extremely hard to enforce and monitor in a rural setting.

Council acknowledges the impact that cats can have on our natural environment and wildlife and will continue to work with cat owners and the public to ensure compliance with Section 25(1) of the Act.

Our current local law now controls the maximum numbers of domestic animals on certain size allotments and excess animal permits for those requesting addition animals. The Local Law is as follows:

An owner or occupier of land must not without a permit; keep or allow to be kept any more in number for each type of animal as is set out in the following table:

Animal	Property Size - (Up to 0.25 ha)	Property Size - (0.25 - 1 ha)	Property Size - (1 ha and above)
Dogs	3	4	5 (other than dogs kept for working stock or primary production)
Cats	3	4	5

To reduce the number of dogs and cats at large and deal with barking dog complaints in a timely manner.

The issue of dogs at large presents problems of dog attacks on other animals, livestock and persons. They can also cause a serious incident when wandering on roads. Considerable time and resources are deployed by Council addressing this problem. Many people have an absolute fear of dogs and the mere sight of a dog at large can cause fear and panic to many people whether warranted or not.

The issue of cats wandering and feral cats is the subject of many complaints due to the fouling of gardens/yards, attack on their own cat by the offending cat, destruction of wildlife and spread of disease.

Council will ensure the community is educated on the importance of animal confinement and information packages/pamphlets will be made available from Council offices and other relevant locations.

Council's Animal Management Officers will also continue to provide a trapping service in areas where stray and feral cat numbers are noticed and will also continue to offer a cat cage hire program where individual cats are causing a nuisance.

Council treats the issue of animal nuisance seriously. Council currently undertakes the following compliance activities in support of nuisance offences:

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

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Our current compliance activities

- vehicle patrols and nuisance complaint response
- dog attack (immediate response, 24 hour on call Ranger service)
- registration and identification of menacing and dangerous dogs
- restricted breed dog
- annual property inspection
- annual door knocks
- cat trap hire service
- notice to comply, verbal and written warnings, infringement notices
- · Council pound operation for the impounding of animals



Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

Objective 1:

Reduce dog nuisance complaints

Activity	When	Evaluation
Review further options for reducing barking dog complaints	Annually	Number of reduced barking dog complaints
Increase education and information on website and other social media channels on responsible dog ownership and minimising barking - with an emphasis on coastal areas during holiday periods	Annually and holiday periods	Number of reduced barking dog/welfare complaints
Update/ review barking dog complaint packs	Annually	Council will provide information to all parties
Direct interaction with complainants and offending parties regarding compliance	Annually	Measure and report results
Enforcement of official warnings, infringements and prosecutions	Annually	Measure and report results
Investigate opportunities to support community groups and to install and manage dog poo dispensers in problem areas	Ongoing	Community Feedback

Objective 2:

Reduce cat nuisance complaints

Activity	When	Evaluation
Make education material available about cat nuisance issues to cat owners with information packs available at reception	Ongoing	Number of reduced barking dog complaints
Assist residents and community groups to deal with cat trespass/nuisance problems by advising that Council has cat traps for hire	Ongoing	Keep records on number of traps hired out Keep records of number of cats impounded
Provide information to assist residents in the use of cat traps and the humane use of looking after the cats welfare	Ongoing	Information on Council website and on the provision of traps
Educate community to contain cats securely to their property	Annually	Website information and social media campaigns
Enforcement of official warnings, infringements and prosecutions	Annually	Measure and report results

Objective 3:

Reduce number of dogs and cats at large

Activity	When	Evaluation
Documentation to be given to owners on the return of dogs or cats found at large and not impounded	Annually	Measure annual results
Provide information to pet ownership clubs/groups and relevant information to new pet owners	Annually	Evaluate and work with identified groups. Measure and report results
Public promotion via media articles, website, mail out with Council rates in quarterly newsletter, website, on hold messages, flyers and pamphlets for distribution in local veterinaries and pet shops	Annually and Ongoing	Measure and report on results
Official warnings, regular patrols for offences, official warnings, infringements and prosecution where required	Annually	Compare number of offences from previous years – warnings, infringements and prosecutions.Measure and report results

Objective 4:

Ensure domestic animals are considered during emergencies

Activity	When	Evaluation
Update Emergency Animal Management Plan and include impounded animals	December, 2022	Plan updated
Ensure Council Relief Centres have procedures and the capacity to cater for domestic animals	December, 2022	Procedures in place

Dog Attacks

During 2019/2020 there were six reported dog attacks resulting in five infringements being issued and one prosecution. It is believed that the number of reported dog attacks is significantly lower than the actual number which could be attributed to a number of things including the victim knowing the animal owner or attacks on livestock where the property owner cannot find the source of the attack.

The number of dog attacks within Colac Otway Shire has remained relatively low due in part to Council's ongoing enforcement of wandering dogs and education of the public in relation to confining of dogs to their property. A de-sexed animal is statistically less likely to wander and Council will therefore continue to encourage and educate in relation to desexing.

Council currently enforces the provisions of the Domestic Animals Act (1994) in regard to dog attacks. All reported dog attacks are investigated as a matter of priority including after hours by the on call officer. Appropriate action is taken in accordance with legislation. Council has developed guidelines for Authorised Officers in regard to the seizure of offending dogs after an attack.

As referred to in Nuisance Animals on page 17, Council also has an order relating to dogs being under effective control by means of chain, cord or leash whereby preventing an animals ability to rush and potentially attack.

Council currently undertake the following compliance activities to raise awareness and hopefully decrease the number of dog attacks/ dog rushes:-

- Vehicle patrols and nuisance complaint response
- Immediate response (including after-hours emergency call out) for dog attacks and aggressive dogs at large
- Registration and identification of menacing and dangerous dogs including monitoring of declared dogs and spot checks
- Issuing of infringements and potential prosecution of dog attack
- Operation of a domestic animal pound for impounded animals

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

Objective 1:

Improve awareness and education of safety around dogs

Activity	When	Evaluation
Improve awareness and education in relation to dog attacks and the need to report all incidents. Discuss with local vets, doctors and hospitals to ensure they are making Council aware.	Ongoing	Measure and report on results in annual review of Plan to determine whether third parties are reporting any attacks. Compare numbers of reports and source they are coming from
Educate pet owners in relation to responsible pet ownership including de-sexing to prevent dogs wandering and the need to keep dogs confined to their property	Ongoing	Record the type and number of educational materials distributed Evaluate by comparing previously reported dog attack numbers
Undertake education and promotion activities through the following outlets; media articles on-hold messages, mail- outs with Council rates website updates issue specific flyers and brochures Use Vet Clinics to encourage dog-on- dog attack reporting	Ongoing	Record numbers of media articles Annual mail-out with Council rates Monthly website updates. New owner information kit developed Monitor the relationship between Council and relevant agencies to ensure reporting of dog attacks Measure and report on results in the annual review of this Plan
Ensure owners of Menacing and Dangerous dogs are aware of their legal obligations	Annually	Measure and report results
Enforcement, doorknocking and random domestic animal registration inspections, reminder notices Maintenance of official warning register. Conduct investigations and regular patrols Seek compliance of this legislation by official warnings, infringement notices and prosecution	Annually	Reduce number of dog attacks on previous year; Random domestic animal registration inspections established; Official warning register set up. Continue to support prosecution unit ; Periodic report to Executive ; Measure and report on results in the annual review of this Plan

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

Objective 2:

Improve reporting of dog attacks

Activity	When	Evaluation
Improve information on Council's website relating to dog attack investigations and reporting	Ongoing	Continuous updating of website
Improve public awareness of what a dog attack is and how to report using media articles, discuss with local vets importance of reporting, social media, public notices in parks, mail out with rates notices	Ongoing	Comparatively report number of reported dog attacks from previous years

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

Dangerous Menacing and Restricted Dog Breeds

Under the Domestic Animals Act (1994), all restricted breed, dangerous and menacing dogs must be reported on the Victorian Declared Dog Register and all owners of such dogs have a number of legal obligations they must comply with. Within the Colac Otway Shire there are currently no restricted breed dog registered but records indicate there is one dangerous and 12 menacing dogs registered.

Dangerous, menacing and restricted breed dogs are controlled by the Domestic Animals Act (1994). Council ensures that all declared dogs are kept in compliance with the Act.

Council currently undertakes the following educational and promotional activities, including providing information of dangerous, menacing and restricted breed dogs

- Use of Media to inform the community of their responsibilities and the consequences of non- compliance
- Distribution of pamphlets and flyers with relevant information
- Use of on-hold messages and Council's website to inform pet owners
- Education and information services provided, as resources and opportunity allow

Council treats all dangerous, menacing and restricted breed dogs very seriously. Council currently undertakes the following compliance activities in support of such offences:

- Vehicle patrols and complaint response
- Dog attack (immediate including 24 hour emergency service)
- Dog at large (as soon as possible during business hours, including weekends and public holidays)
- Registration and identification of menacing and restricted breed dogs including monitoring of declared dogs to ensure compliance; and Infringement notice system
- Prosecution services where required.

Council currently reviews the Victorian Declared Dog Register and monitors the animals recorded on same and ensures compliance is being adhered to. Council's promotional, educational, community and enforcement activities are all targeted at achieving compliance in line with the relevant State legislation involving these matters

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

Objective 1:

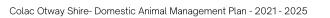
Identify and register all declared dogs in the municipality

Activity	When	Evaluation
Ensure all declared dogs are recorded correctly on Victorian Declared Dog Registry and that owners of such dogs are aware of their legal obligations	Ongoing	Audit database annually and compare to Council records
Monitor Animal Registration Forms for potential registration of a restricted breed dog	Ongoing	Monitor number of restricted breed dogs in database

Objective 2:

Ensure declared dogs are compliant with relevant legislation and regulations.

Activity	When	Evaluation
Inspect and audit declared dog premises quarterly to ensure compliance with legislation	Annually / Ongoing	Create checklist to record, measure and report results.



Colac Otway Shire	2010/2011	2016/2017	2019/2020
Restricted breed dogs	1	0	0
Declared dangereous	5	4	1
Declared menacing	14	15	12



Overpopulation and Euthanasia

Statistics from 2019/ 2020 indicate that from a total of **326** impounded animals **3** dogs and **73** cats were euthanised highlighting the ongoing issue of cat over population. While the euthanasia rates for cats are significantly higher than those for dogs, the majority of cat's euthanised are deemed feral and unsuitable for rehoming.

The large number of cat euthanasia's could be attributed to cat trapping program that Council has been undertaking in known problem areas.

In 2019/2020 only **15** of the **163** cats impounded by Colac Otway Shire were collected by their owners in comparison to **142** dogs collected by their owners out of the **163** impounded. Council would like to increase the registration of cats in the hope of being able to return more home to their owners and reduce the number of euthanasia's.

An incentive which Council proposes to adopt is the free first year of registration of all newly de-sexed cats. Council currently offers free registration for the first year to all rehomed cats. This ensures the data is captured in the registration database and ongoing registrations can be monitored.

Council partners with a local vet who has established a cat adoption program through which many of the impounded cats are rehomed. Each cat is de-sexed, vaccinated and microchipped at a reduced fee and receive free registration for the first year. Council's pound and euthanasia policies are guided by the Domestic Animals Act (1994). Council policy is, wherever possible, to return any lost or seized at-large animal to its owner or to rehome suitable animals where their owner is not found. Prior to any animal returning to its owner, all animals must be microchipped and registered.

Council's current local law controls the maximum numbers of domestic animals on certain size allotments and excess animal permits. A copy of the control is as follows, (Section 129 of Colac Otway Shire Local Law No. 2)

An owner or occupier of land must not without a permit keep or allow to be kept any more in number for each type of animal as is set out in the table set out in page 18.

Council will

- Continue to educate the public through social media, print publications, pamphlets and telephone on-hold messages to promote responsible pet ownership in the hopes of reducing euthanasia rates.
- Continue making cat traps available to public to alleviate problems associated with feral cats
- Offer free registration for the first year to newly de-sexed cats
- Continue working with local vet in rehoming cats through adoption program
- Utilise multiple social media platforms for education and rehoming purposes.

Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

Objective 1:

To increase the number of cats registered

Activity	When	Evaluation
Offer free registration for newly de-sexed cats	December, 2021	Compare number of cat registrations over previous years to see whether numbers have increased

Objective 2:

To reduce the number of cats euthanised

Activity	When	Evaluation
Promote rehoming of suitable cats in conjunction with local vet	Ongoing	Compare number of euthanised cats over four years and continue to reduce numbers
Use of multiple social media platforms to assist with locating owners of impounded animals	Ongoing	Where an impounded cat is unregistered and not microchipped, posting on social media to locate owner
Educate public on de-sexing and responsible pet ownership	Ongoing	Reduce number of wandering cats and reduction of kittens needing rehoming. Compare data over four years

Objective 3:

Raise awareness in relation to the unregistered cat population

Activity	When	Evaluation
Reinforce the need to register all cats, emphasising the discounted registration for de-sexed cats	Ongoing	Increase in the number of registered cats Compare data
Feral cat trapping program	Ongoing	Cat trap hire service is maintained for the community

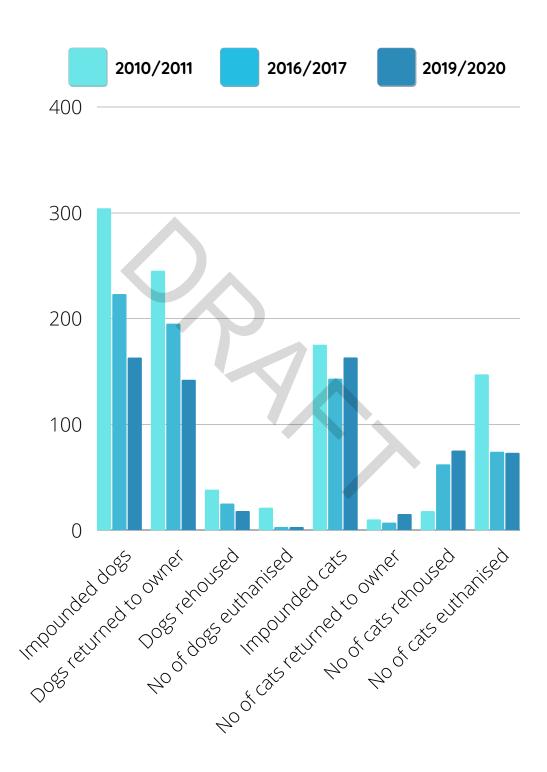
Our Impounded Animal Data

Colac Otway Shire	2010/2011	2016/2017	2019/2020
Number of impoundments (dogs)	304	223	163
Number of dogs returned to owner	245	195	142
Number of dogs rehoused	38	25	18
No of dogs euthanised	21	3	3
Number of impoundments (cats)	175	143	163
Number of cats returned to owner	10	7	15
Number of cats rehoused	18	62	75
Number of cats euthanised	147	74	73



Colac Otway Shire- Domestic Animal Management Plan - 2021 - 2025

Our Impounded Animal Data Chart



Domestic Animal Business

Colac Otway Shire currently has registered one cat boarding facility, one pet shop and the Council pound facility all of which are audited annually to ensure that they comply with all regulations and legislation.

Council also monitors websites, community notice boards, flyers and the local newspaper to ensure that all advertised animals are microchipped and a source number is provided.

This also enables Council to monitor whether there may be a non- registered domestic animal business operating.

Domestic Animal Business registration is controlled by the Domestic Animals Act (1994). Colac Otway Shire has a variety of domestic animal businesses. There are approved Codes of Practice for the operation of breeding and rearing establishments, boarding establishments, and shelters and pounds.

Pet shops are also included. Council is obliged to ensure each establishment complies with the relevant Code of Practice with regular audits. This is an area of intense public scrutiny.

Domestic animal business registration is controlled by the Domestic Animal Act 1994.

Council has a zero-tolerance of non-compliance in domestic animal businesses, and will continue to investigate all reports on domestic animal breeding businesses and seek compliance for any non-registered domestic animal business by conducting door knocks and property inspections.



Objective 1:

Identify and register all Domestic Animal Businesses in the municipality

Activity	When	Evaluation
Identify all businesses that should be registered DAB's in the municipality, including businesses selling pets in the municipality.	Ongoing	Compare number of registered DAB's before and after activity
Monitor Councils registration database to ensure owners comply with the requirements to be a Micro Breeder, Recreational Breeder and Commercial Breeder	Ongoing	Compare data over previous years

Objective 2:

Annually inspect and audit all registered DAB's

Activity	When	Evaluation
Conduct annual inspection of all registered DAB's	March/ April each year	Prepare checklist and compare data

Other Matters

Colac Otway Shire's current General Local Laws were adopted in September 2013 and are due for revision in 2023. A number of Local Laws relate to domestic animal management and these will be evaluated and updated to best meet the changing needs of the community.

Council's current local laws relating to domestic animal management are as follows:-Colac Otway Shire Local Law No 2 (General)- Part 5- Section 78 and Part 7- Sections 127 to 129.

Objective 1:

Collaboration with Great Ocean Road Authority (GORA)

Activity	When	Evaluation
Council will adopt a collaborative approach with the Great Ocean Road Authority (GORA) to discuss a shared service approach relating to animal management issues on the foreshore area. All foreshore areas within the Colac Otway Shire are currently managed and controlled by GORA.	December 2021	Discussion with GORA senior management and other stakeholders undertaken, with a view to developing a Memorandum of Understanding and communications plan.

Annual Review of Plan and Reporting

This section provides for the annual review of the Plan and Annual Reporting.

Compliant with Section 68A(3)(a)(b)(c) of the Domestic Animal Act (1994) as below: 68A(3) Every Council must—

(a) review its domestic animal management plan annually and, if appropriate, amend the plan

(b) provide the Department of Primary Industries' Secretary with a copy of the plan and any amendments to the plan

(c) publish an evaluation of its implementation of the plan in its annual report.

Performance in domestic animal management should be a regular management focus. Appropriate performance statistics should be completed and reported. A review of performance under the DAM Plan is required to be included in Council's Annual Report (see Section 68A (3) (c) of the Domestic Animal Act (1994); page 7 of this Plan).

Measurements should relate to activities and targets in this Plan and should include educational programs, increased registration of domestic animals, reduction of animals at large, decreased numbers of dog attacks, increases in compliance and levels of community satisfaction as a measure of success.

It should be noted that if performance under the DAMP is not sufficient, further revision of the Plan and its methods may be required and should be recommended.

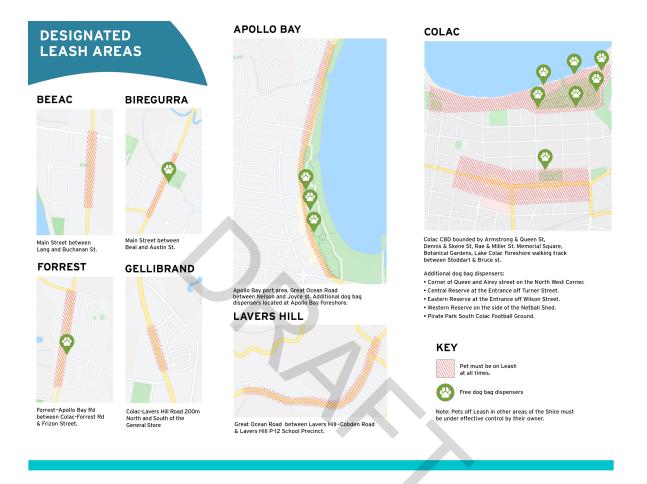


Objective 1:

To review progress on this Plan in a report to Council, including a summary report in the Annual Plan.

Activity	When	Evaluation
Monitor Merit system regarding complaints by the Community	Annually	Evaluate complaints and action taken Measure and report on results
Community Focus on customer service, community education and encouragement of responsible pet ownership	Annually	Continue to improve customer relations and education.
Promotion / Publicity Undertake media/Newsletter/Internet publicity for key messages about responsible pet ownership	Annually	Record published media articles Annual mail-out with Council rates Monthly website updates New owner information kit developed Measure and report on results in the annual review of this Plan.
Other Review and revise activities in Plan as required	Annually	Revise Action Plan if required Report to Council quarterly
Enforcement Review and revise activities as required	Annually	Measure and report on results in the annual review of this Plan

Appendix 1: Designated Leash Area Maps





Item: 10.9

Contract 2202 - Sportsground Lighting at four locations (Design and Construct)

OFFICER	David Smith
GENERAL MANAGER	Tony McGann
DIVISION	Environment and Infrastructure
ATTACHMENTS	Nil
PURPOSE	To approve and award Contract 2202 – Sportsground Lighting at four locations (Design and Construct)

1. EXECUTIVE SUMMARY

State Government funding was received by Council through the 2021 Community Sports Infrastructure Stimulus Program to provide to improve sportsground lighting at four ovals within the Colac Otway Shire.

An Expression of Interest was released for companies with experience in high mast lighting in September 2021. The Expression of interest closed in October 2021 and shortlisted companies were asked to price the works in November 2021.

The contract is a lump sum AS4300 Design and Construct contract. Works are scheduled to commence in February 2022 and practical completion is required by end of August 2022.

The preferred contractor is highly experienced in sportsground lighting works and has demonstrated the capability and availability to undertake the works within the available budget.

2. RECOMMENDATION

That Council:

- 1. Awards Contract 2202 Sportsground Lighting at four locations (Design and Construct) to P and V Newell Electrical Contractors Pty Ltd for the lump sum price of \$1,352,127.55 (exclusive of GST), subject to approval from Sport and Recreation Victoria for a variation to the agreed project scope.
- 2. Authorises the Chief Executive Officer to award contract 2202 Sportsground Lighting at four locations (Design and Construct) to P and V Newell Electrical Contractors Pty Ltd for the lesser amount of \$1,268,953 (exclusive of GST) if Sport and Recreation Victoria do not approve the project scope variation.
- 3. Authorises the Chief Executive Officer to execute the contract documents on behalf of Council.
- 4. Authorises the Chief Executive Officer to perform all roles of the Principal.
- 5. Authorises the Manager Assets and Project Delivery as the Superintendent for Contract 2202, including managing variations in accordance with the contract conditions.
- 6. Notes that unsuccessful tenderers will be advised of the outcome of the tender process and the successful tenderer and contract price will be listed on Council's website.

3. KEY INFORMATION

Council was successful in receiving funding under Round 2 of the State Government's 2021 Community Sports Infrastructure Stimulus Program (CSISP) to upgrade sports lighting at four of the Shire's recreation reserves. These reserves are:

- Irrewillipe Recreation Reserve
- Alvie Recreation Reserve
- Warrowie Recreation Reserve
- Gellibrand Recreation Reserve.

The funding application also included Colac Lawn Tennis Courts and the Lake Colac Oval (Colac Cricket Ground); however, these sites were unsuccessful in receiving funding.

Oval lighting upgrades to football training standard (minimum 100 lux) is proposed for all four sites. Lighting to this level would meet Australian Standards for training purposes including match simulation and will improve ground management. Players are currently unable to utilise the whole playing surface, which means higher wear and tear under the poorly lit areas. Consistent lighting across the playing surface will improve training options and allow areas to be rested if needed. 100 lux lighting is also suitable for amateur level club competition and match practice (ie. minimum requirement suitable for competition at local club level).

The need to upgrade the oval sports lighting was first identified in the G21 and AFL Barwon Regional Strategy (2015) and further highlighted in the G21 and AFL Barwon Towards 2030 Strategy. These key strategic documents have been endorsed by Council, and the recommendations of the strategy have been implemented as funding became available. The priority justification behind this combined lighting project is based on ensuring lighting is provided at key sporting venues across the Shire and ensuring lighting levels meet either training or competition standard, and meeting player safety expectations.

Tender Advertisement (Expression of Interest)

An Expression of Interest for Contract 2202 – Design and Construction of Sportsground Lighting at four locations was advertised in the Colac Herald, the Geelong Advertiser and via eProcure Panel (MAV website) on 18 September 2021.

Expression of Interests closed on 8 October 2021. Expression of Interest submissions were received from five applicants.

Evaluation of Expression of Interests

Tenders are evaluated in accordance with Council's Procurement Policy and Tenders/Quotations and Purchasing Procedure, considering the following weighted selection criteria:

Experience of key personnel and sub-contractors	25.0%
Capacity to deliver	25.0%
Previous experience in completing similar contracts	30.0%
Quality Systems	10.0%
Contribution to the financial, social and environmental wellbeing of the region	10.0%

After the Expression of Interest evaluation, three companies were shortlisted and provided with further information in order to price the project.

Submissions closed on 1 December 2021 with submissions received from two companies.

These submissions were then assessed against the following criteria:

Evaluation Criteria	Weighting
(a) Capacity	
Results from Expression of Interest evaluation	15.0%
(b) Capability	
Understanding of project requirements and outcomes to be delivered, including staging and technical requirements, and/or challenges and opportunities to be addressed	
(c) Local Jobs First Policy (see Item 9 below)	
Industry development	10.0%
Job outcomes	
(d) Financial	
Value for money, including Tendered Price and / or Schedule of Rates (if applicable)	
Grand Total	100.0%

The submission provided by P and V Newell Electrical Contractors Pty Ltd was of a high quality and offered good value for money with extensive experience delivering similar projects.

Details of the tender evaluation are documented in the confidentially distributed document pertaining to this contract.

4. COMMUNITY CONSULTATION & ENGAGEMENT

Council officers have had numerous conversations with representatives from each of the sporting clubs and recreation reserve committees of management via telephone and email, as well as meetings held onsite to discuss the scope of proposed works, to ensure they meet the needs of the individual clubs and reserve committees.

Council officers and the Contractors will liaise with the sporting club and recreation reserve committee representatives during the works to ensure as minimal disruption to their season activities.

5. COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 1 - Strong and Resilient Community

Objective 3: Key infrastructure investment supports our economy and liveability

Theme 3 – Healthy and Inclusive Community

Objective 2: People are active and socially connected through engaging quality spaces and places

The G21 and AFL Barwon Towards 2030: Strategy (regional strategy) highlighted a number of facility upgrades required to ensure player safety at a number of reserves. This project implements these actions if completing facility upgrades where existing oval sports lighting does not meet facility and sporting standards.

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

The successful tenderer is required to provide a Construction Environmental Management Plan (CEMP) that addresses environmental and social considerations. The CEMP will be actively managed by Council staff throughout the contract term.

The upgrade will also enhance opportunities for sporting activities to be held at the four sites later in the day and provide improved social opportunities for the local communities.

The lighting proposed will be LED lighting which is far more environmentally friendly than current lighting at each of the sites.

There are no cultural heritage issues associated with any of the sites.

LEGAL & RISK

The successful tenderer is required to provide adequate documentation for occupational health and safety requirements including site specific potential hazard assessment and Safe Work Method Statements (SWMs). This documentation will be thoroughly checked by Council staff prior to commencement and measures put in place to ensure it is adhered to throughout the work.

The successful tenderer is required to have the necessary insurances to comply with Council's requirements.

FINANCIAL & BUDGETARY

The total budget for the Sportsground lighting improvements is \$1,728,660. Of this amount, Council is contributing \$231,240, with the remaining \$1,497,420 being funded by the State Government through the Community Sports Infrastructure Stimulus Program Round 2.

Other works to be completed as part of this project but outside of this contract are site power upgrades for Alvie, Irrewillipe and Gellibrand recreation reserves. These works will be completed by Powercor.

7. IMPLEMENTATION STRATEGY

Upon Council's approval, the contract will be awarded in January 2022, following advice from Sport and Recreation Victoria as to the outcome of the project scope variation request and works will be programmed to commence early in 2022.

The practical completion date for the lighting installation has been listed as August 2022. This will be subject to the commissioning of the new lighting which will be dependent on power authority works to upgrade the power supply to 3 of the 4 sites. This is within the timelines required for delivery under the funding agreement.

COMMUNICATION

A letter of acceptance and contracts will be issued to the successful tenderer. The contracts shall be signed by both the Contractor and Council prior to the commencement of works.

Signage relating to the works will be placed at each location when a commencement date has been agreed.

TIMELINE

Contract Award: 15 December 2021 Contract Execution: 31 January 2022 Design and Works Commence: February 2022 Practical Completion: 31 August 2022

8. OFFICER DIRECT OR INDIRECT INTEREST

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



Item: 10.10

Contract 2208 - Birregurra Sportsground Lighting Upgrade

OFFICER	David Smith
GENERAL MANAGER	Tony McGann
DIVISION	Environment and Infrastructure
ATTACHMENTS	Nil
PURPOSE	To approve and award Contract 2208 – Birregurra Sportsground Lighting upgrade

1. EXECUTIVE SUMMARY

Council has received State Government funding through the 2021 Local Sports Infrastructure Fund – Community Sports Lighting Stream to improve sportsground lighting at Birregurra Recreation Reserve.

Designs for this project were completed in consultation with club and reserve committee of management representatives, and a public tender for construction was released on 13 November 2021, closing on 3 December 2021.

The contract is a lump sum AS4000 contract. Works are scheduled to commence in February 2022 and practical completion is required by end of August 2022.

The preferred contractor is highly experienced in sportsground lighting works and has demonstrated the capability and availability to undertake the works within the available budget.

2. RECOMMENDATION

That Council:

- 1. Awards Contract 2208 Birregurra Sportsground Lighting Upgrade to P and V Newell Electrical Contractors Pty Ltd for the lump sum price of \$274,598.80 (exclusive of GST), subject to approval from Sport and Recreation Victoria for a variation to the agreed project scope.
- 2. Authorises the Chief Executive Officer to award contract 2208 Birregurra Sportsground Lighting Upgrade to P and V Newell Electrical Contractors Pty Ltd for the lesser amount of

\$228,368 (exclusive of GST) if Sport and Recreation Victoria do not approve the project scope variation.

- 3. Authorises the Chief Executive Officer to execute the contract documents on behalf of Council.
- 4. Authorises the Chief Executive Officer to perform all roles of the Principal.
- 5. Authorises the Manager Assets and Project Delivery as the Superintendent for Contract 2208, including managing variations in accordance with the contract conditions.
- 6. Notes that unsuccessful tenderers will be advised of the outcome of the tender process and the successful tenderer and contract price will be listed on Council's website.

3. KEY INFORMATION

Colac Otway Shire Council was successful in receiving funding under the State Government's 2021 Local Sport Infrastructure Fund – Community Sport Lighting Stream, which will see the oval sports lighting upgraded at Birregurra Recreation Reserve.

The Birregurra Recreation Reserve is located at 19 Strachan Street, Birregurra. This crown land reserve is managed by a Department of Land, Water and Planning (DELWP) appointed Committee of Management. Under the Colac Otway Public Open Space Strategy 2011, the reserve is classified as a 3.1 ha Township Sports Reserve.

Oval lighting upgrades to football training standard (minimum 100 Lux) is proposed for Birregurra Recreation Reserve. Lighting to this level would meet Australian Standards for training purposes including match simulation and will improve ground management; inadequate lighting has led to uneven wearing of the ground. Players are currently unable to utilise the whole playing surface, which means higher wear and tear under poorly lit areas. Consistent lighting across the playing surface will improve management options and allow areas to be rested if needed. 100 lux lighting is also suitable for amateur level club competition and match practice (ie. minimum requirement suitable for competition at local club level).

The need to upgrade the oval sports lighting was first identified in the G21 and AFL Barwon Regional Strategy (2015) and further highlighted in the G21 and AFL Barwon Towards 2030: Strategy. These key strategic documents have been endorsed by Council, and the recommendations of the strategy have been implemented as funding became available. Upgrading the oval sports lighting at Birregurra Recreation Reserve will ensure the lighting levels meet training and competition standard, and meet player safety expectations.

The oval lighting upgrade will also enable the Birregurra Football and Netball Club (BFNC) to increase participation across club activities, including junior participation and the introduction of a female team(s).

Tender Advertisement

A request for tender for Contract 2208 – Birregurra Sportsground Lighting Upgrade was advertised in the Colac Herald, the Geelong Advertiser and via eProcure Panel (MAV website) on 13 November 2021.

Tenders closed on 3 December 2021.

Tender submissions were received from three applicants.

Evaluation of Tenders

Tenders are evaluated in accordance with Council's Procurement Policy and Tenders/Quotations and Purchasing Procedure, considering the following weighted selection criteria:

Evaluation Criteria	Weighting
(a) Capacity	
Availability and expertise of key personnel	10.0%
Availability of suitable resources including plant and equipment	10.0%
(b) Capability	
Previous experience in completing similar projects to the required standard	10.0%
Understanding of project requirements and outcomes to be delivered, including staging and technical requirements, and/or challenges and opportunities to be addressed	10.0%
Ability to meet project timelines and milestones	
(c) Local Content	
Contribution to the financial, social and environmental wellbeing of the Colac Otway Shire in respect of engaging and contracting with local suppliers and sub- contractors.	5.0%
(d) Financial	
Value for money, including Tendered Price and / or Schedule of Rates (if applicable)	50.0%
Grand Total	100.0%

The submission provided by P and V Newell Electrical Contractors Pty Ltd was of a high quality and offered good value for money with extensive experience in similar type projects.

Details of the tender evaluation are documented in the confidentially distributed document pertaining to this contract.

4. COMMUNITY CONSULTATION & ENGAGEMENT

Council officers have had numerous telephone and email conversations with representatives of the reserve committee of management (CoM) and Birregurra Football Netball Club (FNC). Meetings have also been held onsite to discuss the scope of proposed works to ensure the oval lighting upgrades meet the needs of the club.

Council officers and the Contractors will liaise with the Birregurra FNC and CoM representatives during the works to ensure minimal disruption to their season activities.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 1 - Strong and Resilient Community

Objective 3: Key infrastructure investment supports our economy and liveability

Theme 2 - Valuing the Natural and Built Environment

Objective 5: Provide and maintain an attractive and safe built environment

Theme 3 – Healthy and Inclusive Community

Objective 2: People are active and socially connected through engaging quality spaces and places.

The G21 and AFL Barwon Towards 2030: Strategy (regional strategy) highlighted a number of facility upgrades required to ensure player safety at a number of reserves. This project implements these actions if completing facility upgrades where existing oval sports lighting does not meet facility and sporting standards.

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

The successful tenderer is required to provide a Construction Environmental Management Plan (CEMP) that addresses environmental and social considerations. The CEMP will be actively managed by Council staff throughout the contract term.

The upgrade will also enhance opportunities for sporting activities to be held at the site later in the day and provide improved social opportunities for the local communities.

The lighting proposed will be LED lighting which is far more environmentally friendly than current lighting at the site.

There are no cultural heritage issues associated with this site.

LEGAL & RISK

The successful tenderer is required to provide adequate documentation for occupational health and safety requirements including site specific potential hazard assessment and Safe Work Method Statements (SWMs). This documentation will be thoroughly checked by Council staff prior to commencement and measures put in place to ensure it is adhered to throughout the work.

The successful tenderer is required to have the necessary Insurance to comply with Council's requirements.

FINANCIAL & BUDGETARY

Funding	Amount	Funding Program
SRV	\$250,000	2021 Local Sport Infrastructure Fund Community Sports Lighting
(State		Stream - \$225,000.00 received in 2020/21 financial year – funding
Government)		balance of \$25,000.00 to be received at project completion 2022/23
		financial year
COS	\$80,000	COS CEO confirmed Council's contribution – 21/03/2021
Birregurra	\$55,000	BFNC funding commitment – 22/03/2021
Football		
Netball Club		

The project has a total budget of \$385,000 with the breakdown of funding as follows:

7. IMPLEMENTATION STRATEGY

Upon Council's approval, the contract will be awarded in January 2022, following advice from Sport and Recreation Victoria as to the outcome of the project scope variation request and works will be programmed to commence early in 2022.

The practical completion date has been listed as end of August 2022.

COMMUNICATION

A letter of acceptance and contracts will be issued to the successful tenderer. The contracts shall be signed by both the Contractor and Council prior to the commencement of works.

Signage relating to the works will be placed at each location when a commencement date has been agreed.

TIMELINE

Design: Completed. Contract Award: 15 December 2021 Contract Execution: 31 January 2022 Lighting Upgrade Works Commence: February 2022 Practical Completion: 31 August 2022

8. OFFICER DIRECT OR INDIRECT INTEREST

No officer declared an interest under the *Local Government Act 1989* in the preparation of this report.



Item: 10.11

Contract 2114 – Apollo Bay Harbour Redevelopment -Fishermen's Co-operative Building - Architectural Design Services

OFFICER	Frank Castles	
GENERAL MANAGER	Tony McGann	
DIVISION	Environment & Infrastructure	
ATTACHMENTS	 Pages from D 21 165055 Contract 2114 - Part 5 - Design Brief [10.11.1 - 4 pages] 	
PURPOSE	To recommend a tenderer for Contract 2114 – Apollo Bay Harbour – Fisherman's Co-op Redevelopment - Design	

1. EXECUTIVE SUMMARY

Tenders were called for the provision of Architectural, Engineering & Building Design Services for the redevelopment of the Fishermen's Co-operative Building located at the Apollo Bay Harbour.

This is a key project within the Geelong City Deals program, which has been funded by the Commonwealth Government.

The redevelopment project has been driven through the coordinated efforts of the community and the Fisherman's Co-operative, with the project outcomes delivering a high-quality building that will incorporate the continued operation of the fishing co-op, sale of fresh seafood, café, and restaurant.

The engagement of a suitability experienced and qualified architectural consultancy and technical team to facilitate and coordinate the detailed design and documentation for the redevelopment is a key component to the successful delivery of this project.

2. RECOMMENDATION

That Council:

1. Awards Contract 2114 – Apollo Bay Harbour Redevelopment – Fisherman's Co-operative Building – Architectural Design Services, to k20.AU.Pty.Ltd for the tendered price of \$264,809 (ex GST).

- 2. Authorises the Chief Executive Officer to execute the contract documents on behalf of Council.
- 3. Authorises the Chief Executive Officer to perform all roles of the Principal.
- 4. Authorises the Project Director City Deals as the Superintendent for Contract 2114, including managing variations in accordance with the contract conditions.
- 5. Notes that unsuccessful tenderers will be advised of the outcome of the tender process and the successful tenderer and contract price will be listed on Council's website.

3. KEY INFORMATION

Tender Advertisement

A request for tender for Contract 2114 - Apollo Bay Harbour Redevelopment Fishermen's Co-op was advertised through the Colac Herald, Geelong Advertiser, and online through e-Procure on 13 August 2021.

Tenders were opened on 15 September 2021. Tender submissions were received from twelve applicants.

Evaluation of Tenders

Tenders are evaluated in accordance with Council's Procurement Policy and Tenders/Quotations and Purchasing Procedure, considering the following weighted selection criteria:

Capacity	Weighting
Experience and qualifications of key personnel.	5.0%
Capability	Weighting
Previous experience in completing similar contracts.	20.0%
Understanding of project requirements and outcomes to be delivered; including staging and technical requirements, and/or challenges and opportunities to be addressed.	20.0%
Ability to meet project timelines and milestones	5.0%
Industry Capability Network	Weighting
Job Outcomes	10.0%
Industry Development	10.0%

Details of the tender evaluation are documented in the Con 2114 Tender Evaluation Report (TER), which is attached as a confidential attachment to this report.

Although the contract value is such that it falls within the delegation of the Chief Executive Officer the tender is provided to Council for a decision due to the following factors:

1. This is an iconic and highly important site for Apollo Bay and the entire region.

2. The architectural design of this project is crucial to the success of the project and will impact the site for many decades.

4. COMMUNITY CONSULTATION & ENGAGEMENT

The Apollo Bay Harbour Redevelopment project, which is funded by the Commonwealth Government, has a robust Community Engagement strategy and implementation plan, of which the design process will follow.

This will include informing and engaging with the community, particularly during concept design development, to ensure the community are informed and aware of the design outcomes for the redevelopment of the Apollo Bay Fishermen's Co-op.

Graphic images of the concept design for the site are provided below:



Examples of previous work undertaken by k20.AU.Pty.Ltd are attached in the confidential section of this agenda.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021 - 2025:

Theme 1 – Strong and Resilient Economy

- 1.1 Key infrastructure investment supports our economy and liveability
- 1.4 Colac Otway Shire is a destination to visit

Theme 2 – Valuing the Natural and Built Environment

2.5 Provide and maintain an attractive and safe built environment

Theme 4 – Strong Leadership and Management

4.1 We commit to a program of best practice and continuous improvement

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

The development of detailed design will enable the redevelopment of the Fishermen's Co-op Building, which will provide significant gains to the economic potential of the harbour precinct. It will also enhance the social and cultural experiences for residents and visitors within our region.

The design will ensure a robust and responsible building design that incorporates environmental sustainability into the construction.

LEGAL & RISK

The successful tenderer is required to have the necessary Insurance to comply with Council's Requirements, and has extensive experience in the design of similar projects.

FINANCIAL & BUDGETARY

Funding for this contract is provided by Commonwealth Government funding (Geelong City Deal) and the Fishermen's Co-operative.

7. IMPLEMENTATION STRATEGY

Upon Council's approval, the contract will be awarded for the delivery of design services to complete the design for the redevelopment of the Fisherman's Co-op Building. The contract will be managed by the City Deals Project Team.

COMMUNICATION

A letter of acceptance and contracts will be issued to the successful tenderer. The contracts will be signed by both the Consultant and Council prior to the commencement of works.

TIMELINE

The detailed design and documentation is scheduled to be completed by end of March 2022.

8. OFFICER DIRECT OR INDIRECT INTEREST

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

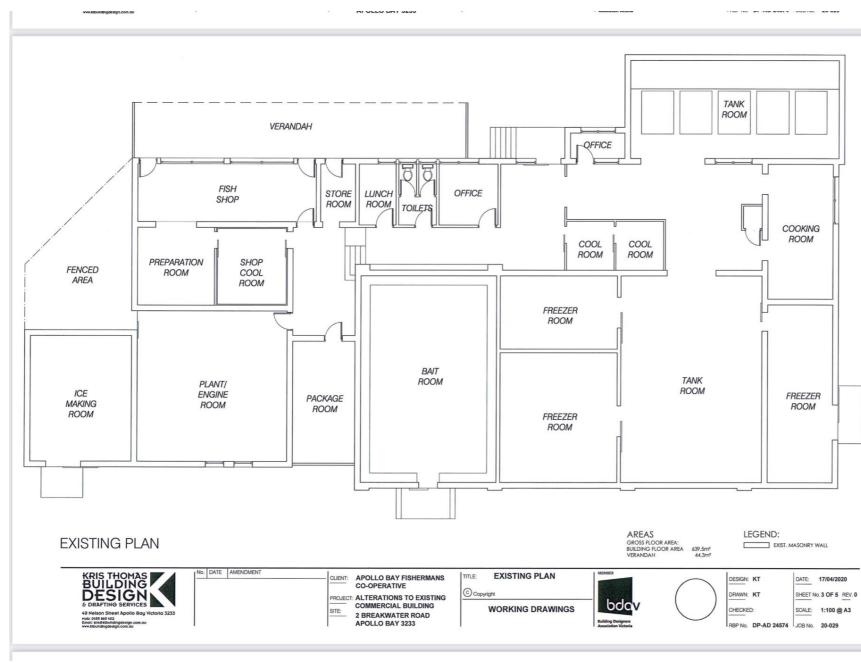
Request for Tender – Part 5 Design Brief



Contract 2114 - Apollo Bay Harbour Redevelopment - Fishermen's Co-operative Building Colac Otway Architectural Design Services

APPENDIX 2 – SCHEMATIC ARCHITECTURAL LAYOUT PLANS

2A - Existing Building Floor Layout



Tender Details:	Contract 2114 - Apollo Bay Harbour Redevelopment - Fishermen's Co-operative Building - Architectural Design Services	Page:	21 of 24
Document:	Request for Tender - Part 5 (Design Brief)	Original Issue:	06/03/2021
Current Version:	Version 3.0	Current Version:	02/08/2021

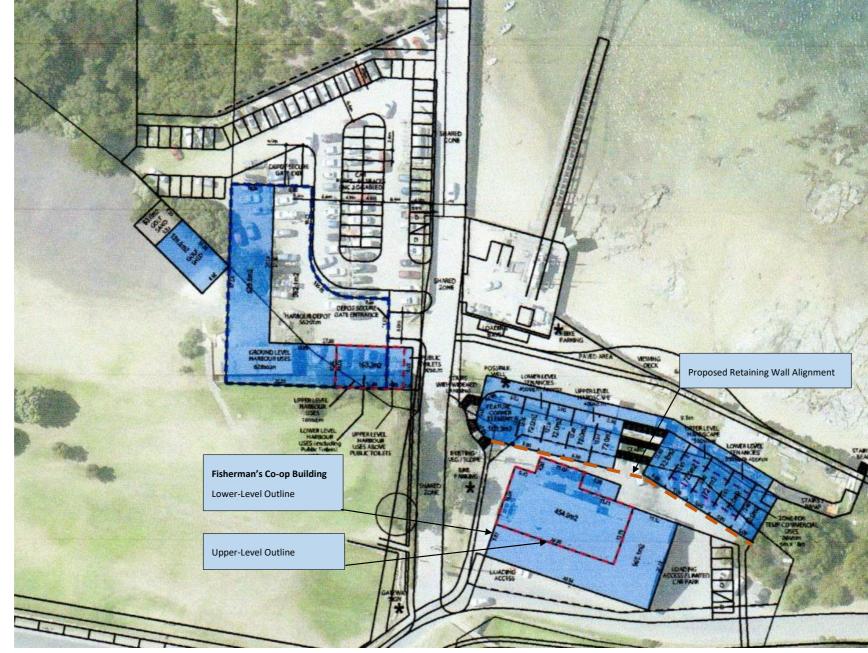
Attachment 10.11.1 Pages from D 21 165055 Contract 2114 - Part 5 - Design Brief

Request for Tender – Part 5 Design Brief



Contract 2114 - Apollo Bay Harbour Redevelopment - Fishermen's Co-operative Building Colac Otway Architectural Design Services

2B - Proposed Harbour Development Linework Plan



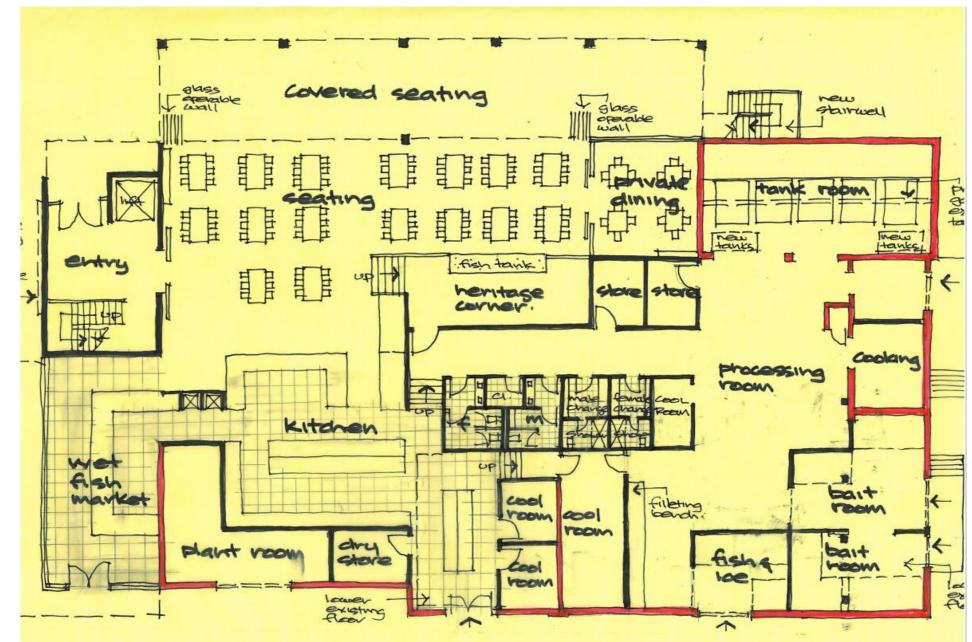
Tender Details:	Contract 2114 - Apollo Bay Harbour Redevelopment - Fishermen's Co-operative Building - Architectural Design Services	Page:	22 of 24
Document:	Request for Tender - Part 5 (Design Brief)	Original Issue:	06/03/2021
Current Version:	Version 3.0	Current Version:	02/08/2021

Attachment 10.11.1 Pages from D 21 165055 Contract 2114 - Part 5 - Design Brief



6 Request for Tender – Part 5 Design Brief Contract 2114 - Apollo Bay Harbour Redevelopment - Fishermen's Co-operative Building Colac Otway Architectural Design Services

2C - Proposed Lower Level - Floor Layout



Tender Details:	Contract 2114 - Apollo Bay Harbour Redevelopment - Fishermen's Co-operative Building - Architectural Design Services	Page:	23 of 24
Document:	Request for Tender - Part 5 (Design Brief)	Original Issue:	06/03/2021
Current Version:	Version 3.0	Current Version:	02/08/2021

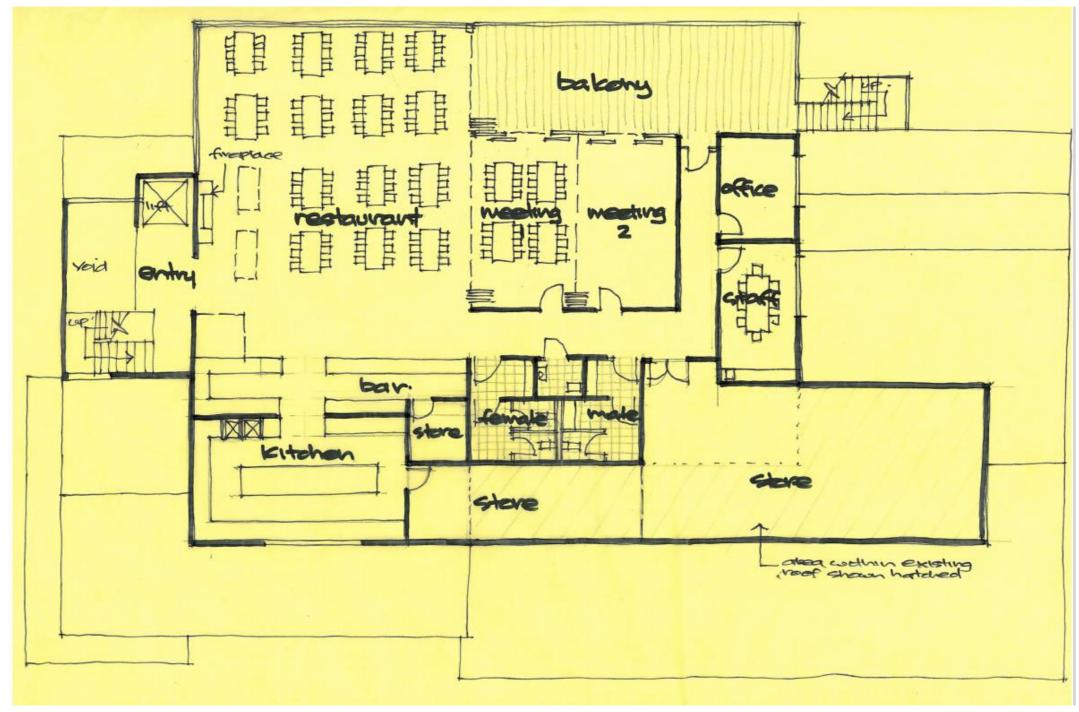
Attachment 10.11.1 Pages from D 21 165055 Contract 2114 - Part 5 - Design Brief

Request for Tender – Part 5 Design Brief



Contract 2114 - Apollo Bay Harbour Redevelopment - Fishermen's Co-operative Building Colac Otway Architectural Design Services

2D - Proposed Upper Level – Floor Layout



Tender Details:	Contract 2114 - Apollo Bay Harbour Redevelopment - Fishermen's Co-operative Building - Architectural Design Services	Page:	24 of 24
Document:	Request for Tender - Part 5 (Design Brief)	Original Issue:	06/03/2021
Current Version:	Version 3.0	Current Version:	02/08/2021

Attachment 10.11.1 Pages from D 21 165055 Contract 2114 - Part 5 - Design Brief



Item: 10.12

Contract 2119 Road Reconstruction McLachlan Street Apollo Bay – Lump Sum award price correction

OFFICER	Kristy Cochrane
GENERAL MANAGER	Tony McGann
DIVISION	Environment and Infrastructure
ATTACHMENTS	Nil
PURPOSE	To correct an error in the lump sum award amount for Contract 2119 – McLachlan Street, Apollo Bay Road Reconstruction.

1. EXECUTIVE SUMMARY

At the Council Meeting held on 24 November 2021, Council resolved to award Contract 2119 – McLachlan Street, Apollo Bay Road Reconstruction to R Slater & Sons Pty Ltd for a lump sum price of \$637,710 (ex GST).

The figure was incorrectly entered into the Officers Report, with the correct contract award amount being \$639,710 (ex GST); a difference of \$2,000.

To rectify the error and enable the contract to be awarded for the correct amount, this report recommends a new resolution be passed by Council containing the correct figure.

2. RECOMMENDATION

That Council:

- 1. Notes the officer report to the 24 November 2021 Council meeting regarding Agenda Item 10.9, Contract 2119 Road Reconstruction McLachlan Street, Apollo Bay, incorrectly listed the tendered price as \$637,710 (ex GST), when it should have been \$639,710 (ex GST).
- 2. Notes that a letter of acceptance and contract documents have not been exchanged at this time.

- 3. Approves the awarding of Contract 2119 Road Reconstruction McLachlan Street, Apollo Bay for the total awarded contract price of \$639,710 (ex GST), superseding the relevant part of Agenda Item 10.9 of the 24 November 2021 Council meeting.
- 4. Notes that all other parts of the resolution made by Council at its meeting on 24 November 2021, remain unchanged.

3. KEY INFORMATION

During the production of the Officers report for Council's consideration, an administrative keying error was made when the lump sum award price was entered, which resulted in the November 2021 Ordinary Council resolution awarding Contract 2119 – McLachlan Street, Apollo Bay Road Reconstruction for an amount \$2,000 less than the submitted Tender price.

This change will not impact timeframes for commencement of the project.

4. COMMUNITY CONSULTATION & ENGAGEMENT

Not applicable.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 1 - Strong and Resilient Community

Objective 3: Key infrastructure investment supports our economy and liveability

Theme 2 - Valuing the Natural and Built Environment

Objective 5: Provide and maintain an attractive and safe built environment

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

Not applicable.

LEGAL & RISK

Bringing the matter back to the Chamber for a decision is good governance.

FINANCIAL & BUDGETARY

The \$2,000 increase will have no material impact on the overall Road Reconstruction program budget for Council.

7. IMPLEMENTATION STRATEGY

Upon Council's approval, the contract will be awarded in December 2021 and works will be programmed to commence. Conditional upon suitable weather, Officers propose that the Works under Contract will commence in February 2022.

COMMUNICATION

Letters of acceptance and contracts will be issued to the successful tenderer. The contract shall be signed by both the Contractors and Council prior to the commencement of works.

Public notices of works will be circulated when commencement dates have been agreed to for the project.

TIMELINE

Works Commence: (estimated) Early February 2022 Practical Completion: End May 2022

8. OFFICER DIRECT OR INDIRECT INTEREST

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



Item: 10.13

Audit and Risk Committee Minutes - 8 September 2021

OFFICER	Lyndal McLean
CHIEF EXECUTIVE OFFICER	Anne Howard
DIVISION	Executive
ATTACHMENTS	 Audit and Risk Committee - Signed Minutes - 8 September 2021 [10.13.1 - 9 pages]
PURPOSE	To receive for information the Colac Otway Shire Audit and Risk Committee minutes dated 8 September 2021.

RECOMMENDATION

That Council receives for information the Colac Otway Shire Audit and Risk Committee minutes dated 8 September 2021.

Attachment 10.13.1 Audit and Risk Committee - Signed Minutes - 8 September 2021





AUDIT AND RISK COMMITTEE MEETING

MINUTES

Wednesday 8 September 2021

at 9:00 AM

by videoconference

COLAC OTWAY SHIRE AUDIT AND RISK COMMITTEE MEETING

Wednesday 8 September 2021

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Minutes - Audit and Risk Committee Meeting - 8 September 2021

Agenda - Council Meeting - 15 December 2021

COLAC OTWAY SHIRE AUDIT AND RISK COMMITTEE MEETING

MINUTES of the AUDIT AND RISK COMMITTEE MEETING OF THE COLAC OTWAY SHIRE held by videoconference on Wednesday 8 September 2021 at 9:00 AM.

MINUTES

1 DECLARATION OF OPENING OF MEETING

2 PRESENT

Mike Said (Chair) Brian Keane Richard Trigg Cr Graham Costin Cr Stephen Hart

Anne Howard, Chief Executive Officer Errol Lawrence, General Manager, Corporate Services Tony McGann, General Manager, Environment & Infrastructure Ian Seuren, General Manager, Development & Community Services Marlo Emmitt, Manager, Governance & Communications Lyndal McLean, Governance Coordinator Amanda Barber, Manager, Financial Services Melanie Duvé, Corporate Planning & Reporting Officer Nicholas Welsh, Senior Accountant Toni Uphill, Management Accountant Christopher Kol, McLaren Hunt

3 APOLOGIES

Nil

4 DECLARATIONS OF INTEREST

Nil

5 CONFIRMATION OF MINUTES

• Audit and Risk Committee Meeting held on 11 August 2021.

Minutes - Audit and Risk Committee Meeting - 8 September 2021

RESOLUTION

MOVED Richard Trigg, SECONDED Cr Stephen Hart

That the Audit and Risk Committee confirm the minutes from the Audit and Risk Committee Meeting held on 11 August 2021.

CARRIED 5:0

6.1 BUSINESS ARISING FROM THE PREVIOUS MEETING

Nil

6.2 DISCUSSION OF ADDITIONAL PAPERS

The papers listed below relating to the agenda were distributed to Audit and Risk Committee members following the distribution of the agenda. They were discussed with the reports.

- Closing Report for the financial year ending 30 June 2021
- Final Management Letter 2020-2021 Financial report and Performance Statement of Colac Otway Shire Council
- 2020-2021 Financial Statement Questions and Responses Updated
- Accounting treatment for Colac Library Building
- 2020-21 Colac Otway Shire Financial Statements V6

6.3 EXTERNAL AUDIT AND REPORTING RESPONSIBILITIES

Audit and Risk Committee Plan

- Item 8.4 Review with management the performance of the External Auditor
- Item 8.5 Meet in camera with External Auditor in absence of management

A closed session meeting of the Audit and Risk Committee members took place on 8 September 2021 from 8.35am – 8.55am to consider the items listed above. Christopher Kol of McLaren Hunt, Council's External Auditor, also attended the meeting from 8.45am.

Audit and Risk Committee Plan

• Item 10.1 Reports on Audit Committee activities to Council

Mike Said (Audit and Risk Committee Chair) attended Councillor Briefing on 8 September 2021 to deliver the biannual audit and risk report to Councillors.

Minutes - Audit and Risk Committee Meeting - 8 September 2021



Item: 7.1

Financial Reporting - Review annual financial and performance statement 2020/21

OFFICER	Amanda Barber, Melanie Duve			
GENERAL MANAGER	Errol Lawrence			
DIVISION	Corporate Services			
ATTACHMENTS	 Audit and Risk Committee Agenda - 2020-21 Colac Otway Shire Financial Statements [7.1.1 - 44 pages] Performance Statement 2020-2021 LGPRF Final [7.1.2 - 21 pages] Governance and Management Checklist - Annual Report 2020-2021 [7.1.3 - 3 pages] Summary of Changes - (LGPR F) Performance Statement 2020-2021 [7.1.4 - 2 pages] 			
PURPOSE	To consider the 2020/21 'In Principle' Financial & Performance Statements and to recommend their approval to Council.			

RECOMMENDATION

That the Audit and Risk Committee recommends that Council:

- 1. Approves in principle the 2020-21 Financial Statements and Performance Statement for Colac Otway Shire Council, subject to any changes that are recommended or agreed by the Auditor in accordance with Section 98(2) of the Local Government Act 2020.
- 2. Makes provision for the 2020-21 Colac Otway Shire Council Financial Statements and Performance Statement to be referred back to the Audit and Risk Committee for information, if there is any significant change prior to certification; and
- 3. In accordance with section 98 of the Local Government Act 2020, Nominates and authorises Deputy Mayor, Cr Graham Costin and Councillor, Cr Stephen Hart to certify and approve the 2020-21 Financial Statements and Performance Statement in their final form, after any changes recommended or agreed with the Auditor, have been made on behalf of Council.

Minutes - Audit and Risk Committee Meeting - 8 September 2021

ALTERNATIVE MOTION

MOVED Richard Trigg, SECONDED Brian Keane

That the Audit and Risk Committee recommends that Council:

- 1. Approves in principle the 2020-21 Financial Statements and Performance Statement for Colac Otway Shire Council, subject to any changes that are recommended or agreed by the Auditor in accordance with Section 98(2) of the Local Government Act 2020.
- 2. Makes provision for the 2020-21 Colac Otway Shire Council Financial Statements and Performance Statement to be referred back to the Audit and Risk Committee for information, if there is any significant change prior to certification.
- 3. In accordance with section 98 of the Local Government Act 2020, Nominates and authorises Deputy Mayor, Cr Graham Costin and Councillor, Cr Stephen Hart to certify and approve the 2020-21 Financial Statements and Performance Statement in their final form, after any changes recommended or agreed with the Auditor, have been made on behalf of Council.
- 4. Acknowledges the work of, and thanks the officers and auditors who were involved in the preparation and auditing of the accounts.

CARRIED 5:0

Minutes - Audit and Risk Committee Meeting - 8 September 2021



Item: 7.2

Financial Reporting - Review significant accounting and reporting issues - Port of Apollo Bay Special Purpose Statements

OFFICER	Amanda Barber
GENERAL MANAGER	Errol Lawrence
DIVISION	Corporate Services
ATTACHMENTS	 2020 - 2021 Port of Apollo Bay Special Purpose Fina [7.2.1 - 15 pages]
PURPOSE	To note the 2020/21 Special Purpose Financial Report relating to the Port of Apollo Bay Management Agreement

RESOLUTION

MOVED Cr Stephen Hart, SECONDED Richard Trigg

That the Audit and Risk Committee notes the 2020/21 Port of Apollo Bay Special Purpose Financial Report, subject to any changes that are recommended or agreed by the auditor to be used to meet the reporting requirements of the Port of Apollo Bay Management Agreement.

CARRIED 5:0

Minutes - Audit and Risk Committee Meeting - 8 September 2021

GENERAL BUSINESS

RESOLUTION

MOVED Brian Keane, SECONDED Cr Graham Costin

That the Audit and Risk Committee:

- 1. Notes the matter raised regarding purchase orders created in the finance system (Authority); and
- 2. Requests that a report be presented to the December 2021 Audit and Risk Committee meeting on this matter.

CARRIED 5:0

Assessment of Audit and Risk Committee Performance

The Chair, Mike Said requested that the annual assessment of the performance of the Audit and Risk Committee be completed after this meeting by all current Audit and Risk Committee members, with the results to be presented at the December 2021 Audit and Risk Committee meeting.

Recommended Appointment of the Audit and Risk Committee Chair

The Chief Executive Officer assumed the role of Chair for the recommended appointment of the Audit and Risk Committee Chair.

On the behalf of the Audit and Risk Committee, the Chief Executive Officer acknowledged the effort and work that Mike Said had given the Committee and Council and therefore the community over the past twelve months as Chair.

The Chief Executive Officer called for nominations for the recommended appointment of the Chair of the Audit and Risk Committee for the period 1 December 2021 until 1 December 2022.

NOMINATION – Brian Keane

MOVED Richard Trigg, SECONDED Mike Said

Brian Keane accepted the nomination.

No further nominations were received.

Having received no further nominations, the Audit and Risk Committee recommends the appointment of Brian Keane as the Chair of the Audit and Risk Committee until 1 December 2022.

Mike Said resumed the role of the Chair for the remainder of the meeting and thanked the staff who had contributed to reports and agendas over the years and senior officers for their contributions.

Minutes - Audit and Risk Committee Meeting - 8 September 2021

The meeting was declared closed at 11.05am.

CONFIRMED AND SIGNED at the meeting held on 8 December 2021.

CHAIR -----

Minutes - Audit and Risk Committee Meeting - 8 September 2021



Item: 10.14

Assessment of Audit and Risk Committee Performance

OFFICER	Lyndal McLean				
CHIEF EXECUTIVE OFFICER	Anne Howard				
DIVISION	Executive				
ATTACHMENTS	 ARC Survey 2020-21 - Summary of Responses [10.14.1 - 4 pages] 				
PURPOSE	To provide a summary of the 2020-21 assessment of the Audit and Risk Committee's performance against the Audit and Risk Committee Charter.				

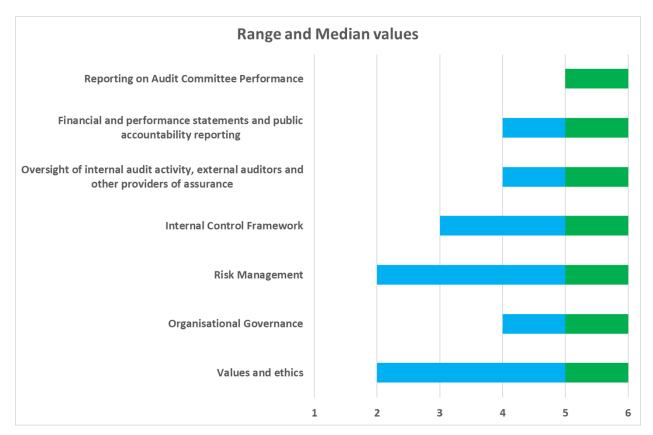
1. EXECUTIVE SUMMARY

The Audit and Risk Committee is required to undertake an annual assessment of its performance against the Audit and Risk Committee Charter.

Each Audit and Risk Committee member completed an assessment survey that consisted of 30 questions, categorised under the following headings and five general questions.

- Values and Ethics
- Organisational Governance
- Risk Management
- Internal Control, Framework
- Oversight of internal audit activity, external auditors and other providers of assurance
- Financial and performance statements and public accountability reporting.

Each question was graded on a scale of one to six, with one and two being less than adequate, three and four adequate and five and six more than adequate. The following graph shows a summary of the minimum score, median and maximum score for each of the seven areas. The left-hand side of each bar is the minimum, the right-hand side is the maximum, and the change of colour indicates the median value.



With all areas obtaining a median score of five (more than adequate) this indicates that the Audit and Risk Committee considers that it is functioning at a high level across all areas. Items that received an individual lower score and items where the spread of results is significant may warrant consideration by the Audit and Risk Committee. These items are explored in the Key Information section of this report.

2. RECOMMENDATION

That Council notes the results of the Audit and Risk Committee's annual assessment of its performance against the Audit and Risk Committee Charter, in accordance with section 54(4) of the Local Government Act 2020.

3. KEY INFORMATION

A Council must establish an Audit and Risk Committee and this committee is required to undertake an annual assessment of its performance against the Audit and Risk Committee Charter, under sections 53(1) and 54(4)(a) respectively, of the *Local Government Act 2020*.

The Annual Assessment of the Audit and Risk Committee Survey for 2020-21 was provided to and completed by the 2020-21 Audit and Risk Committee members. The Audit and Risk Committee consists of two Councillors and three independent members, being:

- Cr Graham Costin
- Cr Stephen Hart
- Mike Said (Chair)
- Brian Keane
- Richard Trigg.

ANALYSIS OF RESULTS

All questions received a median score of five indicating that the strong majority view of the committee is that it is functioning well across all areas. There are, however, several questions with a wide range of scores and some responses with an individual score which is significantly different from the majority view. These questions and their scores are listed below for the Audit and Risk Committee's consideration.

1. Values and Ethics

Each of the questions below scored a two by one Audit and Risk Committee member. The remaining scores were fives and sixes.

- 1.1 Reviewed and assessed the policies, procedures, and practices established to monitor conformance with the code of conduct and ethical policies by all managers and staff. (Median = 5, Range 2-5)
- 1.2 Provided oversight of the mechanisms established by management to establish and maintain high ethical standards for all managers and staff. (Median = 5, Range 2 6)
- 1.3 Reviewed and provided advice on the systems and practices established by management to monitor compliance with laws, regulations, policies, and standards of ethical conduct and identify and deal with any legal or ethical violations. (Median = 5, Range 2 6)

3. Risk Management

The question below received one score of two, with the remainder of scores being a four and fives.

3.4 Provided oversight of the adequacy of the combined assurance being provided. (Median = 5, Range 2-5)

4 Internal Control Framework

4.1 Fraud and Corruption

The indicator below received two scores of three and three scores of five.

4.1.3 Challenged management and internal and external auditors to ensure that appropriate anti-fraud and corruption programs and controls were in place to identify potential fraud and ensure that investigations are undertaken if fraud is detected.

4.2 Control

The indicators below received a wider spread of results (one score of three, one score of four, two scores of five and one score of six).

- 4.2.2 Reviewed the observations and conclusions of internal and external auditors and the findings of any regulatory agencies.
- 4.2.3 Received reports on all matters of significance arising from work performed by other providers of financial and internal control assurance to senior management and the Council.

4.3 Compliance

The following indicator received two quite distinct results – two scores of three and three scores of five.

4.3.3 Reviewed the process for communicating the Code of Conduct to staff and for monitoring compliance and obtained regular updates from management regarding compliance matters.

8 General

The Audit and Risk Committee was asked five general questions around meeting facilitation, information and agendas provided to the Committee and Committee member participation. The results from these questions indicate that Audit and Risk Committee is generally comfortable with the administration and running of its meetings.

9 Other Comments

The Committee members were given the opportunity to raise other matters and provide any suggestions for improvement. The following was provided by one committee member:

"Officer support to the work of the Audit and Risk Committee was fantastic. Prompt and timely responses by all officers to requests by the ARC. The admin support to the committee has been exceptional. As Chair over the past eight to ten years I very much want to thank all the ARC members for their energetic contributions to the work of the committee."

A summary of the responses can be found in Attachment 1.

4. COMMUNITY CONSULTATION & ENGAGEMENT

Not applicable.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 4 – Strong Leadership & Management

4.1 We commit to a program of best practice and continuous improvement

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

Not applicable.

LEGAL & RISK

The Annual Assessment of the Audit and Risk Committee against the Audit and Risk Committee Charter and tabling it at the next Council meeting is a requirement under section 54(4) of the *Local Government Act 2020*.

FINANCIAL & BUDGETARY

Not applicable.

7. IMPLEMENTATION STRATEGY

The contents of this report will be provided to the Chief Executive Officer for tabling at the next Council meeting.

COMMUNICATION

Not applicable.

TIMELINE

To be included in the 15 December 2021 Council meeting agenda.

8. OFFICER DIRECT OR INDIRECT INTEREST

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





Summary of responses

Annual Assessment of the Audit and Risk Committee's Performance against the Audit and Risk Committee Charter 2020 - 2021

Thinking about the last year, to what extent do you believe the Audit and Risk Committee has:			than quate	Adeo	Adequate		than Juate
anu			2	3	4	5	6
1	Values and Ethics (Median = 5, Range 2 – 6)						
1.1	Reviewed and assessed the policies, procedures, and practices established to monitor conformance with the code of conduct and ethical policies by all managers and staff.		1			4	
1.2	Provided oversight of the mechanisms established by management to establish and maintain high ethical standards for all managers and staff.		1			2	2
1.3	Reviewed and provided advice on the systems and practices established by management to monitor compliance with laws, regulations, policies, and standards of ethical conduct and identify and deal with any legal or ethical violations.		1			3	1
2	Organisational Governance (Median = 5, Range 4 – 6)						
2.1	Reviewed and provided advice on the governance process established and maintained within the organisation and the procedures in place to ensure that they are operating as intended.				1	3	1
2.2	Monitored compliance of policies and procedures with the overarching governance principles, the <i>Local Government Act 2020</i> , relevant regulations and any Ministerial directions.				1	2	2
2.3	Monitored financial and performance reporting.					3	2
2.4	Monitored any ongoing legal matters until the matter was determined.				1	3	1
3	Risk Management (Median = 5, Range 2 – 6)						
3.1	Provided oversight on significant strategic and operational risk exposures and control issues, including fraud and corruption risks, governance issues, and other matters needed or requested by senior management and the Council.					3	2
3.2	Reviewed and provided advice on the risk management processes established and maintained by management and the procedures in place to ensure that they are operating as intended.					3	2
3.3	Reviewed Business Continuity Plans and the IT Disaster Recovery Plan with regard to risk management.				2	2	1
3.4	Provided oversight of the adequacy of the combined assurance being provided.		1		1	3	



Thinking about the last year, to what extent do you believe the Audit and Risk Committee has:		than Juate	•		More than adequate	
	1	2	3	4	5	6
4 Internal Control Framework (Median = 5, Range 3 – 6)						
4.1 Fraud and Corruption (Median = 5, Range 3 – 6)						
4.1.1 Overseen management's arrangements for the prevention and deterrence of fraud and corruption.				2	3	
4.1.2 Ensured that appropriate action was taken in respect of any suspected fraud or corruption matter.				2	3	
4.1.3 Challenged management and internal and external auditors to ensure that appropriate anti-fraud and corruption programs and controls were in place to identify potential fraud and ensure that investigations are undertaken if fraud is detected.			2		2	1
4.2 Control (Median = 5, Range 3 – 6)		1		1	1	
4.2.1 Considered the effectiveness of the control framework, including risk management, fraud prevention, and information technology security and control.				2	3	
4.2.2 Reviewed and provided advice on the control of the organisation as a whole and its individual units.			1	1	2	1
4.2.3 Received reports on all matters of significance arising from work performed by other providers of financial and internal control assurance to senior management and the Council.			1	1	2	1
4.3 Compliance (Median = 5, Range 3 – 6)						
4.3.1 Reviewed the effectiveness of the system for monitoring compliance with laws, regulations and Council policies, and the results of management's investigation and follow up of any instances of non-compliance.					5	
4.3.2 Reviewed the observations and conclusions of internal and external auditors and the findings of any regulatory agencies.					4	1
4.3.3 Reviewed the process for communicating the Code of Conduct to staff and for monitoring compliance and obtained regular updates from management regarding compliance matters.			2		3	
5 Oversight of internal audit activity, external auditors and othe Range 4 – 6)	r provi	ders o	of assu	rance	(Med =	= 5,
5.1 Internal Audit Activity (Median = 5, Range 4 – 6)						
5.1.1 Reviewed and approved the Internal Audit Plan and proposed risk-based internal audits, and made recommendations concerning internal audit projects.				1	2	2
5.1.2 Reviewed the internal auditor performance relative to the Internal Audit Plan and met separately with the internal auditor.					4	1



	Thinking about the last year, to what extent do you believe the Audit and Risk Committee has:		Less adeq		Adequate		More than adequate			
and	RISK CO	ommittee has:			1	2	3	4	5	6
		Reviewed internal audit reports and rev management's action plans to address internal audit engagements.						1	3	1
	5.2	External Auditors (Median = 5, Range 4	- 6)		<u> </u>					
	5.2.1	Reviewed the external auditors' propo and approach, including coordination the internal audit activity.		•				1	3	1
	5.2.2	Had exclusive meetings with external internal auditors to discuss sensitive n		nd				2	2	1
	5.2.3	Monitored management's progress or	n action pla	ans.				3	1	1
6		cial and performance statements and	public ac	countabil	ity repo	orting	(Medi	an = 5,	Rang	e 4 –
<i>.</i> .	6)									
6.1	result	wed with management and the external s of audit engagements, including any d ntered.		he				3	1	1
6.2	compl recent	Reviewed significant accounting and reporting issues, concluding complex or unusual transactions and highly technical areas, and recent professional and regulatory pronouncements, and understand their impact on the financial statements.							4	1
6.3	Reviewed the interim financial reports and annual financial statements and performance statement, and considered whether they are complete, consistent with information known to ARC Members, and reflected appropriate accounting standards.			d					4	1
7	Repor	ting on Audit Committee Performand	.e (Mediar	ı — 5, Ranı	ge 5 – 6)	1			1
7.1	 Reporting on Audit Committee Performance (Median – 5, Ran Prepared a biannual audit and risk report that described the Audit and Risk Committee's activities and included its findings and recommendations and provided a copy of the biannual report to the Chief Executive Officer for tabling at the next Council meeting. 					/			3	2
8	Gene	ral								
		out the last year, to what extent do you gree with the following statements?	Strongly disagree	Disagree	Slightly disagre		ghtly ree	Agree		rongly gree
8.1	whate explan	udit and Risk Committee has received ver information, presentations or ations it considers necessary to fulfil its nsibilities.					1	1		3
8.2	been o	ng agendas and supporting papers have of sufficient clarity and quality to enable mmittee to make informed decisions.						4		1



8	General						
	nking about the last year, to what extent do you ee/disagree with the following statements?	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
8.3	Meetings were of an appropriate length and ensured that all key agenda items were well considered, and allowed each member the opportunity to raise any further queries or areas for discussion as required.					4	1
8.4	Committee members participated in active discussion and debate, with appropriate contribution from each member, around key agenda items.					2	3
8.5	The organisation and administration of the Audit and Risk Committee meetings was adequate to allow the committee to discharge its duties.					2	3

9 Other comments

Are there any other matters you wish to raise as part of this assessment of the performance of the Audit and Risk Committee? Do you have any other comments or suggestions for improvement? Please provide any comments, suggestions for improvement or additional information below.

The response below was provided by one committee member.

"Officer support to the work of the Audit and Risk Committee was fantastic. Prompt and timely responses by all officers to requests by the ARC. The admin support to the committee has been exceptional. As Chair over the past eight to ten years I very much want to thank all the ARC members for their energetic contributions to the work of the committee."



Item: 10.15

Transport and Accessibility Master Class - Sensible Transport

OFFICER	Belinda Rocka
CHIEF EXECUITIVE OFFICER	Anne Howard
DIVISION	Executive
ATTACHMENTS	Promotional Flyer
PURPOSE	To approve Councillor Graham Costin's attendance at the Transport and Accessibility Master Class on 22 February 2022 in Melbourne.

1. EXECUTIVE SUMMARY

The purpose of this report is to approve a request from Councillor Graham Costin to attend the Transport and Accessibility Master Class on 22 February 2022 at the Melbourne Town Hall.

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.

2. RECOMMENDATION

That Council:

- 1. Approves Councillor Graham Costin's attendance at the Transport and Accessibility Master Class on 22 February 2022, Melbourne Town Hall, at a cost of \$850 (incl GST).
- 2. Notes that Councillor Costin will cover the cost of transport and accommodation.

3. KEY INFORMATION

This Master Class ties together common transport issues and provides practical tools for Council staff and Councillors to help make informed decisions about the future of their communities. Topics include:

• Strategic transport planning: understanding the key principles

- Car parking policy and management tools
- Transport and climate change
- Electric vehicles, charging infrastructure and zero emission transport
- Disruptive transport innovation and how local government can benefit from new transport technology
- Creating a walking and cycling friendly city
- Why land use planning is critical to achieving a more sustainable transport system.

Speakers scheduled for the event include:

- 1. Dr Elliot Fishman Director, Transport Innovation, Institute for Sensible Transport
- 2. Vaughn Allan Senior Transport Analyst, Institute for Sensible Transport
- 3. Liam Davies Senior Transport Analyst, Institute for Sensible Transport.

The event information has been reviewed by the General Manager Environment and Infrastructure, Tony McGann who has confirmed the Master Class material is applicable to current/future Shire issues.

The cost of the Master Class is \$850 ('early bird' rate), inclusive of GST.

Cr Costin will cover all travel and accommodation expenses to attend the day and only seeks Council approval to pay the registration cost.

4. COMMUNITY CONSULTATION & ENGAGEMENT

Not applicable.

5. ALIGNMENT TO COUNCIL PLANS, POLICIES OR STRATEGIES

Alignment to Council Plan 2021-2025:

Theme 1 - Strong and Resilient Community

Objective 3: Key infrastructure investment supports our economy and liveability

Theme 4 – Strong Leadership and Management

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

6. CONSIDERATIONS

ENVIRONMENTAL, SOCIAL & CULTURAL, & ECONOMIC

Not applicable

LEGAL & RISK

Should the event be cancelled due to COVID-19, there will be a full refund offered.

FINANCIAL & BUDGETARY

The registration cost is \$850 ('early bird' rate). 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.

7. IMPLEMENTATION STRATEGY

COMMUNICATION

Not applicable.

TIMELINE

Council Officers have made a booking to secure registration at the 'early bird' rate of \$850 (incl GST). There is a saving of \$400 if a ticket is purchased prior to 7 December 2021. The registration can be cancelled at no cost to Council, if required.

8. OFFICER DIRECT OR INDIRECT INTEREST

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

View this email in your browser



Institute for Sensible Transport www.sensibletransport.org.au

Events and Learning



22nd February 2022 Melbourne Town Hall



Save \$400 when you register by 7 December 2021

Transport consistently rates as one of the most important issues for local communities. Local councils are responsible for managing 80% of Australia's road network. This places Council at the forefront of transport challenges and a key driver for change.

This one-day Master Class, designed especially for Councillors, tackles the big issues our cities and towns face and

provides practical tools to help make informed decisions about our future.

Learn more and register now



Group discount for 3 or more people

See event page for your coupon code. Offer ends 7 December 2021.

This will be a COVID-safe event and complies with all government regulations.

Topics



Strategic transport planning: Understanding the key principles



Car parking policy and management tools



Transport and climate change



Electric vehicles, charging infrastructure and zero emission transport



Disruptive transport innovation and how local government can benefit from new vehicle technology



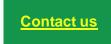
Creating a walking and cycling friendly city



Why land use planning is critical to achieving a more sustainable transport system

Learn more about the topics and speakers

If you have any further questions, send us an email or call 1300 952 759.





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10.16 Notion of Motion – Colac East Entrance Roundabout

COUNCILLOR Cr Joe McCracken

ATTACHMENTS Nil

1. COUNCILLOR COMMENT

The Colac East Roundabout is a golden opportunity to really make a statement about who Colac is as a community and what we're all about. At the moment it sits there as a wasted opportunity to make a real impact on local and visitors alike. The design is difficult to see and understand from nearly all approaches, and it is ambiguous in nature - does anybody really even know what it is?

We should be pushing to make this space more impactful - especially given it is a major entrance to Colac. Why should council, on behalf of the community, settle for anything less? Given that we are in the process of spending significant sums of council funds installing new "welcome" signs at our two major entrances, wouldn't it make sense to ensure the Colac East Entrance roundabout puts our community in a positive light? At the moment it leaves much to be desired.

It is unfortunate that there have been a number of problems resulting from the design of this roundabout. Given that Regional Roads Victoria (RRV) and Major Projects Victoria (MPV) are considering reinstating the current design, we need to take advantage of the opportunity bring about change to a roundabout before the design is reinstated. The community have had extremely limited input into this roundabout - but it's fair to say the response to the current design has not been a positive one.

Let's at least take a stand and fight for our community. We should not just bow to pressure from government departments and accept a sub-standard outcome. We cannot allow a golden opportunity to be squandered on such an important focal point for our community, and we are likely to only get one chance to make this right.

2. OFFICER COMMENT

It is understood that Regional Roads Victoria is planning to replace the dark grey gravel surface with a red scoria surface and to replant the soft landscape area with new planting. This work would have safety as well as aesthetic benefits.

Given the normal finish of this asset would simply be a plain gravel surface, Council has agreed to maintain the centre of the roundabout in order to achieve a better outcome for the community. There

is a balance to strike between constructing a more aesthetically pleasing landscape design and over reaching in terms of the resources required to maintain the area for the long term.

Officers await the completion of the now planned works.

3. NOTICE OF MOTION

That Council:

- 1. Notes the roundabout located at the eastern entrance of Colac, located on the Princes Highway/Ballarat Road intersection (known as the "Colac East Entrance Roundabout"), is an important aspect of our town entrance that has a significant exposure to locals and visitors to Colac.
- 2. Notes there has been limited community consultation with regard to the design, layout, landscaping and other factors relating to the Colac East Entrance Roundabout.
- 3. Opposes the current design of the Colac East Entrance Roundabout.
- 4. Opposes moves to reinstate the current design of the Colac East Entrance Roundabout.
- 5. Writes to Regional Roads Victoria (RRV) and Major Projects Victoria (MPV) requesting that they provide a briefing to Councillors and major stakeholders with the objective of establishing an appropriate outcome that meets community expectations.
- 6. Requests Regional Roads Victoria and Major Projects Victoria to cease progress on this project until an agreed outcome has been achieved, to the satisfaction of council.



Item: 10.17 Report of Informal Meetings of Councillors

OFFICER	Lyndal McLean		
CHIEF EXECUTIVE OFFICER	Anne Howard		
DIVISION	Executive		
ATTACHMENTS	 Informal Meeting of Councillors - Councillor Briefing - 17 November 2021 - CB 20211117 [10.17.1 - 3 pages] Informal Meeting of Councillors - Council Preparation Meeting - 24 November 2021 CM 20211124 [10.17.2 - 2 pages] Informal Meeting of Councillors Record - Lake Colac Coordinating Meeting - 20211125 [10.17.3 - 1 page] Informal Meeting of Councillors - Councillor Briefing - 1 December 2021 - CB 20211201 [10.17.4 - 2 pages] 		
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:

- Councillor Briefing
- Council Meeting Preparation
- Lake Colac Advisory Committee
- Councillor Briefing

3. KEY INFORMATION

The following Informal Meetings of Councillors have been held and are attached to this report:

- Councillor Briefing
- Council Meeting Preparation
- Lake Colac Advisory Committee
- Councillor Briefing

4. OFFICER DIRECT OR INDIRECT INTEREST

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

- 17 November 2021 24 November 2021 25 November 2021
- 1 December 2021

17 November 2021

24 November 2021

25 November 2021

1 December 2021

Attachment 10.17.1 Informal Meeting of Councillors - Councillor Briefing - 17 November 2021 - CB 20211117





Informal Meeting of Councillors Record

Councillor Briefing

Date: 17 November 2021

Time: 11:15am

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 Graham Costin, Cr Kate Hanson, Cr Stephen Hart (by videoconference), Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard, Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt, Peter Macdonald, Sharyn Ryan, Tamzin McLennan, Paula Gardiner, Belinda Rocka, Paul Carmichael, Lynne Stevenson, Lyndal McLean, Melanie Duvé, Dona Alahakoon, Doug McNeill, James Myatt, Blaithin Butler, Ian Williams, Tim Brain

External attendees:				
Nil				
Apologies:				
Nil				
Absent:				
Nil				

Meeting Commenced at: 11:24am

Declarations of Interest:

Name	Type of Disclosure	Item	Reason
Nil			

Attachment 10.17.1 Informal Meeting of Councillors - Councillor Briefing - 17 November 2021 - CB 20211117



Councillor Briefing 17 November 2021			
Time	Item	Attendees	
11:23am- 11:44am	Winifred Nance Playspace update	Tamzin McLennan Peter Macdonald Sharyn Ryan Paula Gardiner	
11:44am – 11:54am	Councillor update from Committee Meetings		
11:54am- 11:58am	Councillor and EA to CEO, Mayor and Councillors catch up	Belinda Rocka	
11:58am- 12:46pm	Break		
12:46pm- 1:20pm	Bruce Street Residential Land Sale	lan Seuren Paula Gardiner Doug McNeill	
1:20pm- 1:25pm	Break		
1:25pm- 2:19pm	2022-25 Rating Strategy - Consideration of Scenarios Modelling Cr Bell attended the meeting at 1:30pm.	Paul Carmichael Lynne Stevenson	
2:19pm- 2:26pm	Break		
2:26pm- 2:39pm	Appointments to Committees	Marlo Emmitt Lyndal McLean	
2:39pm- 2:48pm	Committees Framework for Policy review	Marlo Emmitt Lyndal McLean	
2:48pm- 3:07pm	Quarterly Performance Report July-September 2021	Melanie Duvé Dona Alahakoon	
3:07pm- 3:34pm	Cressy Restructure Overlay Planning Scheme Amendment Update Cr McCracken left the meeting at 3:09pm and did not return.	Doug McNeill	
3:34pm- 3:42pm	Forrest Wastewater Investigation Project	Doug McNeill	

Attachment 10.17.1 Informal Meeting of Councillors - Councillor Briefing - 17 November 2021 - CB 20211117



Councillor Briefing 17 November 2021			
Time	Item	Attendees	
3:42pm – 3:59pm	Key Worker Seasonal Housing - Local Law Exemption	James Myatt Doug McNeill	
3:59pm- 4:16pm	Strategic Planning Update	Doug McNeill	
4:16pm- 4:32pm	Possible Cost Sharing Burrupa Road Bridge Cr Hanson left the meeting at 4:16pm; returned at 4:18pm.	Tony McGann	
4:32pm- 4:48pm	Pre-applications Discussions - Proposed Development at 51-55 Great Ocean Road, Apollo Bay	Doug McNeill Bláithín Butler Ian Williams Tim Brain	
4:48pm- 4:53pm	COVID Support Fund	Errol Lawrence	
4:53pm	Meeting closed		

ttachment 10.17.2 Informal Meeting of Councillors - Council Preparation Meeting - 24 November 2021 CM 20211124





Informal Meeting of Councillors Record

Council Meeting Preparation

Date: 24 November 2021

Time: 1:00pm

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 (by videoconference), 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, Melanie Duvé, Dora Novak, Mark McLennan, Madeleine Bisits, Doug McNeill, Bláithín Butler, Peter Macdonald, James Myatt, Sharyn Rayner, Dani Wright

External attendees:		
Nil		
Apologies:		
Nil		
Absent:		
Nil		

Meeting Commenced at: 1:13pm

Declarations of Interest:

Name	Type of Disclosure	Item	Reason
Cr Graham Costin	General Conflict of Interest	10.1 - PP258/2016-3 – Part 465 & 475 Great Ocean Road, Apollo Bay – Amendment to Allow Restaurant Use and Liquor Licence, and to Alter the Hours of Operation and Maximum Patron Numbers	I received a disclosable gift in the form of an election campaign donation from the Apollo Bay Chamber of Commerce, which made a submission in relation to this item.

ttachment 10.17.2 Informal Meeting of Councillors - Council Preparation Meeting - 24 November 2021 CM 20211124



Council Meeting Preparation 24 November 2021			
Time	Item	Attendees	
1:13pm – 3:08pm	 Council Meeting preparation Cr Bell left the meeting at 1:40pm; returned at 1:45pm. Cr Potter attended the meeting at 2:00pm. Having declared a conflict of interest for Item 10.1 - PP258/2016-3 – Part 465 & 475 Great Ocean Road, Apollo Bay – Amendment to Allow Restaurant Use and Liquor Licence, and to Alter the Hours of Operation and Maximum Patron Numbers, Cr Costin left the meeting at 2:18pm, prior to discussion taking place on this item. The meeting closed at 3:08pm at the conclusion of discussion on this item therefore Cr Costin did not return to the meeting. 	Melanie Duvé Dora Novak Mark McLennan Madeleine Bisits Doug McNeill Bláithín Butler Peter Macdonald James Myatt Sharyn Rayner Dani Wright	
3:08pm	Meetingclosed		

Attachment 10.17.3 Informal Meeting of Councillors Record - Lake Colac Coordinating Meeting - 20211125



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: Lake Colac Coordinating Committee Meeting

Date: 25/11/2021 **Time:** 1 pm – 3.00 pm

Meeting Location: COPACC – Meeting Rooms 1 & 2

Matter/s Discussed: Meredith Park Options and Lake Colac 12 Month Priority List

(eg. Discussions with property owners and/or residents; Planning Permit Application No. xxxx re proposed development at No. xx Pascoe Street, Apollo Bay; Council Plan steering committee with Councillors and officers.)

In Attendance:

Councillors:
Councillor Margaret White
Officers:
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

Attachment 10.17.4 Informal Meeting of Councillors - Councillor Briefing - 1 December 2021 - CB 20211201





Informal Meeting of Councillors Record

Councillor Briefing

Date: 1 December 2021

Time: 12:30pm

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 Graham Costin, Cr Kate Hanson, Cr Stephen Hart (by videoconference), Cr Joe McCracken, Cr Chris Potter, Cr Margaret White, Anne Howard, Errol Lawrence, Tony McGann, Ian Seuren, Marlo Emmitt, James Myatt, Simon Clarke, Doug McNeill, Paula Gardiner, Lucy Moloney, Sean O'Keefe, Madeleine Bisits, Nicole Frampton, Ryan Supple, Tamzin McLennan, Marni Young, Simon McBeth, Frank Castles

External attendees:		
Nil		
Apologies:		
Cr Jamie Bell		
Absent:		
Nil		

Meeting Commenced at: 12:36pm

Declarations of Interest:

Name	Type of Disclosure	Item	Reason
Nil			

Attachment 10.17.4 Informal Meeting of Councillors - Councillor Briefing - 1 December 2021 - CB 20211201



Councillor Briefing 1 December 2021			
Time	Item	Attendees	
12.36pm- 1.02pm	Colac Otway Shire Community Awards	James Myatt	
1.02pm- 1.23pm	Irrewillipe Road Planning Scheme Amendment C120cola - Bakerland Development Plan	Simon Clarke Doug McNeill	
1.23pm- 1.49pm	LRCI Phase 3 Funding Proposed Projects	Doug McNeill Madeleine Bisits	
1.49pm- 2.30pm	Bruce Street Residential Development - Project Update	Doug McNeill Paula Gardiner	
2.30pm- 2.38pm	Break		
2.38pm- 3.13pm	Lavers Hill Pool Funding Agreement	James Myatt Lucy Moloney	
3.13pm- 3.39pm	Bike park location discussion	Tamzin McLennan Nicole Frampton Ryan Supple Marni Young	
3.39pm- 3.42pm	Draft Birregurra Drainage and Flood Study and Planning Scheme Amendment C116cola - Consideration of Submissions	Simon Clarke Doug McNeill Sean O'Keeffe	
3.42pm- 3.59pm	 General Business: Port of Apollo Bay- Breakwater Remediation Project Tender Award PP154/2021-1 - 45 Calvert Street Colac - Two Lot Subdivision Development Plan Overlay - Jennings Street Colac Domestic Animal Management Plan 2021-2025 - Dog exercise areas Women's bike-ride through western Victoria Work accommodation update - Apollo Bay 	Frank Castles Simon McBeth Doug McNeill	
3:59pm	Meetingclosed		

Colac Otway Shire / P: (03) 5232 9400 / www.colacotway.vic.gov.au

CLOSED SESSION

RECOMMENDATION

That pursuant to the provisions of Section 66 of the Local Government Act 2020, the meeting be closed to the public and Council move into Closed Session in order to deal with:

SUBJECT	REASON	SECTION OF ACT
Minutes of the Closed Session	This matter deals with Council	Section 3(1)(a) and
Council Meeting held on	business information, being	Section 3(1)(f)
27 October 2021	information that would prejudice the Council's position in commercial negotiations if prematurely released; and this matter deals with personal information, being information which if released would result in the unreasonable disclosure of information about any person or their personal affairs.	
Port of Apollo Bay - Tender Report	This matter deals with private commercial information, being information provided by a business, commercial or financial undertaking that if released, would unreasonably expose the business, commercial or financial undertaking to disadvantage.	Section 3 (1) (g) (ii)