



Glenelg Shire Council

Notice of Meeting and Agenda

Council Meeting Tuesday 24 January 2023

Notice is hereby given that an Council Meeting will be held in the Council Chamber, Glenelg Shire Municipal Offices, 71 Cliff Street, Portland commencing at **7:00 pm** on the above date for the purpose of transacting the business on the attached Agenda, together with such other business as the Chairperson may permit.

A handwritten signature in black ink, appearing to read 'Paul Phelan', is positioned above the printed name.

PAUL PHELAN

Chief Executive Officer

Date of Issue: Thursday 19 January 2023

Invited: Mayor, Councillor Scott Martin
Deputy Mayor, Councillor Jayden Smith
Councillor Anita Rank
Councillor Gilbert Wilson
Councillor Chrissy Hawker
Councillor Karen Stephens
Councillor Michael Carr
Chief Executive Officer, Mr Paul Phelan
Director Corporate Services, Mr David Hol
Acting Director Assets, Mr Chris Saunders
Director Community Services, Ms Melanie Bennett
Chief Information Officer, Ms Ann Kirkham

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1. PRESENT**2. OPENING PRAYER**

Lord, we ask you for your blessing upon Council, direct and prosper its deliberations to the advantage of Thy Glory, and the true welfare of the people whom we serve.

3. ACKNOWLEDGEMENT TO COUNTRY

On behalf of this Glenelg Shire Council, I respectfully acknowledge the traditional lands and waters of the Guditjmarra, Bunganditj Jardwadjali people and their respective culture heritages. I acknowledge the elders past and present here at today's gathering and through them, to all Aboriginal people.

Aboriginal and Torres Strait Islander People provide an important contribution to Australia's cultural heritage and identity. We respectfully acknowledge the Aboriginal and Torres Strait community living throughout the Glenelg Shire and the contribution they make to the Glenelg Shire's prosperity and wellbeing.

4. RECORDING OF MEETINGS

The Chief Executive Officer will enable an audio recording of the meeting conducted and the recording of that meeting may be made available to the public.

5. RECEIPT OF APOLOGIES

Nil.

6. QUESTION TIME**6.1. QUESTIONS TAKEN ON NOTICE AT PREVIOUS MEETING**

Nil.

6.2. QUESTIONS FROM THE GALLERY

***To those present in the gallery today, by attending a public meeting of the Council you are consenting to your image, voice and comments being recorded and published.*

7. DECLARATIONS OF CONFLICT OF INTEREST**Conflict of Interest**

In accordance with Section 130 (1-8) of the Local Government Act 2020, there is an obligation for Councillors and Officers to declare a conflict of interest in a matter that could come before Council.

Disclosure of Conflict of Interest

A Councillor or Officer must make full disclosure of a conflict of interest by advising the class and nature of the interest immediately before the matter is considered at the meeting. While the matter is being considered or any vote taken, the Councillor with the conflict of interest must leave the room and notify the Chairperson that he or she is doing so.

8. CONFIRMATION OF MINUTES

Recommendation

That the minutes of the Council Meeting held on Tuesday 13 December 2022, as circulated, be confirmed.

9. PRESENTATIONS

Nil.

10. DEPUTATIONS

Nil.

11. NOTICES OF MOTION

Nil.

12. PETITIONS

Nil.

13. COMMITTEE REPORTS**13.1. AUDIT AND RISK COMMITTEE MINUTES 8 DECEMBER 2022**

Director: David Hol, Director Corporate Services

Executive Summary

The purpose of this report is to enable Council to receive the Minutes of the Audit and Risk Committee Meeting held on 8 December 2022.

Recommendation

That Council receives the minutes of the Audit and Risk Committee Meeting held on 8 December 2022.

Background/Key Information:

The role of the Audit and Risk Committee is to monitor, review and advise Council on matters of accountability and internal control affecting the operations of the Council. The Audit and Risk Committee also exists to assist the Council in discharging its responsibilities for monitoring financial management and reporting, maintaining a reliable system of internal controls, compliance with the *Local Government Act 2020* and fostering the Organisation's ethical environment.

Section 54(5)(b) of the *Local Government Act 2020* and the Audit and Risk Committee Charter requires that the Committee's minutes be presented to Council to ensure that an effective communication mechanism between the Committee and Council occurs and to ensure that the Council is fully informed on the Committee's activities.

The Audit and Risk Committee Meeting held on 8 December 2022 considered the following items:

Item No.	Management Reports (Title)
1.	Election of Audit and Risk Committee Chairperson
2.	Internal Audit Update (AFS & Associates)
3.	Internal Audit – Social Media and Communications Strategy and Framework
4.	Internal Audit – Procurement (below tender) and Accounts Payable
5.	Final Management Letter 2021/2022
6.	Compliance with Council's Investment Policy 2021/2022
7.	Annual update on Defined Benefits Superannuation vested benefit position
8.	VicRoads Information Protection Agreement Audit 2021/2022
9	Roads to Recovery 2021/2022
10.	Review key policies – Receive a Review Report on Gifts, Benefits and Hospitality (Councillors) and (Employees)
11.	Glenelg Shire Council Annual Report 2021-2022
12.	Internal Audit Cyber Crime Yr 1 Action Plan – December 2022
13.	Cyber Security Incident Report

14.	Audit and Risk Committee Meeting Schedule for 2023
Item No.	Regular Reports (Title)
1.	Glenelg Shire Council Financial Report October 2022
2.	Audit and Risk Register Review
3.	OHS Quarterly Report 1 July to 30 September 2022
4.	Risk Management Quarterly Report 1 July to 30 September 2022
5.	Workcover & Injury Management Quarterly Report 1 July to 30 September 2022
6.	CEO & EA Expenditure - Credit Card and Reimbursements
7.	Councillors Quarterly Expenditure Report
8.	Annual Work Plan Year Ending 30 June 2023 - Standing Item
Item No.	Confidential Reports (Title)
1.	Council Litigation Matters
Item No.	Other Business (Title)
1.	(Verbal update) Attestation Compliance Report
2.	Budget Update

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

Audit and Risk Committee Charter 2021 - 2023.

b. Legislative, Legal and Risk Management Considerations

Under section 53 of the "Act" Council is required to establish an Audit and Risk Committee and operate this committee under specific guidelines.

The Audit and Risk Committee's role also links to and supports a range of Glenelg Shire policies, procedures and guidelines including the Fraud Prevention Policy; Investment Policy; Procurement Policy; Councillor Code of Conduct and Staff Code of Conduct.

A key element of the internal audit function is to assist with the mitigation of risk.

c. Consultation and/or communication processes implemented or proposed

The minutes of each meeting are provided to the Chairperson of the Audit and Risk Committee to review, prior to being presented to the Executive Team, before Council endorsement. The minutes are also provided to Audit and Risk Committee members for endorsement at the next available meeting.

d. Financial Implications and Collaboration

The 2022-2023 Council budget contains a provision to support the Audit and Risk Committee and to undertake an internal audit program during the financial year. Management and staff time to support the Committee and internal audit projects is an indirect cost.

e. Governance Principles

Local, Regional, state and national plans and policies are to be taken into account in strategic planning and decision making.

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

Collaboration with other Councils (section 109 *Local Government 2020*) and Governments and statutory bodies is to be sought along with Financial and Resource Implications and Opportunities.

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.

Innovation and continuous improvement is to be pursued.

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Public Audit and Risk Committee Minutes 8 December 2022 [**13.1.1** - 64 pages]



Glenelg Shire Council
Minutes of the Audit and Risk Committee held on
Thursday 8 December 2022 at 2:00 pm at
Brewster Walsh & Associates
Gawler Street, Portland

AUDIT AND RISK COMMITTEE MINUTES	THURSDAY 8 DECEMBER 2022
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7.4. Internal Audit - Procurement (below tender) and Accounts Payable	11
7.5. Final Management Letter 2021/2022	15
7.6. Compliance with Council's Investment Policy 2021/2022	17
7.7. Annual update on defined benefits superannuation vested benefit position	20
7.8. VicRoads Information Protection Agreement Audit 2021/2022	23
7.9. Roads to Recovery 2021/2022	26
7.10. Review key policies - Receive a Review Report on Gifts, Benefits and Hospitality (Councillors) and (Employees)	28
7.11. Glenelg Shire Council Annual Report 2021 - 2022	31
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8.4. Risk Management Quarterly Report 1 July to 30 September	53
8.5. Workcover & Injury Management Quarterly Report 1 July to 30 September 2022	55
8.6. CEO & EA Expenditure - Credit Card and Reimbursements	57
8.7. Councillors Quarterly Expenditure Report	59
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9.1. Council Litigation Matters	Error! Bookmark not defined.
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1. INVITED

Mr Philip Saunders (Independent Member), Ms Bonnie Holmes (Independent Member), Mr David Stafford (Independent Member), Cr Scott Martin (Mayor), Cr Karen Stephens, Cr Michael Carr, Mr Paul Phelan (Acting Chief Executive Officer), Mr David Hol (Director Corporate Services), Ms Lauren Easson (Chief Finance Officer), Ms Kylie Walford (Corporate Governance Coordinator) and Rachael Currie (Executive Assistant Corporate Services).

Mr Brad Eads from AFS Auditors also attended in person.

2. ACKNOWLEDGEMENT TO COUNTRY

The Chair Members Saunders read the Acknowledgement to Country.

3. RECEIPT OF APOLOGIES

Ms Teresa Paris (Independent member) and Greg Burgoyne (Chief Executive Officer).

4. CONFIRMATION OF MINUTES**Recommendation**

That the minutes of the Audit and Risk Committee held on Thursday 15 September 2022, as circulated, be confirmed.

MOTION**MOVED Member Bonnie Holmes**

That the minutes of the Audit and Risk Committee held on Thursday 15 September 2022, as circulated, be confirmed.

SECONDED Cr Stephens**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders, Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

5. DECLARATIONS OF CONFLICT OF INTEREST

Mayor Cr Martin declared a Conflict of Interest in item 7.10 Review key policies - Receive a review report on Gifts, Benefits and Hospitality (Councillors) and (Employees).

6. BUSINESS ARISING FROM THE PREVIOUS MEETING

Nil.

7. MANAGEMENT REPORTS**7.1. ELECTION OF AUDIT AND RISK COMMITTEE CHAIRPERSON**

Author: Kylie Walford, Corporate Governance Coordinator
Director: David Hol, Director Corporate Services

Executive Summary

This report seeks the appointment of an Audit and Risk Committee Chairperson for the forthcoming 12 months.

Section 53(4) of the *Local Government Act 2020* states that the Chairperson of an Audit and Risk Committee must not be a Councillor of the Council.

The Temporary Chairperson (Acting Chief Executive Officer) calls for nominations for the position of Audit and Risk Committee Chairperson.

Recommendation

That Independent Member _____ be nominated for the position of Chairperson.

MOTION**MOVED Cr Carr**

That Independent Member David Stafford be nominated for the position of Chairperson.

SECONDED Cr Stephens**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Member David Stafford was invited by the Temporary Chairperson (Acting Chief Executive Officer) to assume the chair.

MOTION**MOVED Cr Stephen**

The Committee thank the outgoing Chair Independent Member Mr Phil Saunders.

SECONDED Cr Carr

CARRIED

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

The Glenelg Shire Council's Audit and Risk Committee Charter states that the Chairperson will be elected on an annual basis.

The adopted Audit and Risk Committee Meeting Plan states that the election of Audit and Risk Committee Chairperson will be conducted at meeting 2 (December). In accordance with the Audit and Risk Committee Charter the following responsibilities apply for the Chairperson:

- The Chairperson shall have a casting vote on occasions where there are an equal number of votes on a matter.
- The Chairperson must review all minutes of the Audit and Risk Committee.
- In accordance with section 54(6b) of the Act, the Chairperson may require any report and annual assessments of the Audit and Risk Committee to be listed on the agenda for the next Council Meeting.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Section 53(4) of the *Local Government Act 2020* states that the Chairperson of an Audit and Risk Committee must not be a Councillor of the Council.

c. Consultation and/or communication processes implemented or proposed

Not Applicable.

d. Financial Implications and Collaboration

Remuneration for Audit and Risk Committee Independent Members, including the Chairperson are accounted for in the 2022-2023 Annual Budget.

e. Governance Principles

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

Attachment List

Nil

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

Chairperson Member David Stafford assumed the chair.

7.2. INTERNAL AUDIT UPDATE (AFS & ASSOCIATES)

- Industry Update
- Strategic Internal Audit Program Status Update

Mr Brad Eads from AFS presented the Industry Update and the Strategic Internal Audit Program Status Update.

Attachment List

1. AFS Industry Update 08.12.22 [7.2.1 - 8 pages]
2. Strategic Internal Audit Program Status Update [7.2.2 - 3 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

7.3. INTERNAL AUDIT - SOCIAL MEDIA AND COMMUNICATIONS STRATEGY AND FRAMEWORK

Author: Kylie Walford, Corporate Governance Coordinator
Director: David Hol, Director Corporate Services

Executive Summary

This report is to present to the Audit and Risk Committee the Internal Audit Report and recommendations in relation to the review of Council's Social Media and Communications Strategy Framework.

Recommendation

That the Audit and Risk Committee receives the Internal Audit Report – Social Media and Communications Strategy Framework.

MOTION**MOVED Mayor Cr Martin**

That the Audit and Risk Committee receives the Internal Audit Report – Social Media and Communications Strategy Framework.

SECONDED Cr Stephens**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

The Internal Audit for the review of Social Media and Communications Strategy Framework has been undertaken in accordance with year two of the Strategic Internal Audit Plan 2021 – 2024.

Council's Internal Auditors AFS & Associates were engaged to complete the Audit.

The objective of the Audit was to assess the adequacy of the controls and processes around Social Media Management, including the effectiveness of Glenelg Shire Council's Social Media and Communications Strategy and Framework.

The scope of the review was as follows:

1. Confirm the processes and framework in place to govern effective social media and communications across GSC to support clarity and consistency to external and internal stakeholders.
2. Assess the processes and controls in place to mitigate communications risks associated with:

- reputation;
 - compliance with privacy, legal and governance obligations;
 - inconsistent and/or miscommunication; and
 - staff and Councillor use of personal social media or communications.
3. Review internal processes and systems in place to manage social media and communications, including budget considerations.

In the final report, under detailed findings, there are six categories, containing a total of six recommendations and two opportunities. Of the six recommendations, three were assessed as moderate risks and three were assessed as low risks.

All of the six recommendations were 'agreed' to by management. Relevant management comments were made and responsibilities and target completion dates assigned.

The full report is attached to this Agenda.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

In accordance with Section 53 of the *Local Government Act 2020* a Council must establish an Audit and Risk Committee.

In accordance with Section 54 of *the Local Government Act 2020* the Audit and Risk Committee must approve an Audit and Risk Committee Charter. The Audit and Risk Committee Charter specifies the functions and responsibilities of the Audit and Risk Committee including overseeing internal and external audit functions.

Planned Internal Audits assist with adopting effective internal controls to mitigate risks.

c. Consultation and/or communication processes implemented or proposed

Communication was undertaken with key personnel assigned to this Internal Audit and management comments have been incorporated into the audit document.

This report has been reviewed by Council's Executive Team prior to being presented to the Audit and Risk Committee.

d. Financial Implications and Collaboration

The Internal Audit Program is incorporated into the 2021/2022 Council Budget.

It is anticipated that the recommendations accepted will be implemented within current operational budgets.

e. Governance Principles

Local, Regional, state and national plans and policies are to be taken into account in strategic planning and decision making.

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

Collaboration with other Councils (section 109 *Local Government 2020*) and Governments and statutory bodies is to be sought along with Financial and Resource Implications and Opportunities.

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 improvement is to be pursued.

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Social Media and Communications Strategy and Framework FINAL [7.3.1 - 20 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

7.4. INTERNAL AUDIT - PROCUREMENT (BELOW TENDER) AND ACCOUNTS PAYABLE

Author: Kylie Walford, Corporate Governance Coordinator
Director: David Hol, Director Corporate Services

Executive Summary

This report is to present to the Audit and Risk Committee the Internal Audit Report and recommendations in relation to the review of Council's Procurement (below tender) and Accounts Payable.

Recommendation

That the Audit and Risk Committee receives the Internal Audit Report – Procurement (below tender) and Accounts Payable.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the Internal Audit Report – Procurement (below tender) and Accounts Payable.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

QUESTION ON NOTICE: Acting CEO Paul Phelan asked about the minimum scope of Audit - rationale of the 2K threshold could be this be clarified.

Background/Key Information:

The Internal Audit for the review of Procurement (below tender) and Accounts Payable has been undertaken in accordance with year two of the Strategic Internal Audit Plan 2021 – 2024.

Council's Internal Auditors AFS & Associates were engaged to complete the Audit.

The objective of the Audit was to review the adequacy and efficiency of controls, processes and frameworks relating to procurement (below tender) and accounts payable.

The review examined the procurement process for procurements less than Council's established threshold of \$200,000 (including goods and services) for requiring a public tender process.

The scope of the review was as follows:

1. Confirmed whether an adequate framework exists to support efficiency and promote value for money in procurement below tender threshold including:
 - spend thresholds and associated procedures;
 - application of internal controls;
 - reference to the Delegations of Authority;
 - reference to the Code of Conduct;
 - governance and oversight arrangements;
 - identification of high risk procurements below tender thresholds; and
 - controls to support establishing vendor supplier panels.
2. Evaluated the process, delegations and approval over non-tender procurements.
3. Evaluated the IT and procurement systems in place to support procurement, including:
 - electronic delegations and approval
 - seeking and obtaining appropriate quotes
 - issuing purchase orders
 - retaining records to support transparency and probity.
4. Confirmed the adequate and appropriate (expected) internal controls exist over accounts payable.
5. Assessed the effective use of monitoring and oversight of procurement (below tender) and accounts payable, including identification of trends or risk indicators requiring further investigation.

In the final report, under detailed findings, there are six categories, containing a total of six recommendations and two opportunities. Of the six recommendations, one was assessed as a high risk, one was assessed as a moderate risk and four were assessed as low risks.

All of the six recommendations were 'agreed' to by management. Relevant management comments were made and responsibilities and target completion dates assigned.

The full report is attached to this Agenda.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

In accordance with Section 53 of the *Local Government Act 2020* a Council must establish an Audit and Risk Committee.

In accordance with Section 54 of *the Local Government Act 2020* the Audit and Risk Committee must approve an Audit and Risk Committee Charter. The Audit and Risk Committee Charter specifies the functions and responsibilities of the Audit and Risk Committee including overseeing internal and external audit functions.

Planned Internal Audits assist with adopting effective internal controls to mitigate risks.

c. Consultation and/or communication processes implemented or proposed

Communication was undertaken with key personnel assigned to this Internal Audit and management comments have been incorporated into the audit document.

This report has been reviewed by Council's Executive Team prior to being presented to the Audit and Risk Committee.

d. Financial Implications and Collaboration

The Internal Audit Program is incorporated into the 2021/2022 Council Budget.

It is anticipated that the recommendations accepted will be implemented within current operational budgets.

e. Governance Principles

Local, Regional, state and national plans and policies are to be taken into account in strategic planning and decision making.

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

Collaboration with other Councils (section 109 *Local Government 2020*) and Governments and statutory bodies is to be sought along with Financial and Resource Implications and Opportunities.

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 improvement is to be pursued.

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Procurement (below tender) and Accounts Payable FINAL [7.4.1 - 22 pages]

7.5. FINAL MANAGEMENT LETTER 2021/2022

Author: Lauren Easson, Chief Finance Officer
Director: David Hol, Director Corporate Services

Executive Summary

The purpose of this Report is to enable the Audit and Risk Committee to review matters arising from the financial audit of the Glenelg Shire Council for the financial year ended 30 June 2022. The objective of the audit is for the Auditor General to express an opinion on the financial report.

Recommendation

That the Audit and Risk Committee receives the Final Management Letter for the Financial Report 30 June 2022.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the Final Management Letter for the Financial Report 30 June 2022.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

The Final Management Letter includes a 'Summary of audit findings' and agreed implementation dates (page 8 and 9 of the attachment). There were two new findings from the 2021/2022 audit (one low risk and one moderate risk). Two findings from previous audits were resolved and two are progressing or largely resolved.

The attachment identifies each finding and the response from management.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

This management letter report is provided by Council's external auditors and is prepared in line with the requirements set out in the *Local Government Act 2020* Division 3, Section 98 where Council is required to prepare an annual report with audited performance statement and financial statements.

c. Consultation and/or communication processes implemented or proposed

Report to be prepared for the Audit and Risk Committee meeting.

d. Financial Implications and Collaboration

The resourcing of year-end audit is provided for in the adopted budget.

e. Governance Principles

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Final Management Letter 2022 [7.5.1 - 10 pages]

MOTION**MOVED Cr Stephens**

That a note of thanks be sent to RSD Mr Phil Delahuntly for his time served attending the Glenelg Shire Council Audit & Risk Committee.

SECONDED Cr Carr**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

7.6. COMPLIANCE WITH COUNCIL'S INVESTMENT POLICY 2021/2022

Author: Lauren Easson, Chief Finance Officer
Director: David Hol, Director Corporate Services

Executive Summary

The purpose of this report is to enable the Audit and Risk Committee to note the investment performance for the 2021/2022 financial year.

Recommendation

That the Audit and Risk Committee receives the report on Council's Investment Policy Performance for 2021/2022.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the report on Council's Investment Policy Performance for 2021/2022.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

ACTION: That term deposit options with other institutions be explored.

Background/Key Information:

Council's adopted Investment Policy states that "where practical, funds in excess of those required for the day to day operations of the Glenelg Shire must be invested for a short-term period (less than one year) with an Australian Prudential Regulatory Authority (APRA) Authorised Deposit Taking Institution (ADI)".

The Policy allows for investments within acceptable risk parameters that balance the generation of interest income with the protection of invested funds. Investments are only permitted with ADI's that have a net worth in excess of \$100 million.

Investment officers must endeavour to ensure that no more than 25% of the total investment portfolio is invested with one financial institution. Investments with the four major banks in Australia, CBA, ANZ, NAB and Westpac are exempt from this clause. The total investment portfolio with any of these four institutions can be up to 100%. In 2021/22 Council had all surplus funds placed in a NAB On Call account to ensure that cash reserves were available for operational and capital commitments, which often differ from timing identified in cash flow projections due to a number of reasons.

From July 2021 to June 2022 Glenelg Shire's investment portfolio generated \$46K in interest, compared to the adopted budget of \$100K. There was a reduction in the Reserve Bank of Australia cash rate, from 0.10% in July 2021 to 0.85% in June 2022. For the 2021/2022 financial year, the weighted average investment rate of return on Council's investments was 0.07% (2020/21 0.40%).

Council also utilise an arrangement in place with Council's banking provider, NAB, to offset current loan amounts with surplus cash. For the 2021/2022 financial year there was \$1.8M in cash reserves offset against outstanding loan amounts. Interest expense on a loan of this amount equates to savings of approximately \$58k.

The Investment Policy is reviewed every four years and is reflective of Council's needs while continuing to adhere to legislative requirements. The last review occurred in February 2022 and is attached for your reference.

Council's Investment Policy reflects a prudent conservative approach to the management and investment of Council's surplus cash funds.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

The review of investment performance is prepared annually for the Audit and Risk Committee.

Further, in accordance with Division 4, Section 101 of the Local Government Act 2020, Council is required to consider the following Financial Management Principles:

1. Revenue, expenses, assets, liabilities, investments and financial transactions must be managed in accordance with a Council's financial policies and strategic plans;
2. Financial risks must be monitored and managed prudently having regard to economic circumstances.

c. Consultation and/or communication processes implemented or proposed

Report to be prepared for the Audit and Risk Committee Meeting.

d. Financial Implications and Collaboration

Income achieved on investments for 2021/2022 was \$46K, which was \$54K lower than adopted budget.

Governance Principles

The ongoing financial viability of the Council is to be ensured.

Attachment List

- 1. ECM 2096325 v4 COUNCIL POLICY Investment Policy [7.6.1 - 7 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

7.7. ANNUAL UPDATE ON DEFINED BENEFITS SUPERANNUATION VESTED BENEFIT POSITION

Author: Lauren Easson, Chief Finance Officer
Director: David Hol, Director Corporate Services

Executive Summary

The purpose of this report is to enable the Audit and Risk Committee to monitor the vested benefit position of the Defined Benefits Scheme.

Recommendation

That the Audit and Risk Committee receives that the VBI of 102.2% as at 30 June 2022 satisfies APRA's Superannuation Prudential Standard 160 (SPS 160), and at this stage no action is required.

MOTION**MOVED Cr Stephens**

That the Audit and Risk Committee receives that the VBI of 102.2% as at 30 June 2022 satisfies APRA's Superannuation Prudential Standard 160 (SPS 160), and at this stage no action is required.

SECONDED Cr Carr**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

Council has previously been subject to four "top-up calls" for the defined benefits fund. These four calls had an aggregate value of \$8.206 million and occurred in 1997, 2002, 2010 and 2012.

An internal audit completed in February 2017 reviewing the potential for further Council "top-up" contributions to the Local Authorities Superannuation Fund (Vision Super) Defined Benefits scheme recommended the preparation of a brief quarterly report to Council's Audit and Risk Committee conveying the latest advice from Vision Super regarding the LASF DB Vested Benefit Index.

Details of this advice for consideration are as follows:

Vested Benefit Index (VBI)

Defined Benefit plans are required by law to have an actuarial investigation at least once every three years. Because LASF DB provides lifetime pensions, a mini review is held every in-between year. The vested benefit position of the sub-plan is reviewed on a quarterly basis. Details of the VBIs are as follows.

VESTED BENEFIT INDEX (VBI)				
Year	QTR 1 - September (estimated)	QTR 2 - December (estimated)	QTR 3 - March (estimated)	QTR 4 - June (actual)
2012/13	96.6%	97.9%	99.4%	100.7%
2013/14	103.1%	105.1%	104.6%	103.4%
2014/15	102.6%	103.1%	108.5%	105.8%
2015/16	104.0%	104.4%	102.4%	102.0%
2016/17	103.7%	105.4%	106.6%	103.1%
2017/18	103.8%	106.4%	106.2%	106.0%
2018/19	106.9%	101.9%	105.4%	107.1%
2019/20	107.3%	107.7%	102.1%	104.6%
2020/21	104.5%	109.6%	111.5%	109.8%
2021/22	109.9%	111.2%	108.5%	102.2%

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Under the superannuation prudential standards, VBIs must generally be kept above a fund’s nominated shortfall threshold, currently 97%.

When an actuarial review/investigation is in progress, the fund’s VBI must be at least 100%. In the event that the VBI falls below the shortfall threshold, the Fund’s Trustee is required under the superannuation prudential standards (SPS 160) to formulate a restoration plan to restore the VBI to 100% within three years.

Vision Super will continue to monitor the sub-plan’s VBI at least quarterly and on a daily basis during periods of high market volatility.

Also, in accordance with Division 4, Section 101 of the Local Government Act 2020, Council is required to consider the following Financial Management Principles:

Revenue, expenses, assets, liabilities, investments and financial transactions must be managed in accordance with a Council’s financial policies and strategic plans; and

Financial risks must be monitored and managed prudently having regard to economic circumstances.

c. Consultation and/or communication processes implemented or proposed

Report to be prepared for the Audit and Risk Committee meeting.

d. Financial Implications and Collaboration

The resourcing of year-end audit is provided for in the adopted budget.

e. Governance Principles

The ongoing financial viability of the Council is to be ensured.

Attachment List

Nil

7.8. VICROADS INFORMATION PROTECTION AGREEMENT AUDIT 2021/2022

Author: Kylie Walford, Corporate Governance Coordinator
Director: David Hol, Director Corporate Services

Executive Summary

This paper is to brief the Audit and Risk Committee on the results of the annual VicRoads Information Protection Agreement Audit 2021/2022.

Recommendation

That the Audit and Risk Committee receives the VicRoads Information Protection Agreement Audit 2021/2022.

MOTION**MOVED Member Bonnie Holmes**

That the Audit and Risk Committee receives the VicRoads Information Protection Agreement Audit 2021/2022.

SECONDED Member Philip Saunders**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

The Glenelg Shire Council has an Information Protection Agreement (IPA) with VicRoads for the provision of vehicle registration information from VicRoads. The current IPA is for the period 1 April 2019 to 30 June 2024.

Council requires the VicRoads information for the prevention, detection, investigation and prosecution of offences and enforcement of penalties in relation to specified purposes.

The IPA contains provisions where Council must protect the privacy and security of the information and only use the information for the permitted purposes. It also includes provisions for breaches of information.

To provide assurance to VicRoads that Council is complying with the IPA obligations, an annual audit is required to be completed by 31 August each year. The Audit Report must fully and accurately respond to the Audit Schedule. The Audit Schedule supplied by VicRoads each year varies based on a risk assessment, in VicRoads' discretion.

The Audit Schedule for 2021/2022 included the following areas:

- Privacy and Data Security;
- Records and Change Management;
- Breach Management;
- Working from Home; and
- Subcontractors

Ten questions were responded to relating to the controls in place. Each question was rated between 0 and 3. Zero being no effective controls and 3 being controls are mature, implemented and effective and on par with best practice.

- Six controls were assessed with a rating of 3.
 - *One less than previous year.*
- Four controls were assessed with a rating of 2
 - *One more than previous year.*
- Nil controls were assessed with a rating of 1
 - *Same as previous year.*

There are 5 rectification items outlined in this year's Annual Audit. These rectification items will be addressed following the recruitment of the Local Laws Coordinator (Organisational Representative):

- Rectification Item 1 – Departmental Procedure to be developed outlining the process for the VicRoads Information Protection Agreement.
- Rectification Item 2 – The Organisational Representative to update the nominated user register and eLearning to be completed by any new nominated persons.
- Rectification Item 3 – The Organisational Representative to forward the current nominated user register to VicRoads.
- Rectification Item 4 – The Organisational Representative to carry out a bi-annual spot check by calendar appointment.
- Rectification Item 5 – All relevant records to be kept in Council's document management systems to assist with the annual audit.

A full copy of the Audit Report is attached to this report.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Road Safety Act 1986 Part 7B:

- Section 90K(g) allows VicRoads to use or disclose relevant information to a law enforcement agency.
- Section 90N requires that VicRoads must not release or disclose the relevant information a body in 90K(g) unless an Information Protection Agreement is entered into.

Privacy and Data Protection Act 2014

c. Consultation and/or communication processes implemented or proposed

Consultation occurred with the Local Laws Unit

d. Financial Implications and Collaboration

Not Applicable.

e. Governance Principles

Council decisions are to be made and actions taken in accordance with the relevant law.

Attachment List

1. Completed signed Vic Roads IPA Annual Audit 2021 2022 Level 1 [7.8.1 - 10 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

7.9. ROADS TO RECOVERY 2021/2022

Author: Lauren Easson, Chief Finance Officer
Director: David Hol, Director Corporate Services

Executive Summary

The Department of Infrastructure, Regional Development and Cities is the funding body for Council's 5 year Roads to Recovery scheme. From 2019/2020 to 2023/2024 Council will receive \$11.368M for roads and associated infrastructure projects under this scheme.

Recommendation

That the audit outcomes for the Roads to Recovery Program Funding as at 30 June 2022 be received.

MOTION

MOVED Member David Stafford

That the audit outcomes for the Roads to Recovery Program Funding as at 30 June 2022 be received.

SECONDED Member Philip Saunders

CARRIED

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

It is a funding requirement that at the end of each financial year that Council's income and expenditure under the R2R scheme is audited by Councils' Auditor, who is the Victorian Auditor General (VAGO). VAGO's Glenelg Audit Contractor is RSD – Phil Delahunty is the responsible Audit Partner. For the period 2021/2022 Council received \$2.22M for roads and associated infrastructure projects under this agreement. Expenditure incurred on R2R projects amounted to \$1.98M in 2021/22. There is a carry forward amount of \$479k which is an accumulation of funds not spent over the last 3 years of the program.

The audit has been completed by RSD and all required documents have been submitted to VAGO. VAGO are yet to distribute the Audit Opinion for the 2021/22 financial year and recent conversations with VAGO suggest it will be received in December. Council officers envisage no issue with receiving this document, and the delay can be attributed to VAGO and the resource challenges experienced with finalizing year end audits for the Local Government Sector.

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

The Audit of the R2R expenditure is required in accordance with the funding agreement and is legislated in accordance with the National Land Transport Act 2014.

c. Consultation and/or communication processes implemented or proposed

Report to be prepared for the Audit and Risk Committee meeting.

d. Financial Implications and Collaboration

The resourcing of Roads to Recovery year-end audit is provided for in the adopted budget.

e. Governance Principles

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Glenelg Shire Council - 2021-22 Standard Annual Report Signed CEO [7.9.1 - 6 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

7.10. REVIEW KEY POLICIES - RECEIVE A REVIEW REPORT ON GIFTS,
BENEFITS AND HOSPITALITY (COUNCILLORS) AND (EMPLOYEES)

Author: Kylie Walford, Corporate Governance Coordinator
Director: David Hol, Director Corporate Services

Executive Summary

As outlined in the Audit and Risk Committee Annual Work Plan 2022-2023, under Compliance and Performance Management, the Audit and Risk Committee is to receive a report annually on 'Review Report on Gifts, Benefits and Hospitality (Councillors) and (Employees).'

Recommendation

That the Audit and Risk Committee receives the report on 'Review report on Gifts, Benefits and Hospitality (Councillors) and (Employees), as required in the Audit and Risk Committee Annual Work Plan.

Mayor Cr Martin re declared a Conflict in item 7.10 and left the meeting at 2:56 pm.

MOTION

MOVED Member Philip Saunders

That the Audit and Risk Committee receives the report on 'Review report on Gifts, Benefits and Hospitality (Councillors) and (Employees), as required in the Audit and Risk Committee Annual Work Plan.

SECONDED Member Bonnie Holmes

CARRIED

FOR: Cr Carr, Cr Stephens, Member Philip Saunders, Member David Stafford
and Member Bonnie Holmes

AGAINST: Nil

Mayor Cr Martin returned to the meeting at 2:58 pm.

Background/Key Information:

The Council, through its policies, processes and Audit and Risk Committee, ensures that gifts, benefits and hospitality risks are appropriately assessed and managed, ensuring that all gifts, benefits and hospitality are declared, reported and disclosed in a public register.

By having the appropriate policies and processes in place helps minimise corruption risks relating to gifts, benefits and hospitality.

Under Section 138 of the *Local Government Act 2020* a Council must have a Councillor Gift Policy.

7.10 Review key policies - Receive a Review Report on Gifts, Benefits and Hospitality
(Councillors) and (Employees)

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'Council Policy Gifts, Benefits and Hospitality Policy – Councillors' was adopted by Council on 23 February 2021 and is due for review in February 2025, or as required by any legislative or Council changes.

This Policy is available on Council's website.

Section 49 of the *Local Government Act 2020* requires the CEO to develop and implement a Code of Conduct for members of Council staff.

The Code of Conduct must include a gift policy that contains a requirement for members of Council staff to disclose all gifts above a specified level, and provisions providing for disclosed gifts to be recorded in a gift register.

The 'Organisational Policy Gifts, Benefits and Hospitality Employees' was adopted by the Executive Team on 8 June 2021 and is due for review in June 2025, or as required by any legislative or council changes.

Both policies are aligned with the principles and standards set out in the Staff and Councillor Code of Conduct.

Both the Councillor Code of Conduct and Staff Code of Conduct include a section on Gifts, Benefits and Hospitality, along with Fraudulent and Corrupt Conduct.

Councillors are required to sign the Code of Conduct upon election.

Staff are required to sign the Code of Conduct upon the core induction onboarding process. Existing employees re-sign the Code of Conduct in situations where changes are made in the Code of Conduct. Training is also provided as part of the core induction onboarding process and refresher programs are undertaken annually for existing staff.

Details of gifts, benefits and hospitality offered, accepted or declined for Councillors and Employees are recorded and maintained in the Glenelg Shire's Gifts, Benefits and Hospitality Register, which is made publicly available on Council's website on a quarterly basis as part of the 'Documents to be made available for public inspection'.

A quarterly report is provided to the Executive Team which includes a register of gifts benefits and hospitality for Councillors and Employees. This reporting process allows for the Executive Team to assess any trends or areas of concern, which would then be reported to the Audit and Risk Committee via the Attestation Compliance Report.

There are nil non-compliance matters to report for the period 1 July 2021 to 30 June 2022 and including first quarter 1 July 2022 to 31 October 2022.

Based on the above, there is a strong awareness of Councillor and Staff obligations in relation to gifts, benefits and hospitality.

A copy of the following Policies are attached to this report:

- Council Policy Gifts Benefits and Hospitality - Councillors
- Organisational Policy Gifts Benefits and Hospitality – Employees

7.10 Review key policies - Receive a Review Report on Gifts, Benefits and Hospitality (Councillors) and (Employees)

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a. Council Plan and Policy Linkage

Your Voice, Our Shared Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Section 49 (2)(a)(b) of the *Local Government Act 2020* – Code of Conduct for members of Council staff.

Section 137 (Anonymous gift not to be accepted) and Section 138 (Councillor Gift Policy) of the *Local Government Act 2020*.

c. Consultation and/or communication processes implemented or proposed

This report is undertaken on an annual basis for the Audit and Risk Committee.

d. Financial Implications and Collaboration

Not Applicable.

e. Governance Principles

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Council Policy Gifts Benefits Hospitality Councillors [7.10.1 - 9 pages]
2. Organisational Policy Gifts Benefits Hospitality Employees [7.10.2 - 7 pages]
3. COUNCILLOR Gift Register for the period 1 July 2021 to 30 June 2022 [7.10.3 - 2 pages]
4. EMPLOYEE Gift Register from 1 July 2021 to 30 June 2022 [7.10.4 - 2 pages]

7.11. GLENELG SHIRE COUNCIL ANNUAL REPORT 2021 - 2022

Author: Jane Ruge, Community Wellbeing Manager
Director: Melanie Bennett, Acting Director Community Services

Executive Summary

The purpose of this report is to present the final version of the Glenelg Shire Council Annual Report for 2021-2022, including the financial report and statements, to the Audit and Risk Committee.

Recommendation

That the Audit and Risk Committee receives the final version of the Glenelg Shire Council Annual Report for 2021-2022, including the financial report and statements.

Ms Ann Kirkham, Chief Information Officer joined the meeting in person at 2.59pm.

MOTION**MOVED Member Bonnie Holmes**

That the Audit and Risk Committee receives the final version of the Glenelg Shire Council Annual Report for 2021-2022, including the financial report and statements.

SECONDED Member Philip Saunders**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

The 2021-2022 Annual Report is a key corporate document of Glenelg Shire Council. It contains Council's Financial Statements, Governance Report, Performance Statement, capital and major works and the progress and achievements delivered under the Council Plan during the financial year - 1 July 2021 to the 30 June 2022.

Council adopted the Glenelg Shire Council 2021-2022 Annual Report at its Council meeting on 25 October 2022.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

The Glenelg Shire Council Annual Report 2021-2022 has been prepared in accordance with the relevant sections of the *Local Government Act 1989* and the *Local Government Act 2020*.

c. Consultation and/or communication processes implemented or proposed

The Annual Report will be distributed to a variety of public and private sector organisations and individuals who have requested that their names be placed on the mailing list. The mailing list is reviewed each year.

The Annual Report will also be available on the Council's website and all Customer Service Centres in the Shire.

d. Financial Implications and Collaboration

The direct cost of the design and printing of the Annual Report is forecast annually within the Council Budget.

e. Governance Principles

The transparency of Council decisions, actions and information is to be ensured.

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 ongoing financial viability of the Council is to be ensured.

Attachment List

1. Glenelg Shire Council Annual Financial Report 2022 [7.11.1 - 72 pages]
2. Glenelg Shire Council Annual Report 2021 2022 [7.11.2 - 63 pages]

7.12. INTERNAL AUDIT CYBER CRIME YR 1 ACTION PLAN - DECEMBER 2022

Author: Ann Kirkham, Chief Information Officer - Glenelg Futures
Director: Ann Kirkham, Chief Information Officer - Glenelg Futures

Executive Summary

The purpose of this report is to brief the Audit and Risk Committee on the current status of the cyber risks identified in the internal audit review of Council's Cyber Security.

Recommendation

That the Audit and Risk Committee receives the Status Report of the cyber risks identified in the internal audit review of Council's Cyber Security.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the Status Report of the cyber risks identified in the internal audit review of Council's Cyber Security.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

ACTION: Provide a timeline of scheduling for PEN test to March Audit and Risk Committee meeting.

Background/Key Information

The Internal Audit for the review of Council's Cyber Security was undertaken in accordance with year one of the Strategic Internal Audit Plan 2021 - 2024.

Crowe were engaged to conduct the following Cyber Crime assessments as a member of the Council's panel for provision of internal audit services.

As a result of the internal audit, the following four reports were produced and presented to the Audit and Risk Committee in March 2022.

- Objective 1. Cyber Crime Vulnerability Scorecard
- Objective 2. Cyber Risk Report
- Objective 3. Cyber Risk Report Cyber Azure 365
- Objective 4. Dark Web Credentials Scan

A clear plan was then developed that outlined the recommendations and priorities of each objective.

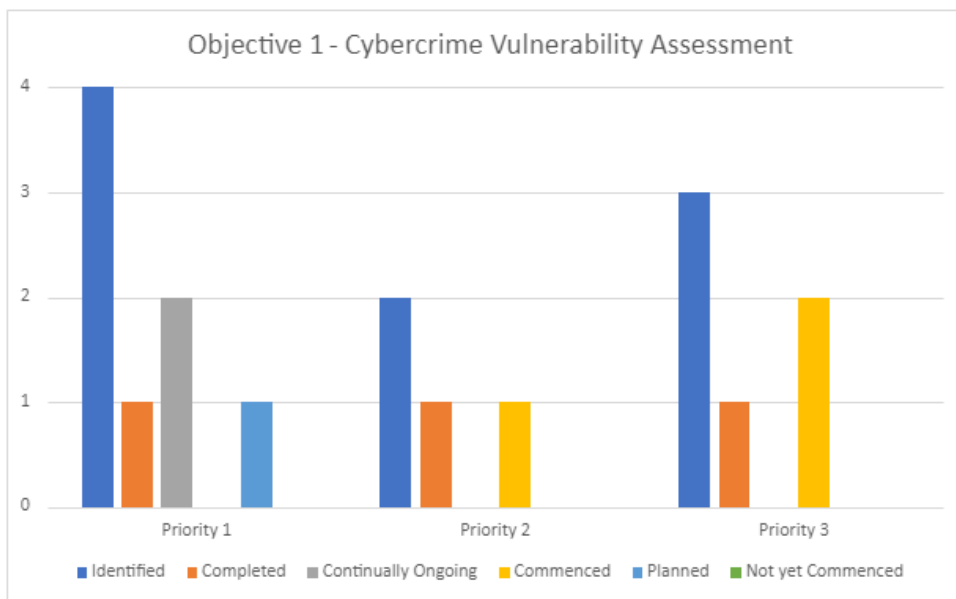
The Audit and Risk Committee requested a quarterly report be provided to each Audit and Risk Committee on the cyber risks identified within the above reports.

A status update of each objective for this quarter is attached for the information of the Audit and Risk Committee.

Cyber Crime Assessment Objectives December 2022 Update:

Objective 1

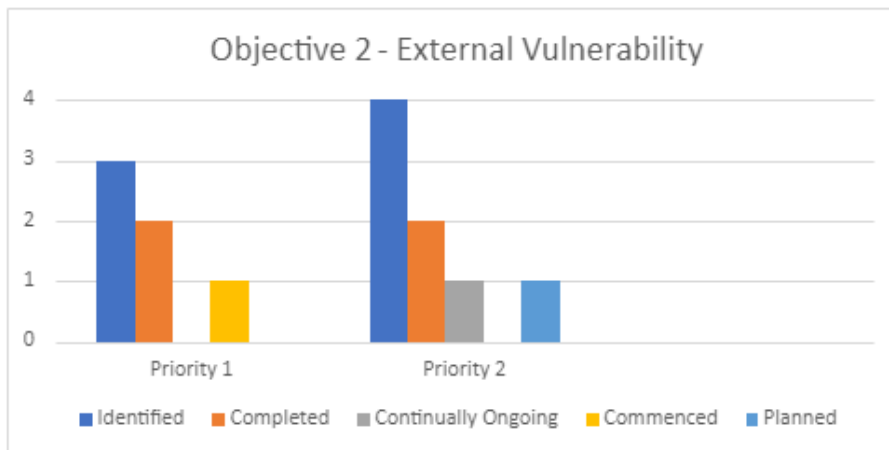
Completing a cybercrime vulnerability assessment using a Cybercrime Vulnerability Scorecard tool.



Objective 2

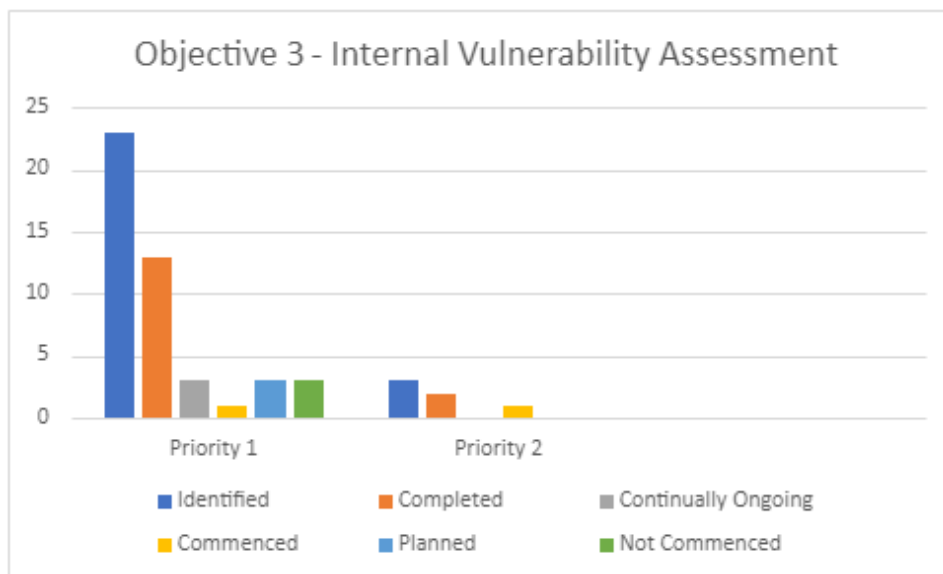
Completing an external vulnerability assessment, including:

- Assessing domains to see if your emails can be spoofed;
- Identification of 'out of date', unsupported software, open ports which can be hacked, known vulnerabilities which haven't been resolved, previously exploited ransomware vulnerabilities, self-signed or expired security certificates and domain registration problems.



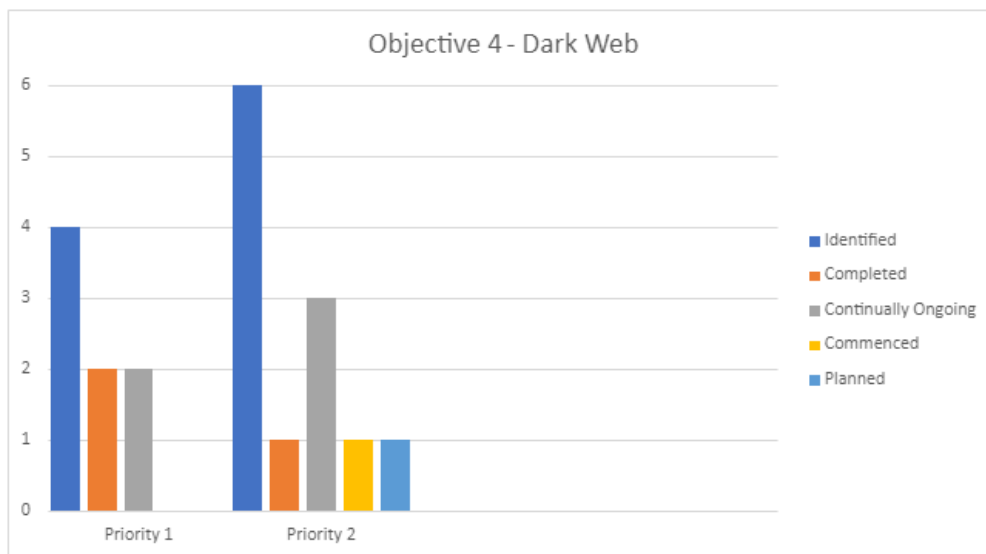
Objective 3

Completing an internal vulnerability assessment to assess the network for weaknesses and to identify vulnerabilities. This is similar to a penetration test where vulnerabilities are identified but not exploited.



Objective 4

Scan the Dark Web for indications that the organisation may be targeted (where much cybercrime is organised and planned), including assessing Council’s exposure on the Dark Web.



Substantial actions have been listed as *Completed*, *Commenced* or *Ongoing*. Some actions have changed status from the previous Action Plan Report from *Commenced* or *Completed* to *Ongoing* as it was identified that some actions do not have an end point and require ongoing monitoring and management.

Any *Planned* items relate to conducting a Pen Test or outcomes and recommendations from the IT & ID Blueprint, which will commence in 2023.

The Azure Management work has not progressed due to the inability to fully scope the requirements despite seeking further clarification from the creator of the Cyber Azure 365 Report, Objective 3, and reaching out to IT professional networks for assistance.

A final action report will be presented to March Audit & Risk Committee. This will enable staff to commit effort to commence the planned Live Fire Exercise, Penetration Testing and commence work on the IT & ID Blueprint recommendations.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Privacy and Data Protection Act 2014.

c. Consultation and/or communication processes implemented or proposed

N/A

d. Financial Implications and Collaboration

Completed within budget.

e. Governance Principles

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.

Innovation and continuous improvement is to be pursued.

Attachment List

1. Action Plan Cyber Crime Assessment Yr 1 Internal Audit Dec 2022 [7.12.1 - 11 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

This item was listed as item 8.3 in the Audit and Risk Committee Agenda.

7.13. CYBER SECURITY INCIDENT REPORT

Author: Kylie Walford, Corporate Governance Coordinator
Director: Ann Kirkham, Chief Information Officer - Glenelg Futures

Executive Summary

The purpose of this report is to provide the Audit and Risk Committee with the quarterly Cyber Security Incident Report update.

Recommendation

That the Audit and Risk Committee receives the quarterly Cyber Security Incident Report update.

MOTION

MOVED Cr Stephens

That the Audit and Risk Committee receives the quarterly Cyber Security Incident Report update.

SECONDED Cr Carr

CARRIED

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Ms Kirkham left the meeting at 3.13pm.

QUESTION ON NOTICE: Ann to confirm on how Councillors log emails that appear suspicious.

Background/Key Information:

A Cyber Security Incident Response Log stored in the Glenelg Data Hub located in Sharepoint logs and records all cyber security incidents. This log supports Council's commitment to report back to the Audit and Risk Committee in the event of a cyber security breach or incident.

Council has had two cyber security incidents in this current quarter, between 21 August 2022 and 21 November 2022:

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

Date	Incident	Control
16/09/2022	Malware attempt.	Council's vulnerability software discovered the repeated attempts and automatically blocked it from entering the network.
08/11/2022	Emails with malicious links were sent to 4 Council staff from rebecca@dwech.com.au .	DWECH confirmed their users account had been hacked, Council blocked this email account for 30 days, or until we know the account is secure.

Attached is a copy of the report which provides the details of each incident and the business impact levels caused.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

The *Privacy and Data Protection Act 2014* outlines an organisation's obligation regarding privacy and information security.

The Victorian Protective Data Security Framework (VPDSF) and the Victorian Protective Data Security Standards (VPDSS) establish mandatory requirements to protect public sector data and provide for governance across the four domains of information, personnel, ICT and physical security. Under the VPDSS, agencies must have effective business continuity processes in place to enable them to respond to and recover from any event that affects the confidentiality, integrity and availability of public sector data.

c. Consultation and/or communication processes implemented or proposed

Ongoing education to staff around cyber security including current training program.

d. Financial Implications and Collaboration

Council's current antivirus and advanced threat protection software used is within the current IT budget.

e. Governance Principles

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

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Cyber Incident November 2022 [7.13.1 - 1 page]

7.14. AUDIT AND RISK COMMITTEE MEETING SCHEDULE FOR 2023

Author: Kylie Walford, Corporate Governance Coordinator
Director: David Hol, Director Corporate Services

Executive Summary

This report seeks the approval of the Audit and Risk Committee for the Committee's meeting schedule for the calendar year 2023.

Recommendation

That the Audit and Risk Committee:

1. Approves the proposed 2023 schedule of meeting dates.
2. Notes that meetings will commence at 1.00pm and will be held either in person or virtually via Microsoft Teams.
3. Notes that scheduled meeting dates and/or commencement times are subject to amendment as required.

MOTION**MOVED Cr Stephens**

That the Audit and Risk Committee:

1. **Approves the proposed 2023 schedule of meeting dates.**
2. **Notes that meetings will commence at 1.00pm and will be held either in person or virtually via Microsoft Teams.**
3. **Notes that scheduled meeting dates and/or commencement times are subject to amendment as required.**

SECONDED Mayor Cr Martin**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

The following dates are proposed for the scheduled Audit and Risk Committee meetings to be held during the 2023 calendar year:

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

Meeting No. (As per Meeting Plan)	Meeting Date
3	Thursday 02/03/2023
4	Thursday 01/06/2023
1	Thursday 14/09/2023
2	Thursday 07/12/2023

It is proposed that meetings continue to commence at 1:00pm on the scheduled dates, but may be amended to accommodate business requirements.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

In accordance with Section 53 of the *Local Government Act 2020*, a Council must establish an Audit and Risk Committee.

c. Consultation and/or communication processes implemented or proposed

Not Applicable.

d. Financial Implications and Collaboration

The cost of holding Audit and Risk Committee meetings is fully provided for within the 2022/23 budget.

e. Governance Principles

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

Attachment List

Nil

8. REGULAR REPORTS**8.1. GLENELG SHIRE COUNCIL FINANCIAL REPORT OCTOBER 2022**

Author: Lauren Easson, Chief Finance Officer
Director: David Hol, Director Corporate Services

Executive Summary

The Financial Report is a key document in assuring responsible and responsive governance and decision making. This high-level report is provided to give Council the ability to monitor Glenelg Shire's financial performance.

Recommendation

That the Audit and Risk Committee receives the financial report for the period ending October 2022.

MOTION

MOVED Member David Stafford

That Audit and Risk Committee receives the financial report for the period ending October 2022.

SECONDED Member Bonnie Holmes

CARRIED

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

The 2022/2023 Annual Budget was adopted by Council on 28 June 2022.

This report provides information on the current status of Council's financial position and performance and includes:

- Comprehensive Income Statement;
- Balance Sheet;
- Statement of Cash Flows; and
- Statement of Capital Works.

a. **Council Plan and Policy Linkage**

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

This report is prepared monthly and is in addition to the requirements set out in the Local Government Act 2020 Division 2, Section 97 where Council is required to prepare a quarterly budget report to be submitted to Council.

Also, in accordance with Division 4, Section 101 Council is required to consider the following Financial Management Principles:

(a) Revenue, expenses, assets, liabilities, investments and financial transactions must be managed in accordance with a Council's financial policies and strategic plans;

(b) Financial risks must be monitored and managed prudently having regard to economic circumstances.

c. Consultation and/or communication processes implemented or proposed

The finance report is prepared monthly for Council and submitted to the Audit and Risk Committee quarterly.

d. Financial Implications and Collaboration

The resourcing of the preparation of the financial report and year-end audit of the financial statements is provided for in the adopted budget.

The financial report is a key document that is required to monitor Council's budget and financial result.

The Financial Report provides commentary on all material variances (Greater than 10% or \$500K) to the adopted 2022/2023 budget.

The information in this report contributes to various strategic planning documents under Council's strategic planning framework, including the Annual Budget, Financial Plan and Revenue and Rating Plan.

e. Governance Principles

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Financial Statements 2022 2023 - October 2022 [8.1.1 - 7 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

8.2. AUDIT AND RISK REGISTER REVIEW

Author: Kylie Walford, Corporate Governance Coordinator
 Director: David Hol, Director Corporate Services

Executive Summary

The purpose of this report is to brief the Audit and Risk Committee on the current status of the Audit and Risk Register.

Recommendation

That the Audit and Risk Committee receives the Audit and Risk Register Review Report.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the Audit and Risk Register Review Report.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
 Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

In accordance with the Audit and Risk Committee Annual Workplan 2022-2023, under 'Internal Audit', the Audit and Risk Committee is to receive a quarterly report on the status of the Audit and Risk Committee Register.

The Audit and Risk Register details each recommendation from prior internal audits conducted, as well as external financial audits which contain recommendations requiring action.

Once items have been completed, they are removed from the register and documented in this report.

Management comments have been updated for items in progress and 11 items have been completed in the last quarter, which are reflected in this report.

No	Title	Audit Recommendation	Final Management Comment
ceo1.5	Internal Audit Child Safety Standards 2 June 2022	4.3 ENHANCEMENTS OF CHILD SAFE POLICY AND THE PROCEDURE 6. Provide a clear definition of contractors to which Council's	COMPLETED Embedded requirements in contractor registration portal and process.

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

		Child Safe Policy and Procedure applies and set out how contractors' compliance with the Standards will be ensured including who is responsible for ensuring compliance; and links to supporting sources are current.	
ceo1.6	Internal Audit Child Safety Standards 2 June 2022	4.4 MANAGEMENT OF STAFF WORKING WITH CHILDRENS CHECKS 7. The Working with Children Check Procedure should be reviewed to: • More specifically identify the separate listing of categories of staff requiring WWCC's; • Identify who is responsible for maintaining records of WWCC's and VIT registrations and evidencing following up renewals.	COMPLETED Embedded requirements in contractor registration portal and process.
ceo1.10	Internal Audit Child Safety Standards 2 June 2022	The Acceptable Device Use Policy should be amended to provide specific protection of children in relation to the use of electronic devices and making physical and online environments safe.	COMPLETED Policy reviewed, policy states staff are responsible for their device, they must not be left unattended and all information is to be kept secure at all times.
cs5.5	Internal Audit Payroll (Excluding Data Analytics)	4.5 ACCESS TO PAYROLL FILES BEFORE BEING IMPORTED 7. Management need to ensure that the pay run files for community support workers, the payroll payment file, the GL file, the PAYG payment file and Superannuation excel report are not inappropriately altered before they are imported. This should include: • Ensure that the files are saved into a secure drive with limited access • Undertake periodic data analytics to compare the data exported from one system and imported into the other • Investigate locking down payroll files	COMPLETED - <u>Re: GL File</u> The location that these files are saved is Community (Live) (N:)/Payroll/NAVupdates. A review has been undertaken of the GL file and the location that the file is saved with our IT department. This GL file folder will be restricted to just the two Payroll Officers. Due to the nature of the file, we don't believe that there is an issue with the file being editable.
	(cont)	“ “ “ “	COMPLETED - <u>Re Community Support Worker file</u> A review has been undertaken of the Community Support Worker file and the location that the file is saved with our IT department. The file has been locked down to ensure that it cannot be edited prior to being imported into the Payroll system. A review will be undertaken of all users in each user group with the Aged & Disability team to determine if they should still be included.

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

			Data analytics is undertaken by Payroll to reconcile data extracted from the Xpedite file with reports from the Xpedite file to ensure the data matches. Payroll will continue to perform this process
	(cont)	“ “ “ “	COMPLETED - <u>Re Payroll Payment file</u> File and location is locked to only relevant users. Council officers have certainty that the file approved for payment is the Bank Payment File that is paid due to segregation of duties
	(cont)	“ “ “ “	COMPLETED - <u>Re: GL File</u> The location that these files are saved is Community (Live) (N:)/Payroll/NAVupdates. A review has been undertaken of the GL file and the location that the file is saved with our IT department. This GL file folder will be restricted to just the two Payroll Officers. Due to the nature of the file, we don't believe that there is an issue with the file being editable.
	(cont)	“ “ “ “	COMPLETED <u>PAYG Payment File</u> File and location is locked to only relevant users. Council officers have certainty that the amount approved for payment from reports in the Payroll system agrees to the Bank Payment amount due to segregation of duties.
cs5.6	(cont)	4.6 CHANGE OF EMPLOYEE BANKING DETAILS 9. A process to be implemented to ensure change of bank account details received via email should be verified over the phone with the employee before being changed on the system. A file note evidencing this should be maintained.	COMPLETED Payroll have now implemented a process for all email and phone requests to change an employee's details in the Open Office system. The new process involves the Payroll Officer calling the employee on the phone number that is listed for the employee in the Business Central Payroll system and confirm that the request to change their details is legitimate. The Payroll Officer will then follow up this conversation via email and ECM.
cs5.7	(cont)	4.7 EFT CONTROLS 10. Management need to implement a process to ensure that the Payroll Officer is not able to authorise the EFT (as they are involved in the payroll process). Access to approve payroll in NAB Connect should be provided senior officers independent of payroll processing. This process to be documented.	COMPLETED A change has been made in NAB Connect (our Bank Software) so that Payroll Officer, (whom is also an Authoriser in NAB Connect due to their accounting duties), is restricted and can no longer authorise a 'Payroll' Bank file. Our Payroll Payment confirmation file generated from NAB Connect clearly details who has approved the file in the bank.

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

			Payroll checks are always performed by someone independent of the payroll process. When these checks are completed, the payroll file is dually approved in NAB connect.
cs5.8	(cont)	4.8 BUSINESS CENTRAL ACCESS RIGHTS 11. Management need to review current access to Business Central and revoke this access as appropriate.	COMPLETED User access has been reviewed by CFO and only relevant users now have access to the system.
cs5.10	(cont)	4.10 AUDIT REPORT OF MASTERFILE CHANGES 14. Management should implement a process whereby supporting documentation is accessible and sighted by management when they review the Audit Report of Masterfile changes, to ensure that the reviewer can be assured that the changes being made are appropriate.	COMPLETED After each payrun, the CFO has to approve an Audit report that details any employee Masterfile changes for the previous fortnight. The Employee Change Audit report is produced fortnightly and details changes that have occurred in the Employee Masterfile and by whom. To ensure that the CFO has data to enable them to review the supporting documentation for the change, we are in the process of requesting access to the restricted payroll files in ECM for the CFO. This report is reviewed and signed off by the CFO each fortnight. We are now also utilising a Time User Log Report in conjunction with the Employee Change Audit report which details who has accessed the Business Central system, the date of access and how long they were in the system for, just for additional information.
as2.3	Internal Audit Review of Road Management Plan 4 March 2021	4.3 Reactive Inspections 1. Management need to determine defect criteria for high, medium low risk road asset concerns or hazards, so there is consistency in its use and application. The criteria should be reflected in the operating guidance recommended at 4.2. 2. Timeframes for closing out requests captured in ECM, in relation to RMP activities, should be formally established.	COMPLETED Road Management Plan highlights the defect criteria and the Road hierarchy of control. FLOWINGLY dictates timeframes for reactive Inspections.
as2.4	Internal Audit Review of Road Management Plan 4 March 2021	4.4 Contracted Works 1. Management need to document the procedure for managing contracted road management works. 2. Internal work crew capabilities need to be documented and criteria established when to engage a contractor.	COMPLETED Flowchart and procedure developed. Skills matrix developed to identify operators capabilities and gaps. New PEARL software will identify operator licences and qualifications.
as3.2	Internal Audit Depot Operations	3. Stocktake Consistency	COMPLETED

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

		We recommend that stocktakes and small audits be completed on at least an annual basis to verify plant and equipment balances are accurate.	Procedure developed. Stocktakes to be undertaken every 6 months (proposed for May and November).
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a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

In accordance with s53 of the *Local Government Act 2020*, Council must establish an Audit and Risk Committee.

The aim of the Audit and Risk register is to assist with adopting effective internal controls to mitigate the risk.

c. Consultation and/or communication processes implemented or proposed

Communication was undertaken with key staff with comments updated as required.

d. Financial Implications and Collaboration

Resource and budget implications will vary dependent upon the specific audit recommendation.

e. Governance Principles

Local, Regional, state and national plans and policies are to be taken into account in strategic planning and decision making.

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

Collaboration with other Councils (section 109 *Local Government 2020*) and Governments and statutory bodies is to be sought along with Financial and Resource Implications and Opportunities.

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 improvement is to be pursued.

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Audit and Risk Register for the financial year 2022 2023 - updated November 2022 [8.2.1 - 14 pages]

8.3. OHS QUARTERLY REPORT 1 JULY TO 30 SEPTEMBER 2022

Author: Lynne Thompson, Acting Risk & Safety Manager
Director: David Hol, Director Corporate Services

Executive Summary

This report provides an overview of OHS matters and developments for the period 1 July 2022 to 30 September 2022.

Recommendation

That the Audit & Risk Committee receives the OHS Quarterly Report 1 July 2022 to 30 September 2022.

MOTION**MOVED Member Bonnie Holmes**

That the Audit & Risk Committee receives the OHS Quarterly Report 1 July 2022 to 30 September 2022.

SECONDED Member Philip Saunders**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

This report provides an overview of the OHS performance over the past three months.

Some of the more notable points include:

- Continuous education and support continues to be provided across all areas within Council, including audits, training, inspections, First Aid checks, contractor management, evacuation drills;
- OHS Committee Meeting was held 21 September 2022;
- The OHS unit are prepared for the Pending introduction of OHS (Psychological Health) Regulations Amendment 2022;
- Training, including Confined Spaces, working at heights, Traffic Management refresher and chainsaw operation;
- Manual Handling training provide by local physiotherapist;
- Unit Risk Assessments have been reviewed;
- OHS induction presentation has been reviewed and updated;
- One WorkSafe inspector visit; Julia Street parklet;
- 35 work related incidents reported via Elumina, 20 Investigations completed;

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

- Possible trends include an increase in minor injuries to children as a result of general child play, all injuries are investigated;
 - 23 workplace inspections were completed; 6 evacuation drills and 51 audits these include first aid kit audits.
- a. Council Plan and Policy Linkage
- Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.
- b. Legislative, Legal and Risk Management Considerations
- Compliance monitoring and improvements are undertaken in accordance with the OHS Act and Regulations.
- c. Consultation and/or communication processes implemented or proposed
- Consultative processes are undertaken in accordance with the OHS Act and Regulations and Council's policies and procedures.
- d. Financial Implications and Collaboration
- OHS and Risk matters are undertaken within existing budget allocations.
- e. Governance Principles
- Innovation and continuous improvement is to be pursued.

Attachment List

1. OHS Quarterly Report From 1 July to 30 September 2022 [8.4.1 - 7 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

8.4. RISK MANAGEMENT QUARTERLY REPORT 1 JULY TO 30 SEPTEMBER

Author: Lynne Thompson, Acting Risk & Safety Manager
Director: David Hol, Director Corporate Services

Executive Summary

This report provides an overview of Risk Management and Insurance claims including Public Liability, from 1 July 2022 to 30 September 2022.

Recommendation

That the Audit and Risk Committee receives the Risk Management Quarterly Report 1 July 2022 to 30 September 2022.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the Risk Management Quarterly Report 1 July 2022 to 30 September 2022.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

This report provides an overview of Councils Insurance claims, legal matters, and third-party incidents over the last three months:

- It provides a table explaining the details around incidents involving members of the public
- A graph will show the reported slips, trips and falls and where intervention was under/over when inspected
- A list of the 27 reviewed strategic Risk Registers can be found on page 5, the registers are operational in PowerBI

a. **Council Plan and Policy Linkage**

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. **Legislative, Legal and Risk Management Considerations**

Relevant legislation is considered when understanding Risk Management

c. Consultation and/or communication processes implemented or proposed

Consultation is undertaken in accordance with legislative requirements and within Council's policies, procedures, and guidelines.

d. Financial Implications and Collaboration

Risk Management is undertaken to ensure the best outcome and within budget requirements

e. Governance Principles

Innovation and continuous improvement is to be pursued.

Attachment List

1. Risk Management Quarterly Report 1 July to 30 September 2022 [**8.5.1** - 5 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

8.5. WORKCOVER & INJURY MANAGEMENT QUARTERLY REPORT 1 JULY TO 30 SEPTEMBER 2022

Author: Lynne Thompson, Acting Risk & Safety Manager
Director: David Hol, Director Corporate Services

Executive Summary

This report provides an overview of Workcover and Injury Management matters and developments from 1 July 2022 to 30 September 2022.

Recommendation

That the Audit and Risk Committee receives the Workcover Quarterly Report 1 July 2022 to 30 September 2022.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the Workcover Quarterly Report 1 July 2022 to 30 September 2022.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

This report provides an overview of the Workcover performance and injury management over the past three months.

Some of the more notable Workcover points include:

- No Workcover claims for this Quarter
 - We have 3 current claims associated with legal actions from 2017 and 2019
 - So far for the 2021/22 period we have 6 claims
 - Assistance across the organisation was provided to manage non-work-related injuries to eliminate exacerbation of existing medical conditions
- a. **Council Plan and Policy Linkage**

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Relevant legislation is considered when undertaking Workcover and injury management.

c. Consultation and/or communication processes implemented or proposed

Consultation is undertaken in accordance with legislative requirements and within Council's policies, procedures and guidelines.

d. Financial Implications and Collaboration

Management of Workcover and injury management is undertaken within operational budgets.

e. Governance Principles

Innovation and continuous improvement is to be pursued.

Attachment List

1. Confidential Quarterly Report Work Cover 1 July to 30 September 2022 [8.6.1 - 7 pages]

8.6. CEO & EA EXPENDITURE - CREDIT CARD AND REIMBURSEMENTS

Author: Lauren Easson, Chief Finance Officer
Director: David Hol, Director Corporate Services

Executive Summary

This report provides Audit and Risk Committee with a report on Chief Executive Officer (CEO) and CEO Executive Assistant (EA) Expenditure. This report is required as a result of the actions resulting from an audit undertaken by VAGO on Fraud and Corruption Control in Local Government.

Recommendation

That the Audit and Risk Committee receives the report on CEO & EA Expenditure for the period 1 August to 31 October 2022.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the report on CEO & EA Expenditure for the period 1 August to 31 October 2022.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

In June 2019 the Victorian Auditor-General tabled its report to Parliament on *Fraud and Corruption Controls – Local Government*. Council undertook a self-assessment of the VAGO Report findings and identified a number of areas for improvement. The actions from this assessment were considered by the Audit and Risk Committee at the meeting held on 5 December 2019.

In this report VAGO identified limitations in fraud and corruption controls over staff expenditure, particularly CEO expenditure. The following statement was included in the VAGO report for CEO expenditure:

We consider better practice would be for the councils' CFOs or equivalent to approve CEO expenditure and for councils to refer the full transaction history to their ARC or council for periodic review. This increases financial scrutiny and ensures that mayors are not involved in daily council business, which is not their role.

One of the recommendations from Internal Audit was to report CEO and CEO Executive Assistant expenditure, including petty cash, credit card and reimbursement expenditure, to the Audit and Risk Committee commencing at the March 2020 meeting.

These transactions are documented in the separate circulation and a summary is provided in the table below:

CEO and EA Expenditure for the period 1 August 2022 to 31 October 2022

Employee	Credit Card	Other
Greg Burgoyne	\$ 351.15	\$ 165.45
Virginia Bobbit	\$ 10,564.21	\$ -
Total Expenditure	\$ 10,915.36	\$ 165.45

Other expenditure accounts for employee reimbursements either through petty cash or the creditor system. Details of this expenditure are provided in the attachment.

These expenditure transactions are now approved by the CFO or Director Corporate Services, rather than the Mayor.

a. Council Plan and Policy Linkage

Leading Glenelg - Create shared visions within the Community, ensuring agreed outcomes

b. Legislative, Legal and Risk Management Considerations

In June 2019 the Victorian Auditor-General tabled its report to Parliament on Fraud and Corruption Controls – Local Government. In this report VAGO identified limitations in fraud and corruption controls over staff expenditure, particularly CEO expenditure. Council have prepared this report on credit card and reimbursement expenditure for the CEO and CEO EA to improve these controls.

c. Consultation and/or communication processes implemented or proposed

The VAGO Report on Fraud and Corruption Control has been presented to Councillors, Audit and Risk Committee and the Executive Team.

d. Financial Implications and Collaboration

It is not possible to quantify the financial or resource implications relating to any improvements in internal controls.

e. Governance Principles

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. CEO and EA Credit Card Expenditure Aug to Oct 2022 [8.7.1 - 13 pages]
2. Employee Reimbursement Expenditure Aug to Oct 2022 [8.7.2 - 1 page]

8.7. COUNCILLORS QUARTERLY EXPENDITURE REPORT

CEO: Greg Burgoyne, Chief Executive Officer

Executive Summary

This Quarterly Expenditure Report is presented to the Audit and Risk Committee on a quarterly basis in the interests of accountability and transparency.

This report is for Councillor expenditure that has been incurred during the period 1 July 2022 to 30 September 2022.

Recommendation

That Audit and Risk Committee receives the Councillors quarterly expenditure report for the period 1 July 2022 to 30 September 2022.

MOTION**MOVED Member Philip Saunders**

That Audit and Risk Committee receives the Councillors quarterly expenditure report for the period 1 July 2022 to 30 September 2022.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders, Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

In accordance with Section 40 of the *Local Government Act 2020*:

- (1) A Council must reimburse a Councillor or a member of a delegated committee for out-of-pocket expenses which the Council is satisfied-
 - (a) Are bona fide expenses; and
 - (b) Have been reasonably incurred in the performance of the role of Councillor or member of a delegated committee; and
 - (c) Are reasonably necessary for the Councillor or member of a delegated committee to perform that role.

Regulation 14 (db) of the *Local Government (Planning and Reporting) Regulations 2014* requires that expenses, including reimbursements of expenses for each Councillor and member of a Council Committee paid by the Council are to be categorised separately as:

- Travel expenses (Includes remote allowance) – TR;

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

- Car mileage expenses – CM;
- Childcare expenses – CC;
- Information and communication technology – IC; and
- Conference and training expenses – CT.

Under Section 41(2)(d) of the *Local Government Act 2020*, Council must have particular regard to expenses incurred by a Councillor who is a carer in a care relationship within the meaning of section 4 of the *Carers Recognition Act 2012*. This is a new requirement under the *Local Government Act 2020*, therefore is not addressed in *Regulation 10 e, f & g of the Local Government (Planning and Reporting) Regulations 2020*.

Documentation is required to provide evidence of the expense specifying the business purpose for each claim.

Councillors are also required to maintain a logbook with each entry providing a clear description of the business purpose.

Following is a table of expenditure that has been incurred by Councillors during the period 1 July 2022 to 30 September 2022.

Note: In some instances, journaling of some items may not necessarily appear in the month that they were expended and will appear in the next quarterly report.

Councillor	TR	CM	CC	IC	CT	Carer	Grand Total
Carr				\$ 436	\$ 123		\$ 559
Hawker				\$ 336	\$ 90		\$ 426
Martin	\$ 176			\$ 397	\$ 123		\$ 696
Rank	\$ 4175			\$ 472			\$ 4,647
Smith				\$ 354	\$ 123		\$ 477
Stephens	\$ 1730			\$ 1,107	\$ 545		\$ 3,385
Wilson		\$41		\$ 351			\$ 392
Grand Total	\$ 6,081	\$41		\$ 3,453	\$ 1,004		\$ 10,579

In accordance with Section 39 of the *Local Government Act 2020*, Councillors are entitled to receive an allowance whilst performing their duty as a Councillor. The Mayor or a Deputy Mayor are also entitled to receive a higher allowance with the Mayor being provided full use of a vehicle.

Following is a table of Councillor allowances paid for the period 1 July 2022 to 30 September 2022:

Councillor	Amount
Carr	\$ 9,623
Hawker	\$ 10,008
Martin	\$ 16,078
Rank	\$ 32,157

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

Smith	\$ 10,008
Stephens	\$ 10,008
Wilson	\$ 8,006
Grand Total	\$ 95,888

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

- *Local Government Act 2020* – Section 39 Allowances for Mayors, Deputy Mayors and Councillors.
- *Local Government Act 2020* – Section 40 Reimbursement of Expenses of Councillors and members of a delegated committee.
- Regulation 10 e, f & g of the *Local Government (Planning and Reporting Regulations 2020)*.
- *Carers Recognition Act 2012*.

c. Consultation and/or communication processes implemented or proposed

Councillor Expenditure is reported on a quarterly basis to the Council Meeting and Audit and Risk Committee and the quarterly expenditure is accessible via Council's website.

Councillor Expenditure is also reported annually in Council's Annual Report.

d. Financial Implications and Collaboration

Councillor Allowances and Councillor Expenditure are accounted for in the 2022-2023 Annual Council Budget.

e. Governance Principles

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

The ongoing financial viability of the Council is to be ensured.

Attachment List

Nil

8.8. ANNUAL WORK PLAN YEAR ENDING 30 JUNE 2023 - STANDING ITEM

Author: Kylie Walford, Corporate Governance Coordinator
Director: David Hol, Director Corporate Services

Executive Summary

In accordance with Section 54 (3) of the *Local Government Act 2020* an Audit and Risk Committee must adopt an annual work program (plan).

The Annual Work Plan is a standing item to the Audit and Risk Committee Agenda.

Recommendation

That the Audit and Risk Committee receives the Audit and Risk Committee Annual Work Plan for the year ending 30 June 2023, as a quarterly standing item.

MOTION**MOVED Member Philip Saunders**

That the Audit and Risk Committee receives the Audit and Risk Committee Annual Work Plan for the year ending 30 June 2023, as a quarterly standing item.

SECONDED Member Bonnie Holmes**CARRIED**

FOR: Mayor Cr Martin, Cr Carr, Cr Stephens, Member Philip Saunders,
Member David Stafford and Member Bonnie Holmes

AGAINST: Nil

Background/Key Information:

The Audit and Risk Committee endorsed the Audit and Risk Committee Annual Work Plan for the year ending 30 June 2023 at its meeting on 2 June 2022, with Council adoption on 26 July 2022.

The annual work plan sets the agenda for the Committee for the next 12 months. There are no amendments for this quarter.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Section 54 (3) of the *Local Government Act 2020* states that an Audit and Risk Committee must adopt an annual work program.

c. Consultation and/or communication processes implemented or proposed

Quarterly Audit and Risk item to be reviewed prior to 30 June each year.

d. Financial Implications and Collaboration

Not Applicable.

e. Governance Principles

Local, Regional, state and national plans and policies are to be taken into account in strategic planning and decision making.

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

Collaboration with other Councils (section 109 *Local Government 2020*) and Governments and statutory bodies is to be sought along with Financial and Resource Implications and Opportunities.

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 improvement is to be pursued.

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Current Audit and Risk Committee Annual Work plan 1 July 2022 to 30 June 2023 [8.9.1 - 4 pages]

AUDIT AND RISK COMMITTEE MINUTES

THURSDAY 8 DECEMBER 2022

9. CONFIDENTIAL REPORTS**10. ANY OTHER BUSINESS****10.1 BUDGET UPDATE**

Mr David Hol Director Corporate Services provided a Budget process update for the 2023/2034 financial year.

ACTION: Provide Essential Services Commission report to Audit and Risk Committee members.

Mr David Hol, Ms Kylie Walford, Ms Rachael Currie, Mr Brad Ead left the meeting at 3.55pm.

10.2. ATTESTATION COMPLIANCE REPORT

Verbal report provided by Acting Chief Executive Officer.

11. NEXT AUDIT AND RISK COMMITTEE MEETING

The next Audit and Risk Committee Meeting will be held on Thursday 2 March 2023.

12. CLOSURE OF AUDIT AND RISK COMMITTEE MEETING

The Audit and Risk Committee Meeting closed at 4.20pm.

14. MANAGEMENT REPORTS

14.1. COUNCILLOR AND CHIEF EXECUTIVE OFFICER LEAVE OF ABSENCE REGISTER

Director: Paul Phelan, Chief Executive Officer

Executive Summary

The purpose of this report is to enable Council to consider the Councillor and Chief Executive Officer Leave of Absence Register.

Recommendation

That Council approve the Councillor and Chief Executive Officer Leave of Absence Register presented as a confidential circulation under Section 35 (1) (e) (4) (6) of the *Local Government Act 2020*.

Background/Key Information:

In accordance with Section 35 (1) (e), (4), and (6) of the *Local Government Act 2020* Councillors are entitled to take Leave of Absence.

Section 35 (1) (e), (4) and (6) of the *Local Government Act 2020* states:

35 Councillor ceasing to hold office

(1) A Councillor ceases to hold the office of Councillor and the office of the Councillor becomes vacant if the Councillor:

(e) subject to this section, is absent from Council meetings for a period of 4 consecutive months without leave obtained from the Council.

(4) The Council must grant any reasonable request for leave for the purposes of subsection (1)(e).

(6) A Councillor is not to be taken to be absent from Council meetings during the period of 6 months after the Councillor or their spouse or domestic partner:

(a) becomes the natural parent of a child; or

(b) adopts a child under the age of 16 years

and the Councillor has responsibilities for the care of the child during that period.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Section 35 of the *Local Government Act 2020*.

c. Consultation and/or communication processes implemented or proposed

Councillors are required to submit Leave of Absence requests in writing to the Chief Executive Officer.

The Chief Executive Officer is required to submit his Leave of Absence requests in writing to Council through the Councillor and Chief Executive Officer Leave of Absence Register.

A register will be held by the Chief Executive Officer and reported monthly to Council.

d. Financial Implications and Collaboration

Nil.

e. Governance Principles

The transparency of Council decisions, actions and information is to be ensured.

Attachment List

Separately circulated as Confidential attachment.

14.2. COUNCIL REPRESENTATION ON EXTERNAL PEAK BODIES

Director: Paul Phelan, Chief Executive Officer

Executive Summary

The purpose of this report is to enable Council to consider Councillor representation to the listed external industry peak bodies.

Recommendation

That Council appoint the following members to the listed external peak bodies in accordance with the following table, for the Council term ending 2024:

External Peak Bodies	Councillor Membership	Comment
Municipal Association of Victoria (MAV) State Council	Delegate: Mayor Substitute Delegate: Cr WILSON	Advocacy

Background/Key Information:

At the December 2020 Council meeting, it was resolved to appoint the Mayor (delegate) and Cr Wilson (substitute delegate) for Glenelg Shire Council representation on the Municipal Association of Victoria (MAV) State Council.

As a result of recent changes and adoption of the new Municipal Association of Victoria (MAV) Rules 2022, each participating member council must appoint by resolution of the council, one of its councillors to be their delegate at State Council and one of its councillors as a substitute delegate.

The role of the MAV delegate is to:

- Participate at State Council (voting on behalf of their council on matters).
- Report to their council on MAV matters and decisions.
- Have regard for any protocols published by the Board in relation to their functions as a delegate.
- Meet with and provide feedback to their regional Board Director & other representatives from the region at MAV functions.
- Participate in MAV strategic planning.

Participation by Glenelg Shire Council Councillors in peak industry bodies has been warranted due to significant community, economic or advocacy aspects.

a. **Council Plan and Policy Linkage**

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. **Legislative, Legal and Risk Management Considerations**

The report highlights the relevant legislative changes and advice from integrity organisations impacting change.

c. Consultation and/or communication processes implemented or proposed

Communication plans are being established for affected committee membership.

d. Financial Implications and Collaboration

Costs associated with appointments to committees are included in the operational budget.

e. Governance Principles

Local, Regional, state and national plans and policies are to be taken into account in strategic planning and decision making.

Attachment List

1. 15 December 2020 Council Meeting Resolution Item 13.5 [**14.2.1** - 1 page]
2. Council's MAV Delegate arrangements [**14.2.2** - 3 pages]

MOVED Cr Hawker

That Council appoint the following members to the listed committees and external peak bodies in accordance with the following table, for the Council term 2020-2024:

Committee	Councillors Membership	Comment
Glenelg Mara Quorin Aboriginal Advisory Committee	To be confirmed	Terms of reference to be developed early 2021
External Peak Bodies	Councillors Membership	Comment
Alliance of Councils for Rail Freight Development	Cr Rank Note: Cr Rank is currently chair	Economic significance to the region
Barwon South West Waste and Resource Recovery Group	Cr Wilson Proxy Cr: Smith	Economic and legislative impacts. Currently under reform.
Committee for Portland	Mayor and CEO	Advocacy, Economic and Tourism significance.
Green Triangle Freight Action Plan	Mayor and Cr Stephens	Economic significance to the region.
Great South Coast Group	Mayor and CEO	Advocacy, Economic and Tourism significance.
Municipal Association of Victoria	Mayor Proxy: Cr: Wilson	Advocacy
Timber Towns Victoria	Cr Stephens	Advocacy and Economic significance
National Timber Councils Taskforce Inc.	Cr Stephens	Advocacy and Economic significance
Rural Councils Victoria	Cr Wilson	Advocacy
GORRT Great Ocean Road Tourism	Mayor and CEO	Advocacy, Economic and Tourism significance

SECONDED Cr Smith

CARRIED



Information sheet

Council's MAV Delegate arrangements

With appointments of Councillors to advisory and external committees on the to-do-list for most councils at this time of year, the following information is provided to assist Councillors and officers (with reporting to council), regarding the appointment of your Council's MAV delegate.

The MAV in brief

The Municipal Association of Victoria (MAV) is a membership association. Formed in 1879, the [Municipal Association Act 1907](#) (the MAV Act) officially recognises the MAV as the legislated peak body for councils and the voice of local government in Victoria. Membership is voluntary, with all 79 Victorian councils' current members of the MAV.

The MAV's role is to:

- Represent and advocate local government (LG) interests
- Lobby for a 'fairer deal' for councils and long-term security
- Facilitate effective networks and inter-governmental co-operation
- Promote and improve community awareness of the capacity and capabilities of the LG sector
- Provide support to councils including policy development, strategic advice, and capacity building programs
- Provide insurance, procurement, professional development, and training services to the LG sector.

The MAV's governance structure

The MAV Act defines the purpose and operation of the MAV and empowers its members ('member councils') to make rules to further clarify its role and processes. The Rules prescribe amongst other matters:

- Membership participation and arrangements
- Appointment of MAV representatives (delegates)
- The MAV Board, its role, function and elections of the President and Board members (Directors)
- The MAV State Council, its role, and functions, and
- MAV management and administrative functions

New rules (the MAV Rules 2022) were approved by the Governor in Council on Tuesday 18 October 2022 and commenced when they were published in the Victoria Government Gazette on Thursday 20 October 2022.

MUNICIPAL ASSOCIATION OF VICTORIA
LEVEL 12 60 COLLINS STREET MELBOURNE
GPO BOX 4326 MELBOURNE 3001
T 03] 9667 5555 F 03] 9667 5555 W www.mav.asn.au



Information sheet

State Council is the MAV's overarching governing body consisting of all the appointed representatives (delegates) of participating member councils.

State Council meetings are held at least twice a year to consider:

- The MAV's annual report and financial affairs, and
- Motions or other items of business proposed by member councils and the Board.

The Board is elected every two years by member council delegates that comprise the State Council. The next Board elections, for President and the ten Directors, are being held on Friday 3 March 2023.

Under the MAV Rules 2022:

- The Board will comprise the President and ten (10) Directors, with one Director elected from each of the five metropolitan regions and one from each of the five (5) non-metropolitan regions. (Nb: The MAV is currently undertaking a review of the regional groupings with final groupings of councils to be endorsed by the Board in December 2022.)
- The MAV President is elected by all council member representatives (delegates), whereas the ten (10) Directors are elected by the representatives (delegates) in the regional participating member council group within which their council is located.

It is important to note that for a Councillor to be eligible to vote in the MAV elections or to be eligible for election to the Board (as the President or a Director) a Councillor must be their council's appointed MAV delegate.

The President's role is to:

- Be the principal spokesperson for the MAV
- Promote the MAV & the LG sector
- Facilitate communication between MAV representatives, the Board and the organisation
- Chair Board meetings and State Council
- Attend MAV Insurance Board, Audit and Risk Committee meetings
- Represent the MAV at the Australian Local Government Association (ALGA)
- Maintain relationships with State/Federal Government Ministers, political parties and other key stakeholder groups
- Represent the Board at MAV events
- Be the conduit for feedback & input from members.

The Board's role is to govern the MAV's operations and includes:

- Developing and giving effect to the strategic direction of the MAV
- Oversight of the administration and financial management of the MAV
- Appointing and overseeing the performance of the MAV's Chief Executive Officer

MUNICIPAL ASSOCIATION OF VICTORIA
 LEVEL 12 60 COLLINS STREET MELBOURNE
 GPO BOX 4326 MELBOURNE 3001
 T 03] 9667 5555 F 03] 9667 5555 W www.mav.asn.au



Information sheet

- Oversight of the provision of MAV services, risk management, adoption of the Annual Budget, and ensuring the legal and ethically integrity of the MAV.

The time commitment for a MAV Director typically involves attending monthly Board meetings, briefings, State Council, and preparation, with the review of business papers etc. MAV Directors also represent and advocate for their region on matters of state-wide and sector importance; attend meetings or functions in their region and participate on working groups and other committees as requested by the Board.

MAV Delegates

Each participating member council must appoint one of its councillors to be their delegate at State Council and one of its councillors as a substitute delegate. Appointments must be made by resolution of the council and must notify the MAV of those appointments on the notification of appointment form (refer attachment 1).

The role of the MAV delegate is to:

- Participate at State Council (voting on behalf of their council on matters)
- Report to their council on MAV matters and decisions
- Have regard for any protocols published by the Board in relation to their functions as a delegate
- Meet with and provide feedback to their regional Board Director & other representatives from the region at MAV functions.
- Participate in MAV strategic planning.

Substitute delegates act when their council's delegate is unavailable.

Further Information:

Further information about the MAV including our Rules, State Council and MAV services is available on the MAV website (www.mav.asn.au).

For enquiries about this guideline contact us by Tel: (03) 9667 5555 or Email: governancesupport@mav.asn.au.

14.3. INVITATION TO JOIN MAYOR'S FOR THE VOICE TO PARLIAMENT PUBLIC STATEMENT

CEO: Paul Phelan, Chief Executive Officer

Executive Summary

The purpose of this report is for Council to consider an invitation to join the 'Mayor's for the Voice to Parliament public statement' in support of the Uluru Statement from the Heart.

Recommendation

That Council supports the invitation to join the Mayor's for the Voice to Parliament public statement.

Background/Key Information:

On 24 November 2022, correspondence was forwarded to the Mayor, Glenelg Shire Council inviting Council to join a campaign referred to as 'Mayor's for the Voice to Parliament public statement' in support of the Uluru Statement from the Heart.

The invitation was initiated by the Mayor, Inner West Council, NSW (Mr. Darcy Byrne) seeking a joint Statement of Mayors from across Australia in support of the Uluru Statement from the Heart and the upcoming referendum on whether to constitutionally recognise Aboriginal and Torres Strait Islander people through a Voice to Parliament.

The Uluru Dialogue Supported by the Indigenous Law Centre at UNSW Sydney and UluruStatement.org describe the Uluru Statement as follows;

"The Uluru Statement is an invitation from First Nations Peoples issued to all Australians on 26 May 2017. It calls for legal and structural reforms to reshape the relationship between First Nations Peoples and the Australian population.

The Statement calls for 2 substantive changes: Voice and Makarrata.

1. *Voice to Parliament enshrined in the Constitution.*
2. *A Makarrata Commission to supervise:*
 - a. *Agreement making.*
 - b. *Truth telling about our history.*

The Statement calls for real and lasting structural change to our current systems of authority and decision making, rather than surface changes to existing systems. It is a path forward for justice and self-determination for First Nations Peoples in this country."

The Statement from *Mayors for the Voice to Parliament* initiated by Inner West Council, seeks support of the following statement;

"We the undersigned endorse the Uluru Statement from the Heart and support constitutional recognition for Aboriginal and Torres Strait Islander people through a Voice to Parliament.

As local leaders we are committed to building awareness in our communities about the upcoming referendum.

Our citizens should be informed about what constitutional recognition through a Voice to Parliament will mean for Indigenous people and Australian society as a whole.

Local government must play an important role in holding civic forums, promoting dialogue, and providing a platform for Indigenous voices to be heard in the debate.

We believe that a successful referendum can be a unifying achievement for Australia.

We are ready to work with all levels of government to educate and inform our communities about why this referendum is such an important moment for our nation.”

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

Local Government Act 2020, Section 9.

c. Consultation and/or communication processes implemented or proposed

An upcoming referendum will be held in Parliament to enshrine an Aboriginal and Torres Strait Islander Voice in the Australian Constitution.

d. Financial Implications and Collaboration

No financial implications.

e. Governance Principles

The transparency of Council decisions, actions and information is to be ensured.

Collaboration with other Councils (section 109 *Local Government 2020*) and Governments and statutory bodies is to be sought along with Financial and Resource Implications and Opportunities.

Attachment List

1. Mayors for the Voice to Parliament public statementv 2 [**14.3.1** - 1 page]
2. Uluru Statement from the Heart (USFH Interactive Supporters Kit 050521) [**14.3.2** - 13 pages]

Mayors for the Voice to Parliament Public Statement

We the undersigned endorse the Uluru Statement from the Heart and support constitutional recognition for Aboriginal and Torres Strait Islander people through a Voice to Parliament.

As local leaders we are committed to building awareness in our communities about the upcoming referendum.

Our citizens should be informed about what constitutional recognition through a Voice to Parliament will mean for Indigenous people and Australian society as a whole.

Local government must play an important role in holding civic forums, promoting dialogue, and providing a platform for Indigenous voices to be heard in the debate.

We believe that a successful referendum can be a unifying achievement for Australia.

We are ready to work with all levels of government to educate and inform our communities about why this referendum is such an important moment for our nation.

The Uluru Statement from the Heart Supporter Kit



Led by the Uluru Dialogue
Supported by the Indigenous Law Centre at UNSW
Sydney



UluruStatement.org



[@UluruStatement](https://www.facebook.com/UluruStatement)



[@UluruStatement](https://twitter.com/UluruStatement)



[@UluruStatement](https://www.instagram.com/UluruStatement)



Walk with us to a better Australia

The Uluru Statement from the Heart is an invitation to the Australian people to work with First Nations people to create a better future. It is a gift: a strategic roadmap to peace, where First Nations peoples take a rightful place in our own land. It is a moment where all Australians can come together to realise our nation's true potential.

This roadmap, set out in the Uluru Statement, is Voice, Treaty and Truth. The path to a better Australia. But we need your voice to get there. We need you, your family, friends, organisations, and communities to rally together and to help us make this a reality. The time is now.

We are calling on all Australians to walk with us in support of a Voice to Parliament enshrined in the Constitution.

A First Nations Voice, protected by the Constitution, will mean that agreement-making and truth-telling can finally be done on equal terms. With Voice, we can begin the journey of *coming together after a struggle* – Makarrata.

We are the Uluru Dialogue. We are a group of First Nations people from across Australia that have the cultural responsibility for progressing the reforms called for in the Uluru Statement from the Heart. We are based at the UNSW Indigenous Law Centre (ILC), Australia's oldest and only Indigenous legal research unit, that has supported much of the foundational work that led to the Uluru Statement. Our work is grounded in the cultural authority and mandate of the Uluru Statement and is informed by the ILC's research on law reform.

Now, almost four years on from the issuing of the Uluru Statement to the Australian people, we are asking for your help. We've put together this Supporter Kit as part of a national education project on the first reform: **enshrining a Voice to Parliament in the Australian Constitution.**

We need you to lead conversations in your own community, through your networks, workplaces, into schools and around family dinner tables. We need you to use your voice, so that a First Nations Voice can be protected and listened to for generations to come. For our voices to be a fundamental part of the national story.

You can make a difference and you can make it now. It is we, the Australian people, who have the power to unlock the Australian Constitution. It is we, the Australian people, walking together, who can lead governments to take the necessary steps to enact lasting and meaningful change.

We need you to show the government and the parliament that the Australian people are ready to accept the invitation of the Uluru Statement to walk together to a better Australia. We can't wait any longer.

We need you now. Lend us your Voice.

**Aunty Pat Anderson AO, Professor Megan Davis & Roy Ah-See
Co-Chairs, Uluru Dialogue**

0.1

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Why we need your support	0.4
Your call to action	0.5
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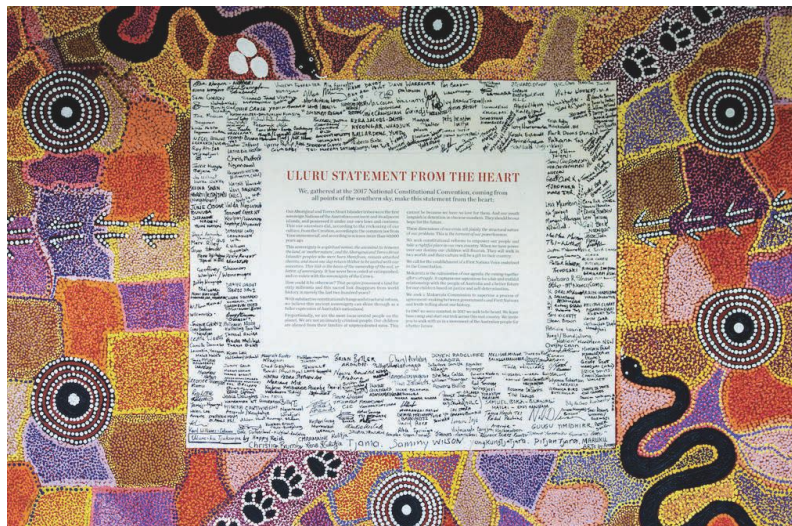


Image: The **Uluru Statement from the Heart**. Issued to the Australian people on 26 May 2017.

Front and Back: Uluru at the Uluru Climb Closure Ceremony, Jimmy-Widders Hunt.

0.2

Where are we now?

1200 First Nations People

In 2016-2017, over 1200 First Nations people participated in the first ever Indigenous designed and led deliberative process asking First Nations what meaningful constitutional recognition to them.

This historic process culminated in the adoption of the Uluru Statement from the Heart in May 2017, which makes clear there is one proposal for recognition that has consensus support: the constitutional enshrinement of a First Nations Voice.

9 Reports

Since 2010, no fewer than 9 reports have considered constitutional recognition of First Nations people.

In 2018, a Joint Select Committee concluded there was only one option for constitutional recognition that was viable: an Indigenous Voice to Parliament. The Committee said it must be designed first before a referendum. In 2020, the government started a co-design process. In January 2021, this process released an Interim Report for public consultation and is open for everyone to have their say.

94% of the Australian public

In 2020, 94% of the general community agreed it is important that Aboriginal and Torres Strait Islander people have a say in matters that affect them.

86% of the general community think it's important to establish a representative Indigenous body.

81% of the general community think it is important to protect that body within the constitution.

Source: Reconciliation Australia – 2020 Barometer

\$160 million government commitment

At the 2019 federal election, the Liberal party took a commitment to pursue constitutional recognition to the federal election. Including:

\$7.3 million to develop a proposal to take to a referendum

Budget allocation of \$160 million to hold a referendum, held 'once a model has been settled'.

This policy stated that more work was needed on "what model we take to a referendum and what a Voice to Parliament would be".

Uluru Statement from the Heart Supporter Kit – UluruStatement.org

0.3

Why we need your support

The Referendum Council recommended that a referendum be held as soon as practicable to enshrine a Voice to Parliament and commence the journey to Voice, Treaty and Truth. The Referendum Council was confident that the detail on a Voice would be worked out after a referendum supervised by the Australian parliament.

A 2018 parliamentary committee on the other hand recommended that there is more 'meat on the bones' of a Voice before can go to a referendum. Now, in 2021, the government's handpicked committee chosen to design the voice has released a report. It has asked the Australian people for their views. And following this report we believe there is plenty of information about what a Voice may look like and it is time for the government to put the Voice to the Australian people in a referendum.

The Minister of Indigenous Affairs Ken Wyatt banned consideration of Uluru through the Terms of Reference for the co-design groups. Minister Wyatt has sought to ignore First Nations and public support for constitutional enshrinement. The Interim Report avoids the issue by saying, incorrectly, that the line between Parliament and the Government is thin.

That's why we need you now!

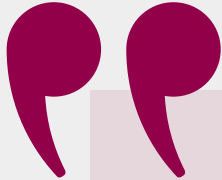
There is a real risk is that constitutional recognition will be separated from the idea of a First Nations Voice. This risks the government putting in place a legislative Voice and pursuing a symbolic form of constitutional recognition that does not accord with the wishes of First Nations people themselves.

The Morrison Government needs to hear NOW that constitutional enshrinement of a First Nations Voice has overwhelming support amongst the Australian voting public.

Uluru Statement from the Heart Supporter Kit – UluruStatement.org

0.4

This Supporters Kit gives you the tools to do that. It gives you practical actions you can take NOW.



In 1967 we were counted, in 2017 we seek to be heard. We leave base camp and start our trek across this vast country. We invite you to walk with us in a movement of the Australian people for a better future.

Uluru Statement from the Heart, 26 May 2017.



YOUR CALL TO ACTION

We walked together in 1967. We are asking to walk together again.

1. **Accept the invitation** at the official Uluru Dialogue website (UluruStatement.org) by signing your support.
2. **Use this toolkit** to start and lead conversations with your friends and family and work colleagues.
3. **Make your support known** - share your support through your networks, online with our social media (@UluruStatement, #UluruStatement) and let your Federal, State and Local Government representatives know you support a referendum on a constitutionally protected First Nations Voice. Visit UluruStatement.org for more information.

Uluru Statement from the Heart Supporter Kit – UluruStatement.org

0.5

What does constitutional enshrinement mean?

Constitutional enshrinement means constitutional protection of the existence and primary functions of the Voice. It **does not mean constitutional entrenchment of the detail of the Voice.**

This detail will be determined by the Australian Parliament through legislation and can be changed to adapt to future circumstances.

Constitutional enshrinement of a Voice **will create a new constitutional body that informs the legislative process.**

It is not a new constitutional “right” that increases the power of judges, or a “third chamber” of Parliament.

Why is constitutional enshrinement important?

Constitutional enshrinement of a First Nations Voice is **the only form of recognition that garnered the collective endorsement** of Aboriginal and Torres Strait Islander peoples themselves.

Only through a constitutional referendum will the Voice have the public legitimacy and authority it needs to make sure the government and Parliament will take its advice seriously.

Only constitutional enshrinement can **give the Voice the necessary stability and certainty** in its operation, free from the fear of abolition by one government to the next, while allowing for flexibility in design.

If the government doesn’t take leadership on this issue, we, the Australian people, will lose the opportunity to achieve the wider objectives of constitutional recognition of First Nations, and lose the opportunity to say that we are a nation committed to developing and sustaining a respectful relationship with First Nations peoples.

4. Go see your local MP. Use this toolkit and take your submission. Discuss your support for a constitutionally enshrined Voice to Parliament.
5. Tell people about your support for a Voice to Parliament, enshrined in the Constitution! Add your support to your website and email signature (see **Appendix A** of this toolkit)
6. Follow our socials and share our posts (**Twitter, Instagram, Facebook**)
7. Make a donation (**here**)

 **@UluruStatement**

 **@UluruStatement**

 **@UluruStatement**

Uluru Statement from the Heart Supporter Kit – UluruStatement.org

0.6

Appendix A – Tell people about your support for a Voice to Parliament, enshrined in the constitution after making a submission!

IT's TIME to demonstrate the strong public support that already exists for a Voice to Parliament enshrined in the Constitution and to make our collective voices heard.

On your website

Add the Uluru Statement logo to your website with the following text.

(Your organisation) accepts the invitation of the Uluru Statement from the Heart and supports a First Nations Voice to Parliament enshrined in the Australian Constitution. (insert hyperlink to official Uluru Dialogue website UluruStatement.org)



Download [here](#)

On your email signature

Consider inserting the following text along with one of our email banners below. *(I /or organisation name) accept the invitation of the Uluru Statement from the Heart and support a First Nations Voice to Parliament enshrined in the Australian Constitution.*

Choose a banner, copy and paste it to your email signature. Encourage our colleagues, friends and family to do the same.



Download [here](#)



Download [here](#)



Download [here](#)

On your social media

Below are some tiles you can use across your social media to show your support. Make sure you tag us **@UluruStatement**.

Profile pictures



Download [here](#)



Download [here](#)

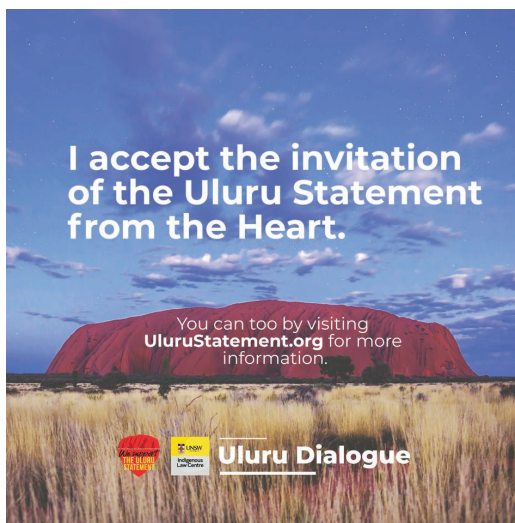


Download [here](#)

"I accept" posts



 Download **here**



 Download **here**



 [Download here](#)

"IT'S TIME" posts



 [Download here](#)

0.10



 [Download here](#)



 [Download here](#)



14.4. GLENELG SHIRE COUNCIL FINANCIAL REPORT DECEMBER 2022

Director: David Hol, Director Corporate Services

Executive Summary

The Financial Report is a key document in assuring responsible and responsive governance and decision making. This high-level report is provided to give Council the ability to monitor Glenelg Shire's financial performance.

Recommendation

That Council receives the Financial report for the period ending December 2022.

Background/Key Information:

The 2022/2023 Annual Budget was adopted by Council on 28 June 2022.

This report provides information on the current status of Council's financial position and performance and includes:

- Comprehensive Income Statement;
- Balance Sheet;
- Statement of Cash Flows; and
- Statement of Capital Works.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

This report is prepared monthly and is in addition to the requirements set out in the Local Government Act 2020 Division 2, Section 97 where Council is required to prepare a quarterly budget report to be submitted to Council.

In addition, the second quarterly report of a financial year must include a statement by the Chief Executive Officer as to whether a revised budget is, or may be, required. A statement is noted in the attachment.

Also, in accordance with Division 4, Section 101 Council is required to consider the following Financial Management Principles:

- (a) Revenue, expenses, assets, liabilities, investments and financial transactions must be managed in accordance with a Council's financial policies and strategic plans;
- (b) Financial risks must be monitored and managed prudently having regard to economic circumstances.

c. Consultation and/or communication processes implemented or proposed

The finance report is prepared monthly for Council and submitted to the Audit and Risk Committee quarterly.

d. Financial Implications and Collaboration

The resourcing of the preparation of the financial report and year-end audit of the financial statements is provided for in the adopted budget.

The financial report is a key document that is required to monitor Council's budget and financial result.

The Financial Report provides commentary on all material variances (Greater than 10% or \$500K) to the adopted 2022/2023 budget.

The information in this report contributes to various strategic planning documents under Council's strategic planning framework, including the Annual Budget, Financial Plan and Revenue and Rating Plan.

e. Governance Principles

The ongoing financial viability of the Council is to be ensured.

Attachment List

1. Financial Statements 2022 2023 - December 2022 FINAL [14.4.1 - 8 pages]



Glenelg Shire Council
2022/2023 Financial Report - YTD December

Glenelg Shire Council 2022/2023 Financial Report - YTD December

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Balance Sheet	2
Balance Sheet variance analysis	3
Statement of Cash Flows	4
Statement of Capital Works	5
CEO Statement	6

Comprehensive Income Statement

For the Period ended December 2022

	2022/2023 Adopted Budget	2022/2023 Forecast Budget	December 2022 YTD Forecast Budget	December 2022 YTD Actual
Income				
Rates and Charges	31,392,915	31,392,915	31,101,484	31,222,555
Statutory Fees and Fines	931,778	923,778	401,856	433,308
User Fees	3,152,858	3,160,858	1,377,471	1,627,798
Grants - Operating	14,783,620	16,835,547	5,807,012	5,859,175
Grants - Capital	8,248,469	18,479,513	12,230,137	11,287,257
Other Income	573,892	1,073,892	697,373	834,706
Contributions - Monetary	115,000	364,118	279,118	96,940
Net Gain (or Loss) on disposal of PP & E	1,200	1,200	73,928	19,954
Total Income	59,199,732	72,231,821	51,968,379	51,381,694
Expenses				
Employee Costs	(26,339,804)	(26,602,504)	(12,097,317)	(11,669,798)
Materials and Services	(18,825,769)	(21,571,759)	(10,574,957)	(9,769,725)
Borrowing Costs	(146,000)	(146,000)	(73,000)	(20)
Bad and Doubtful Debts	0	0	0	(75)
Other Expenses	(2,266,607)	(2,287,457)	(1,368,868)	(1,350,392)
Finance Costs - Leases	(19,500)	(19,500)	(9,750)	(9,803)
Depreciation and Amortisation	(12,751,800)	(12,751,800)	(6,375,896)	(6,371,804)
Internal Cost Allocations	1,210,577	1,210,577	665,348	213,704
Total Expenses	(59,138,903)	(62,168,443)	(29,834,440)	(28,957,911)
Surplus/(Deficit) for the year	60,829	10,063,378	22,133,939	22,423,783

Notes

Rates and Charges amount is based on amount invoiced during this financial year (1 Jul 2022 to 30 Jun 2023)

Variance notes are based on a materiality threshold where the variance is greater or less than \$500,000 and this variance to YTD forecast or Full year budget is greater or less than 10 percent.

Category	Variance Notes
User Fees	User Fees are tracking \$250k above YTD budget due to timing differences in Waste (\$185k) and Kinder (\$55k). Higher than expected User Fees have been received for Hall Hire (\$20k) and Aged (\$29k). This is offset by a decrease in Trawler Wharf/Local Port User Fee Income (\$11k) YTD and a timing variance in Other Lease Fee Income of (\$16k) and Booking Fee Income of (\$7k).
Grants - Capital	The YTD Capital Grants are \$942k below YTD Forecast Budget due to \$1M of Local Roads and Infrastructure (COVID stimulus) funding not yet received. This was partially offset by \$73k Grant funding received for Henty Creek Bridge.
Other Income	Other Income is tracking \$137k above YTD budget due to receiving higher than expected Income in the following areas: Reimbursement Income - Workcover (\$91k), Interest Income (\$20k) and Sales Income from the Visitor Centres (\$45k). Other Income is \$531k higher than Dec YTD 21/22.
Contributions - Monetary	Monetary Contributions received YTD are \$182k less than YTD Forecast budget due to timing. Funds have not yet been received for the following budget items: Great South Coast Cycling Tour (\$20k), Western Vic Grain Industry Supply Chain Study (\$125k) and Hooked on Portland Festival (\$40k).
Net Gain (or Loss) on disposal of Property Plant & Equipment	Net gain for the month is below the YTD budget as no light fleet has been disposed of YTD.
Borrowing Costs	YTD Borrowing costs are \$72k below YTD budget. This large variance is due to the deferral of the need to draw down on Loans.
Internal Cost Allocations	Allocations for vehicle and machinery costs will increase in H2 as works programs get underway. Gravel allocations fluctuate each year depending on materials required for the capital works program. Internal Cost Allocation is \$9k higher than Dec YTD 21/22.

Balance Sheet

For the Period ended December 2022

	2022/2023 Adopted Budget	2022/2023 Forecast Budget	December 2022 YTD Actual
Assets			
Current assets			
Cash and Cash Equivalents	4,696,000	4,412,327	5,537,088
Trade and other receivables	3,204,000	3,204,000	23,896,649
Inventories	200,000	200,000	189,963
Non-current assets classified as held for sale	0	0	0
Other Assets	400,000	400,000	0
Total current assets	8,500,000	8,216,327	29,623,699
Non-current assets			
Non current Trade and other receivables	10,000	10,000	0
Property, infrastructure, plant and equipment	460,044,000	472,081,035	458,589,493
Right of Use Assets	249,000	249,000	334,997
Total non-current assets	460,303,000	472,340,035	458,924,490
Total assets	468,803,000	480,556,362	488,548,189
Liabilities			
Current liabilities			
Trade and other payables	2,100,000	2,100,000	2,679,567
Trust funds and deposits	1,000,000	1,000,000	1,752,447
Provisions	5,052,000	5,052,000	4,276,262
Interest-bearing loans and borrowings	1,147,000	771,446	265,866
Lease Liabilities - Current	155,000	155,000	86,722
Total Current liabilities	9,454,000	9,078,446	9,060,864
Non-current liabilities			
Non Current Provisions	8,291,000	8,291,000	9,965,762
Non Current Interest-bearing loans and borrowings	13,532,000	6,906,892	710,500
Lease Liabilities - Non Current	93,000	93,000	263,629
Total Non-current liabilities	21,915,000	15,290,892	10,939,891
Total liabilities	31,369,000	24,369,338	20,000,755
Net assets	437,434,000	456,187,024	468,547,434
Equity			
Accumulated surplus	143,040,171	125,173,362	125,173,368
Reserves	293,875,509	320,492,793	320,492,793
Reserves - Restricted Cash	457,491	457,491	457,491
Operating Surplus (Deficit)	60,829	10,063,378	22,423,783
Total Equity	437,434,000	456,187,024	468,547,434

Balance Sheet variance analysis

For the Period ended December 2022

Category	Variance Notes
Cash and cash equivalents	Cash and Cash Equivalents decreased by \$3.3M. Rates received of \$1.1M and Grant Income of \$707k was offset by Capital Works expenditure of \$1M, Salary Expenses of \$1.8M and Materials & Services of \$2.1M.
Trade and other receivables	Trade and other receivables at EOM have decreased by \$1.2M to \$23.9M for the period ending 31 December 2022. The value of Rates debtors at EOM is \$20.9M and the Fire Services Debtors \$2M. As each Rate instalment falls due, the value of Rates Debtors will decrease. Sundry Debtors at EOM total \$247k while Other Debtors make up \$674k.
Non current assets held for sale	There are no identified non current assets held for sale.
Right of use assets	No new Lease Agreements were entered into in December.
Trade and other payables	Trade and Other payables has decreased by \$322k for December 2022. Trade and Other Payables of \$2.6M is made up of Fire Services Levy (\$2.2M) and Rates Overpayments of (\$390k).
Provisions	Current and Non Current provisions are made up of Employee, Landfill and Gravel Pit Provisions. YTD, Provisions have decreased by approx \$1.29M due to payments of Annual Leave, Long Service Leave and Sick Leave Gratuity paid from these amounts.
Interest Bearing Loans and borrowings	No change in Loans outstanding of \$1.2M at 30 June 2022. Borrowings are fully offset by cash balances resulting in \$0 interest paid YTD. Council have budgeted new borrowings of \$7M in the 2022/23 Budget which is not expected to be used prior to 30 June 2023. However Council will utilise an approved loan facility of approximately \$7M with the NAB from the Budget 21/22 (this amount was not draw down in 21/22 due to surplus cash from grants paid in advance).
Reserves	Reserves have increased as a result of a revaluation of land and buildings from an independent valuation in 21/22. Also included is a reserve for Public Open Space levies collected of \$457k to be spent at a future date.

Statement of Cash Flows

For the Period ended December 2022

	2022/2023 Adopted Budget	2022/2023 Forecast Budget	December 2022 YTD Actual
	Inflow (Outflow)	Inflow (Outflow)	Inflow (Outflow)
Cash flows from operating activities			
Rates, Charges & User Fees (including kerbside collection)	34,546,000	34,553,773	12,581,078
Grants	23,032,000	21,822,361	6,542,665
Statutory Fees and Fines	932,000	923,778	433,308
Contributions - monetary	115,000	364,118	96,940
Interest received	100,000	150,000	94,553
Other receipts	475,000	923,892	740,153
Employee costs	(26,340,000)	(26,602,504)	(12,956,583)
Materials and services	(18,826,000)	(23,245,017)	(11,612,010)
Short term, low value and variable lease payments	(20,000)	(50,000)	(57,945)
Trust funds and deposits repaid	0	0	(676,147)
Other payments	(2,432,000)	(2,287,457)	(1,350,392)
Net cash provided by/(used in) operating activities	11,582,000	6,552,944	(6,164,379)
Cash flows from investing activities			
Payments for property, infrastructure, plant and equipment	(10,920,000)	(11,932,035)	(1,623,896)
Payments for carry forward property, infrastructure, plant & equipment	(17,332,000)	(12,960,289)	(3,149,087)
Proceeds from sale of property, infrastructure, plant and equipment	0	1,200	19,954
Proceeds from investments	0	0	0
Loans and advances made	0	0	0
Payments of loans and advances	0	0	0
Net cash provided by/(used in) investing activities	(28,252,000)	(24,891,124)	(4,753,029)
Cash flows from financing activities			
Finance costs	0	(19,500)	0
Proceeds from borrowings	7,000,000	7,000,000	0
Repayment of borrowings	(590,000)	(590,000)	0
Interest paid - Lease liabilities	(21,000)	(17,570)	(9,803)
Repayment of lease liabilities	(183,000)	(193,844)	(107,122)
Net cash provided by/(used in) financing activities	6,206,000	6,179,086	(116,925)
Net increase (decrease) in cash and cash equivalents	(10,463,000)	(12,159,094)	(11,034,334)
Cash and cash equivalents at the beginning of the financial year	15,159,000	16,571,421	16,571,421
Cash and cash equivalents	4,696,000	4,412,327	5,537,088

Statement of Capital Works
For the Period ended December 2022

	2022/2023 Adopted Budget	2022/2023 Forecast Budget	December 2022 YTD Actual
Property			
Buildings	5,375,000	12,252,675	330,923
Land	0	0	3,759
Total Property	5,375,000	12,252,675	334,682
Plant and Equipment			
Heritage plant and equipment	10,000	20,000	1,500
IT Equipment	0	0	0
Plant, machinery and equipment	1,135,000	2,049,250	1,365,186
Fixtures, fittings and furniture	10,000	10,000	0
Library Resources	95,000	95,000	45,171
Total Plant and Equipment	1,250,000	2,174,250	1,411,857
Infrastructure			
Roads	2,905,000	7,820,800	355,013
Bridges	200,000	1,199,926	218,239
Footpaths and Street Furniture	50,000	59,814	0
Drainage	50,000	2,597,258	15,230
Recreational, Leisure and Community facilities	200,000	5,751,901	1,040,925
Waste Management	280,000	290,000	135,916
Parks, Open Space and Streetscapes	260,000	1,457,552	162,967
Aerodrome	50,000	430,000	3,069
Off Street Carparks	50,000	50,000	0
Other Infrastructure - LRCI	0	5,350,117	1,095,085
Other Infrastructure - Other	250,000	749,749	0
Total Infrastructure	4,295,000	25,757,117	3,026,444
Total Capital Works Expenditure	10,920,000	40,184,042	4,772,983
Capital Works represented by:			
New asset expenditure	5,350,000	31,585,134	2,319,667
Asset renewal expenditure	5,310,000	8,250,034	2,205,121
Asset upgrade expenditure	260,000	348,874	248,195
Total Capital Works	10,920,000	40,184,042	4,772,983

Notes

The Forecast Budget 2022/2023 has not been adjusted for expenditure that will be carried forward to future financial years as a result of phasing of some major projects.

Category	Variance Notes
Property	The Forecast budget for "Property" Capital Works has increased to \$12.25M due to carried forward works from 21/22 of \$6.8M. \$6.1M of the carried forward works are for the Foreshore Multipurpose Building which has incurred \$179k of expenditure YTD for design work.
Plant and equipment	The Forecast Budget for "Plant and Equipment" Capital Works has increased by \$924k to \$2.17M. This is mostly due to delays in purchasing new light and heavy vehicles that were budgeted for in 21/22. YTD \$1.4M has been spent made up of the following: \$844k on Heavy Fleet (2 new trucks) and \$512k on Light Fleet. YTD \$45k has also been spent on Library Resources.
Infrastructure	The Forecast Budget for "Infrastructure" Capital Works has increased by \$21.5M to \$25.7M. This includes new projects such as the Airport Hangar Improvement project of \$630k, and fully funded projects such as Local Freight Roads \$4.8M and Portland North Precinct \$2.5M. It also includes carry forwards of \$12.5M from 21/22 such as Alexandra Park for \$4.4M, Bridge Replacement works \$1M, Bridgwater Bay \$1.1M, and Local Roads and Infrastructure Projects (Covid Stimulus LRCI program) of \$5.3M. YTD \$3M has been spent on Infrastructure with some of the major projects including Alexandra Park Masterplan (\$896k), Portland Foreshore Ancillary Works (\$684k), Bridge Replacements Program (\$218k), Island Park Lighting (\$157k) and Heywood Rec Reserve Lighting (\$173k).

CEO Statement

In my opinion, the quarterly budget report presents fairly the financial transactions and budget of Glenelg Shire Council for the quarter ended 31 December 2022. I am not aware of any circumstances that requires the Adopted budget to be revised.

Paul Phelan
CEO, Glenelg Shire Council

14.5. COUNCILLORS QUARTERLY EXPENDITURE REPORT

Director: Paul Phelan, Chief Executive Officer

Executive Summary

This Quarterly Expenditure Report is presented to the Council Meeting on a quarterly basis in the interests of accountability and transparency.

This report is for Councillor expenditure that has been incurred during the period 1 October 2022 to 31 December 2022.

Recommendation

That Council receives the Councillors quarterly expenditure report for the period 1 October 2022 to 31 December 2022.

Background/Key Information:

In accordance with Section 40 of the *Local Government Act 2020*:

- (1) A Council must reimburse a Councillor or a member of a delegated committee for out-of-pocket expenses which the Council is satisfied-
 - (a) Are bona fide expenses; and
 - (b) Have been reasonably incurred in the performance of the role of Councillor or member of a delegated committee; and
 - (c) Are reasonably necessary for the Councillor or member of a delegated committee to perform that role.

Regulation 14 (db) of the *Local Government (Planning and Reporting) Regulations 2014* requires that expenses, including reimbursements of expenses for each Councillor and member of a Council Committee paid by the Council are to be categorised separately as:

- Travel expenses (Includes remote allowance) – TR;
- Car mileage expenses – CM;
- Childcare expenses – CC;
- Information and communication technology – IC; and
- Conference and training expenses – CT.

Under Section 41(2)(d) of the *Local Government Act 2020*, Council must have particular regard to expenses incurred by a Councillor who is a carer in a care relationship within the meaning of section 4 of the *Carers Recognition Act 2012*. This is a new requirement under the *Local Government Act 2020*, therefore is not addressed in *Regulation 10e, f & g* of the *Local Government (Planning and Reporting) Regulations 2020*.

Documentation is required to provide evidence of the expense specifying the business purpose for each claim.

Councillors are also required to maintain a logbook with each entry providing a clear description of the business purpose.

Following is a table of expenditure that has been incurred by Councillors during the period 1 October 2022 to 31 December 2022.

Note: In some instances, journaling of some items may not necessarily appear in the month that they were expended and will appear in the next quarterly report.

Councillor	TR	CM	CC	IC	CT	Carer	Grand Total	YTD
Carr								\$559
Hawker								\$426
Martin	\$3033						\$3033	\$3729
Rank	\$2142			\$234	\$1970		\$4346	\$7023
Smith	\$545						\$ 545	\$2992
Stephens	\$3239	\$3271		\$233			\$6743	\$10125
Wilson		\$174		\$764			\$938	\$1330
Grand Total	\$8959	\$3445		\$1231	\$1970		\$15605	
YTD	\$15040	\$3486		\$4684	\$2974		\$26184	\$26184

In accordance with Section 39 of the *Local Government Act 2020*, Councillors are entitled to receive an allowance whilst performing their duty as a Councillor. The Mayor or a Deputy Mayor are also entitled to receive a higher allowance with the Mayor being provided full use of a vehicle.

Following is a table of Councillor allowances paid for the period 1 October 2022 to 31 December 2022:

Councillor	Amount	YTD
Carr	\$5588	\$12805
Hawker	\$7611	\$15117
Martin	\$24392	\$36451
Rank	\$4045	\$28163
Smith	\$12466	\$19972
Stephens	\$7611	\$15117
Wilson	\$5384	\$11389
Grand Total	\$67097	
YTD	\$139014	\$139014

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

- *Local Government Act 2020* – Section 39 Allowances for Mayors, Deputy Mayors and Councillors.
- *Local Government Act 2020* – Section 40 Reimbursement of Expenses of Councillors and members of a delegated committee.
- Regulation 10e, f & g of the *Local Government (Planning and Reporting Regulations 2020)*.
- *Carers Recognition Act 2012*.

c. Consultation and/or communication processes implemented or proposed

Councillor Expenditure is reported on a quarterly basis to the Council Meeting and Audit and Risk Committee and the quarterly expenditure is accessible via Council's website.

Councillor Expenditure is also reported annually in Council's Annual Report.

d. Financial Implications and Collaboration

Councillor Allowances and Councillor Expenditure are accounted for in the 2022-2023 Annual Council Budget.

e. Governance Principles

Council decisions are to be made and actions taken in accordance with the relevant law.

The transparency of Council decisions, actions and information is to be ensured.

The ongoing financial viability of the Council is to be ensured.

Attachment List

Nil

14.6. COUNCILLOR CONDUCT HEARING OUTCOME

Director: David Hol, Director Corporate Services

Executive Summary

This report provides Council with the determination and statement of reasons received by the Arbiter appointed to consider an allegation of misconduct by a Councillor in accordance with section 147(4) of the *Local Government Act 2020*.

Recommendation

That Council:

- 1. Receive the Arbiter determination and statement of reasons on this matter; and**
- 2. That the Arbiter determination and statement of reasons be recorded in the minutes in accordance with the requirements of section 147(4) of the *Local Government Act 2020*.**

Background/Key Information:

An application from Cr Gilbert Wilson for an internal arbitration process to make a finding of misconduct against Cr Scott Martin was lodged on the 15 September 2022 relating to comments posted on social media.

The application has been examined by the Principal Councillor Conduct Registrar in accordance with section 144 of the *Local Government Act 2020* and an Arbiter was appointed to hear the matter.

A directions hearing was undertaken via Microsoft Teams on the 16 November 2022 and the Arbitration Hearing conducted on the 12 December 2022 in Portland.

A copy of the Arbiters determination and statement of reasons is provided as an attachment to this report.

a. Council Plan and Policy Linkage

Our Voice and Action - A highly engaged and capable local government, leading Glenelg to ensure the needs and aspirations of our community are realised.

b. Legislative, Legal and Risk Management Considerations

This report has been prepared in accordance with Division 6 of the *Local Government Act 2020* and the Glenelg Shire Council Councillor Code of Conduct adopted 23 February 2021

c. Consultation and/or communication processes implemented or proposed

Undertaken in accordance with the provisions of the *Local Government Act 2020* relating to Councillor conduct matters.

d. Financial Implications and Collaboration

Costs associated with Councillor Conduct matters are allocated to the operational budget for Corporate Governance.

e. Governance Principles

Council decisions are to be made and actions taken in accordance with the relevant law.

Attachment List

1. Arbiter determination IAP 2022-27 Wilson & Martin Glenelg Shire Council
[14.6.1 - 7 pages]

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INTERNAL ARBITRATION IAP 2022-27

Applicant: Councillor Gilbert Wilson
Respondent: Councillor Scott Martin
Council: Glenelg Shire Council
Date of Hearing: 12 December 2022
Arbiter: Louise Hill

DETERMINATION

The Arbiter has determined that there has been a breach of the prescribed standards of conduct by the Respondent, Cr Martin in that he failed to show respect to the Applicant and therefore a finding of misconduct is made.

The Arbiter directs that the Respondent make a written apology as outlined in the statement of reasons for decision.

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STATEMENT OF REASONS FOR DECISION**Application**

The Application from Councillor Gilbert Wilson alleges that Councillor Scott Martin has breached the following prescribed standards of conduct set out in Schedule 1 to the Local Government (Governance and Integrity) Regulations 2020.

1. Treatment of Others

A Councillor must, in performing the role of a Councillor, treat other Councillors, members of Council staff, the municipal community and members of the public with dignity, fairness, objectivity, courtesy and respect, including by ensuring that the Councillor –

(d) in considering the diversity of interests and needs of the municipal community, treats all persons with respect and has due regard for their opinions, beliefs, rights and responsibilities.

2. Performing the role of Councillor

A Councillor must, in performing the role of a Councillor, do everything reasonably necessary to ensure that the Councillor performs the role of a Councillor effectively and responsibly, including by ensuring that the Councillor -

(d) represents the interests of the municipal community in performing the role of a Councillor by considering and being responsive to the diversity of interests and needs of the municipal community.

3. Compliance with good governance measures

A Councillor in performing the role of a Councillor, to ensure the good governance of the Council, must diligently and properly comply with the following:

(a) any policy, practice or protocol developed and implemented by the Chief Executive Officer in accordance with Section 46 of the Act for managing interactions between members of the Council staff and Councillors

4. Councillor must not discredit or mislead Council or public

(1) In performing the role of a Councillor, a Councillor must ensure that their behaviour does not bring discredit upon the Council.

(2) In performing the role of a Councillor, a Councillor must not deliberately mislead the Council or the public about any matter related to the performance of their public duties.

In support of his application, Cr Wilson cites comments made by Cr Martin on the Portland Bay Beacon Facebook page on 12 July 2022. The Facebook entry is lengthy and refers to decisions by the Glenelg Shire Council on changes to the rating system.

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Cr Wilson has highlighted ten excerpts of the Portland Bay Beacon article from Facebook as evidence of breaches of the standards as shown in the table at Attachment 1. Cr Wilson asserts that Cr Martin has made false statements and accusations against him, and his application provides supporting statements as to why each of the excerpts demonstrate breaches of the standards by Cr Martin.

In summary, Cr Wilson considers that Cr Martin has not:

- treated Cr Wilson with dignity, fairness, objectivity, courtesy and respect by making a comment on attending council meetings in a bathrobe and by naming him and other councillors for voting against the decision to change to the Council's rating process;
- ensured that he responds to the diverse needs of the community, given that some members of the community were adversely affected by the Council's decision on rates;
- complied with good governance for managing the interactions between Councillors by making comment on the way some Councillors voted on the rating decision.

Cr Wilson also alleges breaches of the standards in that he considers that Cr Martin has discredited the Council and misled the public in relation to the rating decision.

A directions hearing was held via Microsoft Teams on 16 November 2022.

Response

Cr Martin as respondent, provided his response on 1 December 2022 together with a letter from the Victorian Ombudsman of 5 October 2022 to the President of the Victorian Farmers Federation responding to a complaint about the Glenelg Shire Council's decision on the rating system.

Cr Martin has acknowledged that he was the author of the Facebook entry for the Portland Bay Beacon, signed by him as Councillor and Deputy Mayor. He considers that the article constitutes robust political debate and that his comments are within the bounds of a Councillor's role and are statements of fact and delivered in a respectful manner.

Cr Martin states that he did not specifically name Cr Wilson as wearing a bathrobe to Council meetings.

A hearing was conducted in person at the offices of Brewster Walsh and Associates in Portland on 12 December 2022. In attendance were Mr David Hol, Council Conduct Officer, Cr Wilson and Cr Martin and Arbiter Louise Hill.

Cr Wilson stated that Cr Martin was attacking him and other Councillors and that Cr Martin should not name them negatively. He was overseas and returned from holiday to be made aware of the Facebook post.

Cr Wilson stated that although the article did not name him as wearing a bathrobe, people who know him believed that it was him who was referred to. He had been ill and was required to attend a confidential Council meeting via Zoom. To get a good digital connection, he had to go to his garage and wore his bathrobe, as it was very cold.

Cr Wilson stated that he found it distasteful and abhorrent that his views on the rating system were about getting votes. Cr Martin's comments about the Council being virtually bankrupt and having to close services was creating fear in the community. He also stated that he considered the article to be "divisive and anti-team" about the cohesiveness of the Councillors. He also questioned whether publishing the article was in breach of the Council's media policy, as it was not authorised or made by the Mayor.

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Cr Martin's response is that he had asked the Mayor for permission to make the comments. He considers that the comments in the article are part of "robust political debate" and he was "highlighting the Councillors' decisions". He considers that he is representing the interests of the community who he says wants to hear from all Councillors.

In relation to the bathrobe comment, Cr Martin does not consider this to be disrespectful and conversely that it is disrespectful to attend Council meetings in a bathrobe.

Cr Wilson is keen to have higher standards of trust and confidence in Council and Councillors and that community trust is lost if media releases name councillors as it belittles them. Council decisions should be communicated in a positive way.

Findings and Reasoning

Considerations of findings of misconduct do not extend to the quality or correctness of the decisions made by Council. Central to the Facebook article and the application is the decision taken by the Glenelg Shire Council on the rating system and the associated decision on the Council budget. The Victorian Ombudsman's letter provided as evidence by Cr Martin deals with the rating system and decisions by the current and previous Councils and is therefore not relevant as to whether Cr Martin has breached the Standards of Conduct.

Councillors' voting on specific decisions are recorded by the Council and publicly available. It is therefore within the limits of fairness that Cr Martin has highlighted how Councillors have voted on the rating system recently or historically. Stating the case for change is part of this debate and is not considered to be misleading or not considering the diverse needs of the community. However, it does seem politically motivated given that the Council's decision for rating system change was already made and was not still under consideration by Council.

All Councillors are entitled to vote as they consider is in the best interests of their community. Public discussion of issues and which way Councillors voted is not bringing discredit on the Council nor misleading the public.

The statement about the bathrobe "...one Councillor has been rocking up to Council meetings in a bathrobe of late." is highly personal. Cr Wilson is not directly named but as the article only names two other current Councillors in respect of the rating system decision, it can be reasonably deduced that it is one of them. The statement is without context as it implies multiple meetings and is silent whether these are in person or virtual meetings. It is designed to belittle, embarrass or possibly humiliate a Councillor by implying that the Councillor is not putting sufficient importance on the manner of attending Council meetings.

Cr Martin stated that this is "all part of the theatre of politics." I disagree. Robust political debate is about the contest of ideas, options and impact of Council decisions. Personal attacks are not consistent with the Standard of Conduct 1(d): specifically "A Councillor must...treat other Councillors with dignity, fairness, objectivity, courtesy and respect....."

I therefore make a finding of misconduct by Cr Martin in relation to a breach of Standard of Conduct 1(d).

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Sanction

Cr Martin is required to provide an apology on Portland Bay Beacon Facebook page within 14 days of the tabling of this report to Council and to provide a personal written apology to Cr Wilson acknowledging the personal negative impact on him and to provide assurances to Cr Wilson that he will work as Mayor and Councillor to build positive constructive relationships with him and between all Councillors throughout his term(s) on Council.

It is regrettable that the arbitration process is being used in this manner and that Councillors are reluctant to discuss their differences and concerns directly with one another. The community expects their elected representatives to uphold high standards of behaviour and without this, our trust and confidence in them is diminished unnecessarily.

Louise Hill
Arbiter

9 January 2023

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Attachment 1

Excerpt from Facebook page Portland Bay Beacon	Standard
<i>It is disappointing to see all councillors didn't take the opportunity to provide a clear voice to ratepayers on how the rates system works although I wasn't surprised as one councillor has been rocking up to meetings in a bathrobe of late.</i>	1(d), 2(d), 3(a), 4(1), 4(2)
<i>There is a fantastic groundswell of residents that want to see change but have been let down and given the wrong information to make that change possible because of some people's own self-interest.</i>	4(1), 4(2)
<i>There is a clear and precise system that needs to be adhered to that all councillors knew. There was a period where all councillors had direct input into the budget and we all signed off on it. It then went out to community consultation for anyone to have direct input and there was no community feedback to add or take out anything from the budget. It also went through an audit committee unchanged for which Cr Stephens and Cr Carr and the Mayor sit on, they gave it their tick of approval a second time.</i>	1(d), 2(d), 3(a), 4(1), 4(2)
<i>Last year the VFF framed the start of this journey as a farming issue and advocated for no change. I voted for that not to happen as it is a shire-wide issue and a small 5% change last year would have meant roughly 10% increase or none this year instead of what we faced. Cr Wilson and Cr Stephens brought the motion last year supported by Cr Carr that ultimately see a large change this year and the problem was pushed down the road like it has been since 2016.</i>	1(d), 2(d), 3(a), 4(1), 4(2)
<i>Instead on the night, there were 3 councillors that explained what and why it was happening and three that took advantage to win votes at the expense of the correct information getting out and providing the drive for meaningful change at the state government level. In fact, since the rebate system was introduced, around \$30 million of the taxpayer's money was given as discounts to the Primary Industries in the form of these rebates. An industry that contains multinational companies that are beholden to shareholders. In-effect,(sic) our rate money has been given as dividends to shareholders instead of invested in the community which disgusts me no end.</i>	1(d), 2(d), 3(a), 4(1), 4(2)
<i>That is no more evident than what happened in 2010 when a rebate was introduced by then Cr Northcote and Cr Stephens and caused all this problem (Cr Wilson was also on the council at the time). Good governance was not adhered to and no one seems to know why they did it. That decision rests solely with these councillors, yet this council must pick up the pieces.</i>	1(d), 2(d), 3(a), 4(1), 4(2)
<i>In 2016 with the change and implementation of the fair go rates system the writing was on the wall that if a change wasn't made back to a differential system the council would become the equivalent of bankrupt. What that would look like is a severe reduction in all services. Instead, the proverbial can was kicked down the road until now and astonishingly but not surprisingly, was attempted to be kicked down the road again. The decision made by Councillors Carr, Wilson and Stephens would have led to financial issues if allowed to happen. If that had been allowed to happen what that would most likely have looked like is a severe reduction in services and all residents paying the same, like a neighbouring shire, not to mention no more councillors for breaking the legislation.</i>	1(d), 2(d), 3(a), 4(1), 4(2)
<i>There are two points of concern that I would have pointed out on the night.... will no longer be a possibility.</i>	1(d), 2(d), 3(a), 4(1), 4(2)

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<i>So where do I go from here as dwelling on what has been done is not productive</i>	1(d), 2(d), 3(a), 4(1), 4(2)
<i>Part of being a good councillor is that you must make tough decisions at times unpopular decisions. Not to be fearful of the tough decisions because you think more about that next election that the next generation.</i>	1(d), 2(d), 3(a), 4(1), 4(2)

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14.7. AMENDMENT C108GELG – FITZROY DARLOT REGIONAL FLOOD INVESTIGATION IMPLEMENTATION

Director: David Hol, Director Corporate Services

Executive Summary

Amendment C108gelg (the amendment) received authorisation from the Minister for Planning to prepare and exhibit the amendment. Public exhibition has taken place with an Independent Planning Panel (Panel) appointed to consider the submissions. The Panel recommends that Council adopt the amendment as exhibited. This report recommends that Council proceeds by adopting the amendment and submitting it to the Minister for Planning for approval.

Recommendation

That Council:

- 1. Adopts Amendment C108gelg to the Glenelg Planning Scheme pursuant to Section 29 of the *Planning and Environment Act 1987*; and**
- 2. Submits Amendment C108gelg as adopted, to the Minister for Planning for approval pursuant to Section 31 of the *Planning and Environment Act 1987*.**

Background/Key Information:

The *Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study 2017* (Study) was prepared for the State Government. The investigation was completed in 2017 with a subsequent action for Council to complete the implementation into the planning scheme. The amendment seeks to implement the findings of the Study into the Glenelg Planning Scheme (the planning scheme).

The summary report from the Study is proposed to be inserted as a Background Document into the planning scheme. The amendment documents and maps have been prepared, including an updated version of the incorporated document *Glenelg Shire Local Floodplain Development Plan*. Delineation of the flood plain mapping has been completed with support from the Glenelg Hopkins Catchment Management Authority to inform the Floodway Overlay (FO) and Land Subject to Inundation Overlay (LSIO) mapping proposed to be inserted into the planning scheme.

At the 24 May 2022 Council Meeting Council resolved to seek authorisation from the Minister for Planning to prepare and exhibit the amendment. Authorisation to prepare the amendment was granted under delegation from the Minister for Planning on 7 June 2022 subject to conditions being fulfilled.

Exhibition of the amendment C108gelg was held from 7 July 2022 to 8 August 2022 with six (6) submissions being received, including four (4) objections and two (2) in support of the amendment.

The Panel hearing was held on 29 November 2022. The Panel has reviewed the amendment and the submissions received. The Panel Report was received 5 January

2023 (refer to Attachment 1) and recommends that the amendment be adopted as exhibited.

Refer to Attachment 2 for a copy of the complete amendment package recommended for adoption by Council.

a. Council Plan and Policy Linkage

The amendment is consistent with the Council Plan objectives to implement the actions from the Regional Catchment Strategy.

b. Legislative, Legal and Risk Management Considerations

A planning scheme amendment is required to amend the Floodway and Land Subject to Inundation Overlays in the planning scheme. The amendment is in support of the Planning Policy Framework and the Municipal Planning Strategy for floodplains.

For the flood study to have statutory effect it is required to be included in the planning scheme as a Background document by way of a planning scheme amendment. This process is set out in the *Planning and Environment Act 1987*.

c. Consultation and/or communication processes implemented or proposed

The amendment required formal exhibition under the *Planning and Environment Act 1987*. This has been done in the prescribed manner by the Act.

Notification of individual landowners and occupiers has occurred to notify of the proposed changes to affected properties. Newspaper and website advertising has also occurred. The complete amendment package was available for viewing at the Portland and Heywood customer service centres.

All the submission received were referred to the Panel, which allowed the submitters the opportunity to be heard in an independent forum. The Panel has provided a recommendation to Council to proceed with the amendment as exhibited.

d. Financial Implications and Collaboration

Council has received funding through the Risk and Resilience Grants Program 2021 to assist with the potential costs involved in undertaking the planning scheme amendment. Funding under the Risk and Resilience Grants Program 2021 included \$40,000.

The project expenditure to date included the necessary mapping work.

The Panel and approval costs are to be covered by the operational budget and funding received.

e. Governance Principles

Local, Regional, State and National plans and policies are to be considered in strategic planning and decision making.

Attachment List

1. Glenelg C 108 gelg Panel Report [**14.7.1** - 23 pages]
2. Amendment package C108gelg [**14.7.2** - 74 pages]

**Planning
Panels
Victoria**

**Glenelg Planning Scheme Amendment C108gelg
Fitzroy River, Darlot Creek, and Heywood Regional Floodplain
Mapping Study (2017)**

Panel Report

Planning and Environment Act 1987

5 January 2023



How will this report be used?

This is a brief description of how this report will be used for the benefit of people unfamiliar with the planning system. If you have concerns about a specific issue you should seek independent advice.

The planning authority must consider this report before deciding whether or not to adopt the Amendment.
[section 27(1) of the *Planning and Environment Act 1987* (the PE Act)]

For the Amendment to proceed, it must be adopted by the planning authority and then sent to the Minister for Planning for approval.

The planning authority is not obliged to follow the recommendations of the Panel, but it must give its reasons if it does not follow the recommendations. [section 31 (1) of the PE Act, and section 9 of the *Planning and Environment Regulations 2015*]

If approved by the Minister for Planning a formal change will be made to the planning scheme. Notice of approval of the Amendment will be published in the Government Gazette. [section 37 of the PE Act]

Planning Panels Victoria acknowledges the Wurundjeri Woi Wurrung People as the traditional custodians of the land on which our office is located. We pay our respects to their Elders past and present.

Planning and Environment Act 1987

Panel Report pursuant to section 25 of the PE Act

Glenelg Planning Scheme Amendment C108gelg

Fitzroy River, Darlot Creek, and Heywood Regional Floodplain Mapping Study (2017)

5 January 2023



Geoff Underwood, Chair

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Glossary and abbreviations

2017 study	<i>Fitzroy River, Darlot Creek, and Heywood Regional Floodplain Mapping Study (2017)</i>
AEP	Annual Exceedance Probability
Council	Glenelg Shire Council
DELWP	Department of Environment, Land, Water and Planning
FO	Floodway Overlay
GHCMA	Glenelg Hopkins Catchment Management Authority
LFDP	Local Floodplain Development Plan
LSIO	Land Subject to Inundation Overlay
PE Act	<i>Planning and Environment Act 1987</i>
Planning Scheme	Glenelg Planning Scheme

Overview

Amendment summary	
The Amendment	Glenelg Planning Scheme Amendment C108gelg
Common name	Fitzroy River, Darlot Creek, and Heywood Regional Floodplain Mapping Study (2017)
Brief description	The Amendment implements the Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study (2017) by inserting high confidence mapping into the Glenelg Planning Scheme by way of the Floodway Overlay (FO) and Land Subject to Inundation Overlay (LSIO). Consequential changes are made to administrative provisions of the Planning Scheme.
Subject land	The Amendment applies to the Fitzroy River floodplain, including within the town of Heywood, from the edge of the Cobboonee National Park to the river mouth at Tyrendarra and the Darlot Creek floodplain from the downstream end of Lake Condah to its confluence with the Fitzroy River.
The Proponent	The Amendment has been made at the request of Glenelg Shire Council and the Glenelg Hopkins Catchment Management Authority.
Planning Authority	Glenelg Shire Council
Authorisation	The Amendment was authorised under delegation on 7 June 2022
Exhibition	7 July 2022 to 8 August 2022 with six submissions received. Two submissions were received in support or not requiring changes to the Amendment documents. Four submissions object to an aspect or require changes to the Amendment documents
Submissions	Number of Submissions: 6 Opposed: 4 <ul style="list-style-type: none"> - Allison & David Long, 16-18 Cameron Street, Heywood - Michael & Rita Handreck, 3 Cameron Street, Heywood - Mick Swan, 13 Cameron Street, Heywood - Hon. Gayle Tierney MP, 1 Yarra Street, Geelong - Kevin Hughes, 11 Cameron Street, Heywood - Peter Robertson, Glenelg Hopkins Catchment Management Authority, 79 French Street, Hamilton

Panel process	
The Panel	Geoff Underwood, Panel Chair
Directions Hearing	On-line at 10.00am Wednesday, 2 November 2022
Panel Hearing	At the Glenelg Shire Customer Service Centre, Heywood at 10.00am, Tuesday 29 November 2022
Site inspections	An unaccompanied inspection on Monday 28 November 2022. An accompanied inspection followed the Hearing at 2.00pm on Tuesday 29 November 2022
Parties to the Hearing	Glenelg Shire represented by: <ul style="list-style-type: none"> - Matt Berry, Regulatory Services Manager - Jacob Clements, Strategic Planner who called evidence in hydrology from David Tetley of Catchment Simulation Solutions The Glenelg Hopkins Catchment Management Authority represented by: <ul style="list-style-type: none"> - Graeme Jeffrey, Senior Statutory Planner - Tatjana Linke Allison & David Long Mike Swan
Citation	Glenelg Planning Scheme PSA Amendment C108gelg [2022] PPV
Date of this report	5 January 2023

Executive summary

Glenelg Planning Scheme Amendment C108gelg (the Amendment) proposes to apply floodway planning controls over a large geographical area of the municipality in response to a 2017 study into flood events that have occurred across the catchment of the Fitzroy River and the Darlot Creek. The Amendment proposes the first application of overlay controls to control development of land which modelling has shown will be subject to inundation in the event of a 1% annual exceedance probability (1% AEP).

Key issues raised in submissions included:

- The acceptability of the modelling and the resulting planning controls.
- The desirability of mitigation works to improve the flow of flood waters.
- The impact of the controls on future development proposals.

The 2017 Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study was undertaken on behalf of the Department of Environment, Land, Water and Planning (DELWP) by specialist consulting company Water Technology. The study was initiated by DELWP to define the extent and characteristics of flooding in the Fitzroy River and Darlot Creek catchment so that future planning decisions may be soundly based and measures may be put in place to minimise risk to the community.

The Amendment translates the recommendations of the report into flood controls in the Glenelg Planning Scheme (Planning Scheme) for a broad area of the Fitzroy River catchment which has an area of 1,460 square kilometres, extending 57 kilometres from Portland Bay, and the Darlot Creek catchment which extends 73 kilometres upstream of its confluence with the Fitzroy River.

Planning permit applications will be required for development in the floodplain or within 100 metres of a designated floodplain in rural areas. The Floodway Overlay (FO) and the Land Subject to Inundation Overlay (LSIO) will apply to urban areas.

State planning policy supports municipalities in upgrading their flood planning to recognise climate change and to anticipate a rise in sea level of not less than 0.8 metres by 2100. With the direct support of DELWP, the Amendment begins the process for the catchment of the Fitzroy River and the Darlot Creek

Despite the geographic spread of the catchment, the only property-based submissions made related to four sites in one street in Heywood.

After considering the proposal, the expert witness statement, and submissions, the Panel recommends the Amendment be approved as exhibited.

Council's expert witness supports the investigation of mitigation works that may improve the flow of flood waters through Heywood as suggested by submitters. The Glenelg Hopkins Catchment Management Authority (GHCMA) and Council have agreed to undertake that work and to amend the planning controls if warranted. The Panel endorses that approach but makes no recommendations as the task and any later mitigation works are beyond the scope of the Amendment.

The Panel finds:

- Modelling for the 2017 report was undertaken in accordance with standard practice at the time.
- No further study needs to be undertaken before the Amendment is finalised.

- The output from the 2017 report is suitable for translation into planning controls under the Amendment.
- The Local Floodplain Development Plan will assist in the making of permit applications and decision making.
- The planning overlay controls will not unreasonably impact future development proposals.
- The investigation of mitigation works is an appropriate response to submissions.

The Panel concludes the Amendment:

- is supported by, and implements, the relevant sections of the Planning Policy Framework
- is consistent with the relevant Ministerial Directions and Practice Notes
- is well founded and strategically justified
- is fit for purpose.

Recommendation

Based on the reasons set out in this Report, the Panel recommends that Glenelg Planning Scheme Amendment C108gelg be adopted as exhibited.

1 Introduction

The Amendment translates the recommendations of the *Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study (2017)*, undertaken by specialist consulting company Water Technology on behalf of DELWP. The study defined the extent and characteristics of flooding in the Fitzroy River and Darlot Creek catchment and underpins the proposed floodway planning overlays to control development so that future planning decisions may be soundly based and measures may be put in place to minimise risk to life, property and the community.

This is the first application of floodway planning controls in the catchment. Planning permit applications will be required for development in the floodplain or within 100 metres of a designated floodplain in rural areas. The Floodway Overlay (FO) and the Land Subject to Inundation Overlay (LSIO) will apply to urban areas.

The only property-based submissions about the controls related to four sites in one street in Heywood.

1.1 The Amendment

(i) Amendment description

The Amendment implements the *Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study*. The Amendment inserts mapping for the LSIO and FO to rectify the current lack of development controls across the entire extent of the mapped 1% Annual Exceedance Probability (AEP) floodplain in the catchment area, and, most importantly, will address the current lack of flood risk related planning controls for the township of Heywood.

Including the LSIO and FO mapping into the Planning Scheme will require the referral of applications proposing to develop flood-prone land to the GHCMA, thereby ensuring development decisions in the area fully account for flood risks.

The Explanatory Report describes the Amendment:

- Amends planning scheme map nos. 30LSIO-FO and 32LSIO-FO and inserts new map nos. 26LSIO-FO, 29LSIO-FO and 31LSIO-FO.
- Amends the Schedule to Clause 44.03 (FO) to include mapping reference "FO1".
- Amends the Schedule to Clause 44.04 (LSIO) to include mapping reference "LSIO1".
- Amends the Schedule to Clause 72.03 to list the three new LSIO-FO Maps.
- Amends the Glenelg Shire Local Floodplain Development Plan incorporated document to include the new overlay areas and makes associated changes to the Schedule to Clause 72.04.
- Amends the Schedule to Clause 72.08 to include the Summary Report from the 2017 Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study as a background document in the planning scheme.

Council did not propose any change to the exhibited planning controls in response to submissions.

(ii) The subject land

The study area for the *Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study* covered the catchment and the floodplain for the Fitzroy River and its main tributary, Darlot Creek. The river catchment has an area of 1,460 square kilometres extending 57 kilometres north

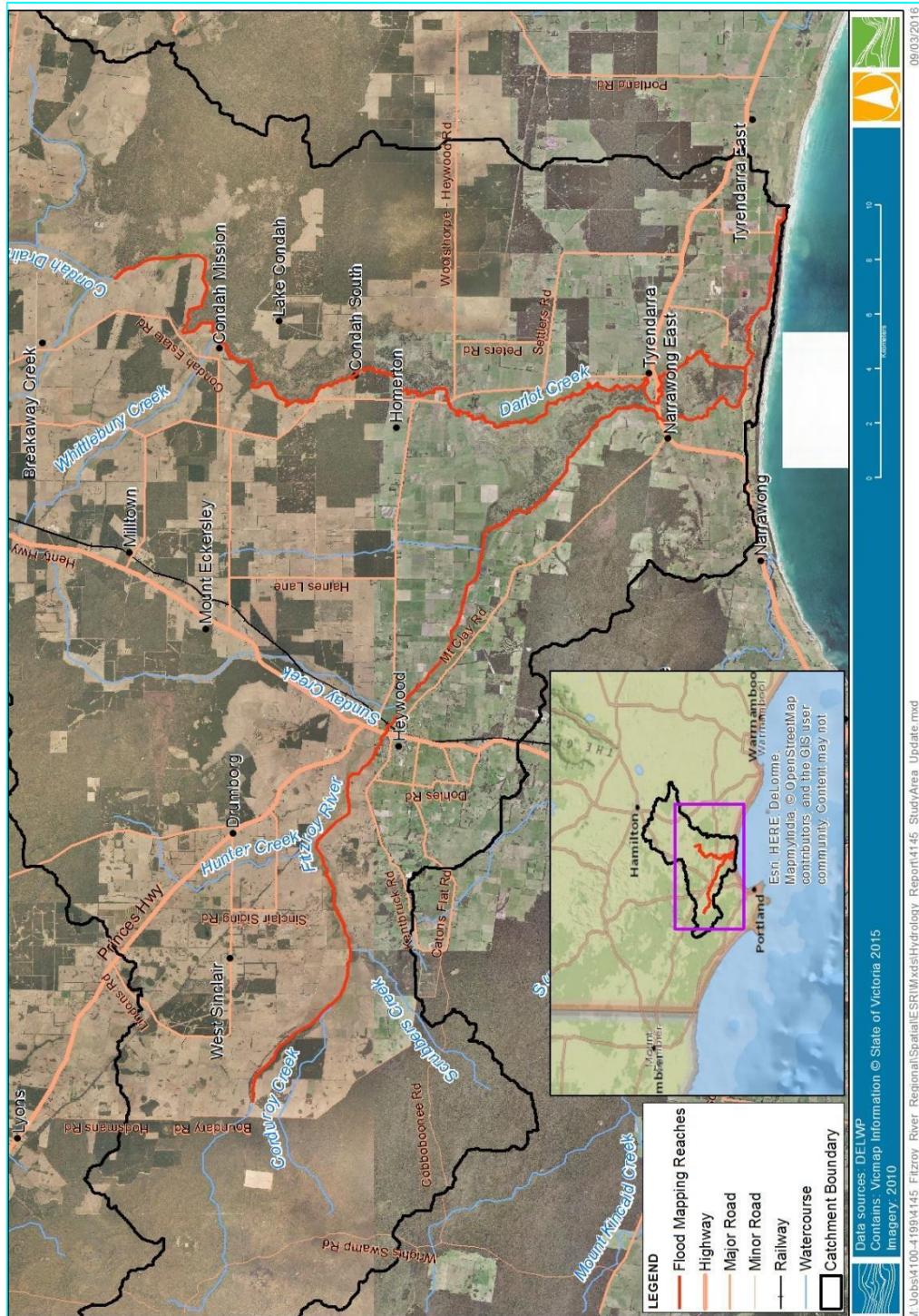
westerly from Portland Bay in the south. Darlot Creek extends 73 kilometres upstream of its confluence with the Fitzroy River near the township of Tyrendarra. The GHCMA noted the urban and rural areas within these catchments include Heywood, Drumborg, Condah, Breakaway Creek, Tyrendarra and Homerton.

This broad geographical area of the Glenelg Shire in western Victoria, and the extent of the study area, are shown in Figure 1.

Heywood is central to the study area. Tyrendarra is in the south-east of the study area. Portland and Portland Bay lie to the south of Heywood.

The Amendment area results from the modelled flood flows along the courses of the Fitzroy River and Darlot Creek.

Figure 1 Fitzroy River flood study area. Source: Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study



1.2 Background

Council summarised the issues raised in submissions as:

- The extent of the flood mapping
- Maintenance/clearing/dredging of the Fitzroy River (Heywood)
- Installation of culverts under the railway line
- Insurance
- Valuation
- Rates
- Increased construction requirements
- Construction of a levee bank (Heywood)
- Stormwater infrastructure
- Subdivision
- Uncertainty to reconstruct a dwelling
- Content of the summary report.

Council considered matters raised in submissions related to insurance, valuations and rates were unable to be resolved through the planning process. The Panel accepts that position.

The remaining matters were addressed in submissions for Council, the GHCMA and submitters. Each topic is considered in this report which deals with the issues under the following headings:

- Strategic issues
- Issues
 - The acceptability of the Amendment
 - Mitigation works
 - The impact of the controls
 - Overall conclusions.

2 Strategic issues

2.1 Planning context

The 2017 study was conducted for DEWLP as part of a statewide initiative to update local planning schemes with controls over flood prone land. The Amendment is consistent with that approach as it translates the study outcomes and recommendations into the Planning Scheme.

This chapter confirms the planning context relevant to the Amendment as set out in the Explanatory Report and confirmed in Council's submission at the Hearing.

Council submitted the Amendment complies with critical elements of State policy and planning directives. Council submitted the Amendment:

- is consistent with the objectives of planning in Victoria set out in section 4 of the PE Act
- is consistent with section 6(2)(e) of the PE Act which provides provision in the planning scheme to 'regulate or prohibit any use or development in hazardous areas or in areas which are likely to become hazardous areas'.
- is consistent with the requirements of the Ministerial Direction - The Form and Content of Planning Schemes (section 7(5) of the Act).
- complies with Ministerial Direction 11 Strategic Assessment of Amendments.
- is consistent with the objectives identified in Clause 13.03-1S Floodplain management and Clause 14.02-1S Catchment planning and management, to assist with the protection of life, property and community infrastructure
- is consistent with Clause 02.03-3 Environmental risks and amenity about the protection of floodplains from development
- applies the FO and LSIO in accordance with Planning Practice Note 12 and as outlined in the Fitzroy Darlot Flood Overlay Methodology report.

Council confirmed the Amendment satisfied elements of:

- The Municipal Planning Strategy
- The Planning Policy Framework (PPF)
- Ministerial Directions and practice notes
- Glenelg Shire Council Plan.

2.2 Strategic justification

(i) Evidence and submissions

Under the heading *Strategic Context and Assessment* Council's submission dealt with relevant strategic issues.

Council submitted the Amendment implements the objectives of Planning in Victoria under the PE Act, responds to the Municipal Planning Strategy, the Planning Policy Framework for the implementation of state level policy including at clause 13.01-2S with the strategy to plan for sea level rise of not less than 0.8 metres by 2100¹.

Council submitted

1. Section 6 (2)(e) of the PE Act allows Councils to:

¹ Doc 5 paras 20-32

- regulate or prohibit any use or development in hazardous areas or in areas which are likely to become hazardous areas.
2. the Municipal Planning Strategy required action for floodplain areas, including Heywood, as:
 - The proper management of floodplains protects the natural environment and properties located in areas subject to inundation.
 3. The Amendment is consistent with the objectives identified in the Planning Policy Framework at Clause 13.03-1S Floodplain management and Clause 4.02-1S Catchment planning and management, to assist with the protection of:
 - Life, property and community infrastructure from flood hazard, including coastal inundation, riverine and overland flows.
 - The natural flood carrying capacity of rivers, streams and floodways.
 - The flood storage function of floodplains and waterways.
 - Floodplain areas of environmental significance or of importance to river, wetland or coastal health.
 - ...catchments, waterways, estuaries, bays, waterbodies...

Council also submitted the Amendment follows relevant Ministerial Directions and practice notes.

The GHCMA submission was the only submission to comment on the strategic justification of the Amendment. The GHCMA supported the Amendment, among other things, on the basis section 6(2)(e) of the PE Act allows a planning scheme to *“regulate or prohibit any use or development in hazardous areas or in areas which are likely to become hazardous areas”*. The GHCMA submitted this properly allows for flood risk to be addressed through planning scheme controls based on the best available flood information.

(ii) Discussion

Council has made the case that the Amendment is supported by State and local planning policy. The GHCMA has supported that position.

The Panel agrees and notes no landowner has disputed the strategic justification of the Amendment.

(iii) Conclusions

The Panel concludes the Amendment:

- is supported by, and implements, the relevant sections of the Planning and Environment Act (PE Act) and the Planning Policy Framework
- is consistent with the relevant Ministerial Directions and Practice Notes
- is well founded and strategically justified.

3 Issues

The three main issues raised in submissions are:

1. The acceptability of the modelling and the resulting planning controls, specifically:
 - the extent of the flood mapping
 - content of the summary report.
2. The desirability of mitigation works, including
 - a need for maintenance/clearing/dredging of the Fitzroy River (Heywood)
 - installation of culverts under the railway line
 - construction of a levee bank (Heywood) and other stormwater infrastructure to increase flow capacity
3. The impact of the controls on future development proposals resulting from:
 - uncertainty to reconstruct a dwelling
 - increased construction requirements.

3.1 The acceptability of the modelling

(i) The issues

The issues are:

- Was the modelling undertaken in accordance with standard practice?
- Should further study be undertaken before the Amendment is finalised?
- Is the output suitable for translation into planning controls?

(ii) Evidence and submissions

To support the modelling, Council relied upon the expert evidence of Mr Tetley of Catchment Simulation Solutions who had undertaken a review of the 2017 report. Mr Tetley stated the objective of his work was:

to determine if the proposed zoning changes and flood overlays are appropriate and are based on best practice in floodplain management taking regard to the submissions that were received during the public exhibition of the proposed amendment.

Mr Tetley examined the use of industry-accepted models, various inputs and considered limitations on data about past flood and rainfall events, as well as the time series of the study (that is, the use of data from 2017 since when later and more reliable data about rainfall and industry practice has changed). After checking *the results documented in the Study are reliable*², Mr Tetley stated:

Overall, my view is that the floodplain mapping study, models and outputs are fit for purpose for developing flood planning controls, including overlays³

He concluded:

² Doc 5.1 page 5 section 3.1

³ Doc 5.1 page 7 section 3.1

The Floodplain Mapping Study appears to have been developed in accordance with modern best practice and the 1% AEP flood extent that form the basis for the flood overlays does not appear to overstate the extent of inundation ⁴.

The GHCMA supported the mapping for three reasons:

- to implement the 2017 study
- to fill the absence of *the best available 1% AEP flood risk mapping*, and
- because the Amendment *introduces flood risk planning controls to the Glenelg Shire Planning to align with the best available flood information obtained through the Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study (Water Technology 2017)* ⁵

Submitter 3 considered that Heywood had been underestimated in the 2017 flood study. He questioned the accuracy of recorded levels of past flood events used in the modelling of future flood events and, through questions to Mr Tetley, Council and the GHCMA, sought to establish Heywood's topographical conditions negated the need for the proposed controls.

At the Hearing, submitter 3:

- maintained the flood data was insufficient to support the proposed FO and LSIO
- requested the controls not be approved until further study of flow paths and depths are undertaken
- stated:

I strongly believe that the summary report modelling applied by Water Technology does not apply for the township of Heywood (hydrological and hydraulic modelling) and by not including the actual data of total rainfall and flood depth to base their study on in the report is misleading ⁶.

Mr Tetley responded:

A review of the modelling approach has been completed and this determined that the models were developed in a robust manner.

A common limitation of flood models is a lack of historic information to calibrate against to confirm the models are providing reliable flood estimates.

Fortunately for this study, the models have been calibrated against recorded flood information for 4 historic floods. This includes multiple historic water levels within Heywood. The models were shown to reproduce these historic flood levels to better than 0.2m.

Therefore, the models do appear to have utilised all available information as part of the model validation process ⁷.

Council did not support the submission and noted:

- the modelling undertaken to inform the FO and LSIO is noted to be high reliability and utilises historic information, LiDAR and survey data
- the historic flood information utilised data from recorded history and needs to consider a 100-year flood event. The worst recorded flood to affect the area occurred in 1946 when flood levels reached approximately 25.65 metres AHD.

Council submitted no further study was required because the modelling adopted the probability of a 1% AEP event which, Mr Tetley advised, had not been experienced in the area for the past 20 years.

⁴ Doc 5.1 page 17 section 5

⁵ GHCMA submission Doc 1.2 paras 6 and 7

⁶ Doc 7

⁷ Doc 5.1 table 4 page 17

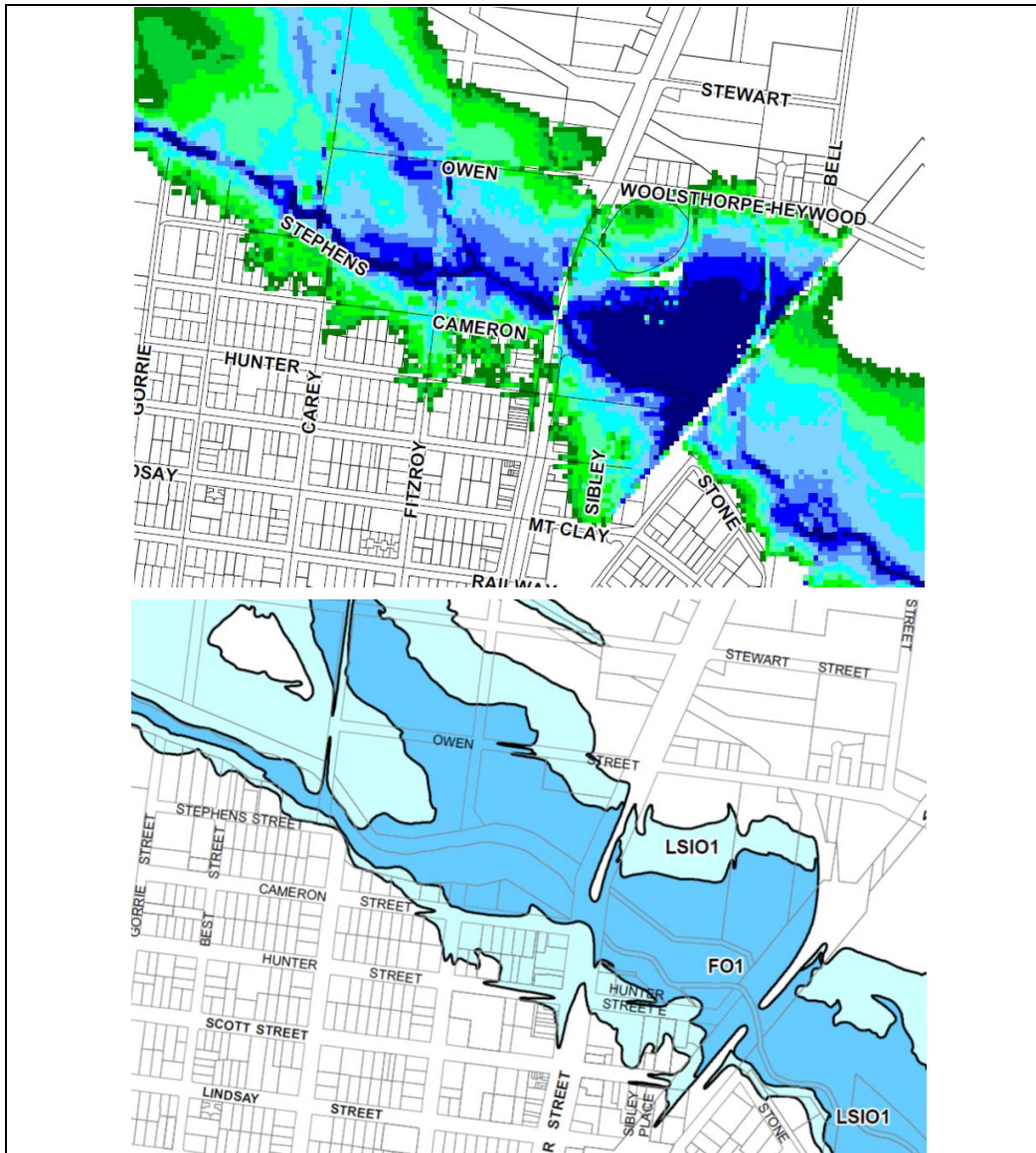
This position was supported by the GHCMA who submitted the approach *“is consistent with the GHCMA’s flood control delineation guideline and all other flood risk related amendments implemented in the Glenelg Hopkins Region since 2013”*. The GHCMA stated at the Hearing that it fully supported the Amendment as the robustness of the modelling and the science behind it were satisfactory. He stated the Amendment was *“fit for purpose”*.

Mr Tetley conceded issues with measurements of flood flows at the Heywood gauge. In the past, because of split flow paths near the gauge, not all flows from upstream were measured. Mr Tetley submitted this rendered the results unreliable to estimate flows for larger floods, but, as the modelling for the 1% AEP event had overcome the limitations, he was confident of the results.

Mr Tetley’s evidence:

- considered the approach by the GHCMA to translating modelled outputs to planning controls
- referred to the GHCMA practice since 2013 to adopt a standardised approach for the derivation of the FO and the LSIO *“utilising the modelled outputs for the 1% AEP flood, which is standard practice across Victoria as well as Australia for flood planning purposes”*
- cited with approval the application of the FO where the peak depth exceeds 0.5 metres and the peak velocity x depth exceeds 0.4 metres²/second and the LSIO where the depth is at less than 0.5 metres and velocity less than 0.4 metres²/second.
- included two comparison images to illustrate the closeness of the translation of the modelled outputs to the overlay maps to be included in the Planning Scheme.

Figure 2 Comparison between Cardno (2008) 1% AEP water depths (top image) and flood overlays (lower image)



Source: Mr Tetley's evidence

Mr Tetley was confident of the accuracy of the mapping from the hydraulic flood model⁸. He stated the model reproduced recorded flood levels to better than 0.1 metre in one location and to 0.2 metres in the vicinity of Cameron Street, where each of the landowner submitters reside.

⁸ Mr Tetley declared himself independent on the mapping despite his company had prepared the maps. He himself had not been involved.

Mr Tetley conceded some improvements could be made to the Floodplain Mapping Study, he concluded *“there does not appear to be any evidence to suggest that the 1% AEP flood results and the flood overlays that are derived from these results are overstated”*. In his opinion, even if the 2017 data was lacking, the latest modelling adds an element that overcomes any previous failing.

(iii) Discussion

The report on which the Amendment is based was completed over five years ago. Notwithstanding the passage of time and changes to methodology for similar studies, Council, the independent expert and the GHCMA all submitted the Amendment was prepared according to best practice at the time and should proceed.

The Panel acknowledges the conceded limitations of the modelling for the 2017 report. However, as the witness submitted and the GHCMA agreed, the best available flood information was applied in the 2017 report.

The Panel accepts the modelling on which the Amendment is based was undertaken in accordance with standard practice.

The Panel accepts the evidence the modelling overrides what landowners submit are the relevant flood levels of recent events as the modelling for the 1% AEP is for a flood event greater than any experienced in Heywood in the past 20 years. The Panel accepts the evidence and finds there is no need for further study before the Amendment is finalised.

The Panel notes two points in the GHCMA submissions that support the Amendment:

- Its submission that the approach in applying the FO and the LSIO is consistent with the GHCMA’s approach on all other flood risk related amendments implemented in the Glenelg Hopkins Region since 2013.
- The statement at the Hearing by Mr Jeffrey the Amendment was “fit for purpose” because the robustness of the modelling and the science behind it were satisfactory.

The Panel accepts the 2017 report is suitable for translation into planning controls under the Amendment.

(iv) Conclusions

The Panel concludes:

- Modelling for the 2017 report was undertaken in accordance with standard practice at the time.
- No further study needs to be undertaken before the Amendment is finalised.
- The output from the 2017 report is suitable for translation into planning controls under the Amendment.

3.2 Mitigation works

(i) The issues

The issue is whether mitigation works should be undertaken to improve flows in the Fitzroy River and to protect against future flooding.

(ii) Evidence and submissions

Submitters stated the breadth of the overlays went further than necessary because the spread of water was caused by water backing-up as a result of inappropriate infrastructure to drain the water, including at the railway culverts, and the lack of flood mitigation works.

The capacity of culverts under the railway bridge, the lack of maintenance of vegetation within the Fitzroy River and the potential to construct a new levee adjacent to the river were highlighted in submissions. Submissions urged Council to consider undertaking works to increase the flow capacity of the river. The works included:

- maintenance, clearing and dredging of the river
- installation of culverts under the railway line
- construction of a levee bank and other stormwater infrastructure.

The question of mitigation works was tabled in the 2017 study which acknowledged *“Flood levels in Heywood are sensitive to the rail bridge opening, and potential increases in the bridge culvert capacity should be considered for flood mitigation”*⁹. Each of the resident submitters renewed calls for works in submissions. Council responded that mitigation works are outside the scope of the Amendment and maintained that position at the Hearing.

Mr Tetley addressed the issue of mitigation in his evidence. Within his framework that *“(t)he flood overlays reflect the flood risk as it currently exists”* and that *“it is not possible for the flood overlays to be modified to reflect potential future mitigation measures, he stated If flood mitigation options are investigated and ultimately implemented, there will be opportunity to modify the flood overlays at that time”*.

He recognised the merit of studying the effect of works including dredging the river of reeds and weeds that hinder the flow, as well as construction of a levee and increasing the size of the railway culverts. He stated:

Flood risk mitigation options that have been suggested by the community could be explored. If these options are found to be feasible and are implemented, the flood overlays should be updated to reflect the revised extent of inundation/flood risk¹⁰.

Regarding migration works, the GHCMA supported the Amendment, agreed with the 2017 study, and Mr Tetley’s evidence about vegetation management and augmenting the railway culverts. The GHCMA agreed the works should be investigated.

Council considered mitigation works to be outside the scope of the Amendment. No works are proposed. Council agreed to work with the GHCMA to investigate if mitigation measures are feasible stating it:

... will continue to work with the GHCMA to explore possible mitigation measures. Any mitigation measures will need to be implemented prior to a revision of the flood overlays that are proposed by the Amendment.

Council committed itself to review the modelling if any mitigation measures are undertaken. It stated:

A review at that stage could also include the development of a synthetic rating curve and update the flood estimation approach as suggested¹¹.

⁹ Doc 1.6 page 43 section 6.4 Recommendations

¹⁰ Doc 5.1 page 17 section 5

¹¹ Doc 5 para 105

Mr Tetley noted “any modifications to flood behaviour/extents that arise due to implementation of flood mitigation measures will be reflected in future flood overland amendments.”¹²

(iii) Discussion

Council wishes to proceed with the Amendment to avoid further delay in the implementation of the 2017 study. To avoid delay in approving the Amendment, no mitigation works are proposed. That is understandable. On the other hand, the Panel is surprised that after being put on notice in the 2017 study that flood levels in Heywood are sensitive to physical structures interrupting flows, that no deeper examination of the benefits of mitigation work was undertaken by DELWP who commissioned the report, the GHCMA as the agency responsible for works within waterways or Council with its narrower purview.

The Panel is not asked to consider the merit of any mitigation works. It does, however, endorse the agreement between Council and the GHCMA to investigate the benefits of all or some of the mitigation works to Heywood.

(iv) Conclusion

The Panel notes and endorses the agreement of Council and the GHCMA to investigate mitigation works. The Panel concludes:

- the investigation of mitigation works is an appropriate response to submissions.

3.3 The impact of the controls

(i) The issue

The issue is whether the planning overlay controls will unreasonably impact future development proposals.

(ii) Evidence and submissions

Submitter 3 expressed concern about “the uncertainty of being able to obtain a planning permit to totally replace any dwelling”¹³. At the Hearing, he submitted the controls may limit the ability to construct a dwelling, or other buildings, and may impose additional construction requirements.

Council recognised:

The amendment will result in an increase in the number of planning permit applications where development is proposed within the floodplain or within 100 metres of a designated floodplain in rural zones.¹⁴

The GHCMA agreed the consequence of the controls will lead to an increase in the number of planning applications for development of land affected by the overlays.

As part of the Amendment, Council exhibited a revised Local Floodplain Development Plan (LFDP), the purpose of which is to simplify the permit process.

The LFDP is proposed to be incorporated into the Planning Scheme to include the new overlay areas. It is aimed at assisting permit applicants with understanding when an application is

¹² Doc 5.1 page 16 table 4

¹³ Submission 3 lodged during exhibition of the Amendment page 2

¹⁴ C108gelg Explanatory Report

required, what information is required to support the application and the basis for decision making.

In response to submitter 3 who commented on the relevance of the LFDP to future development when all the land in Cameron Street Heywood is subdivided (except for one block), Mr Tetley advised:

The planning amendment will ensure future development (both new development and redevelopment) occurs in a way that recognises the flood risk and ensure that this development does not increase the flood risk. By identifying land with a flood risk, it helps to ensure the risk to the broader community is reduced through application of appropriate development controls and ensuring high risk/inappropriate development does not occur ¹⁵.

Mr Tetley recommended a community engagement and education programme to assist the community in understanding the potential flood risk and how this risk can be managed in the short term but did not submit on the issue of the certainty of the controls.

(iii) Discussion

Council and the GHMA each acknowledged the increased workload to result from the controls but each submitted they had the capacity to respond in a timely manner to enquiries and applications. Both submitted the public benefit of controlling development in areas subject to inundation outweighed the increase in the number of permit applications.

The concern of submitter 3 is relevant but it can be a factor in an education campaign to alert landowners to how the controls apply and how to respond. The LFDP can be an educational tool to inform parties about how to respond to the overlay controls and to assist permit applicants.

The Panel accepts the use of the LFDP and commends its dissemination as an element in the education campaign suggested by Mr Tetley.

(iv) Conclusion

The Panel concludes:

- the planning overlay controls will not unreasonably impact future development proposals.

3.4 Overall conclusions

For the reasons set out in this report, the Panel concludes the Amendment:

- is supported by, and implements, the relevant sections of the Planning Policy Framework
- is consistent with the relevant Ministerial Directions and Practice Notes
- is well founded and strategically justified
- is fit for purpose

The Panel also finds:

- the Local Floodplain Development Plan will assist in the making of permit applications and decision making, and
- the investigation of mitigation works is an appropriate response to submissions.

¹⁵ Doc 5.1 page 15 table 4

- 1. The Panel recommends:
The Amendment be adopted as exhibited.**

Appendix A Document list

No.	Date	Description	Provided by
1	1 Oct 2022	Folio of background papers including <ol style="list-style-type: none"> 1. Panel request 2. List of submitters 3. Council minutes referring the Amendment to a Panel 4. Amendment maps 5. Local Floodplain Development Plan 6. Summary report Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study Fitzroy Darlot Flood Overlay Methodology	Council
2	13 Oct 2022	Panel Directions Hearing letter	PPV
3	3 Nov 2022	Panel Directions and hearing timetable	PPV
4	4 Nov 2022	Council response to Directions 1 & 2	Council
5	21 Nov 2022	Council submission with attachments <ol style="list-style-type: none"> 1. Expert witness report 2. Council resolution to prepare the Amendment 3. DELWP letter of authorisation 4. Methodology report 5. Submissions received 6. Council resolution to request a Panel 7. GHCMA advice 16-18 Cameron Street Heywood 8. GHCMA advice 3 Cameron Street Heywood 9. GHCMA advice 13 Cameron Street Heywood 10. GHCMA advice 11 Cameron Street Heywood 	Council
6	24 Nov 2022	Summary evidence statement	Council
7	28 Nov 2022	Closing submission	Mr Swan

Planning and Environment Act 1987

GLENELG PLANNING SCHEME

AMENDMENT C108gelg

EXPLANATORY REPORT

Who is the planning authority?

This amendment has been prepared by the Glenelg Shire Council, which is the planning authority for this amendment.

The amendment has been made at the request of Glenelg Shire Council and the Glenelg Hopkins Catchment Management Authority.

Land affected by the amendment

The amendment applies to the Fitzroy River floodplain, including within the town of Heywood, from the edge of the Cobboonee National Park to the river mouth at Tyrendarra and the Darlot Creek floodplain from the downstream end of Lake Condah to its confluence with the Fitzroy River.

A mapping reference table is attached at Attachment 1 to this Explanatory Report.

What the amendment does

The amendment implements the Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study (2017) by inserting high confidence mapping into the Glenelg Planning Scheme by way of the Floodway Overlay (FO) and Land Subject to Inundation Overlay (LSIO). The FO represents the higher hazard portion of the floodplain where flooding may occur equal to or greater than 0.5 metre flood depth or with a depth velocity product equal to or greater than 0.4m²/s.

Specifically, the proposed amendment:

- Amends planning scheme map nos. 30LSIO-FO and 32LSIO-FO and inserts new map nos. 26LSIO-FO, 29LSIO-FO and 31LSIO-FO.
- Amends the Schedule to Clause 44.03 (FO) to include mapping reference "FO1".
- Amends the Schedule to Clause 44.04 (LSIO) to include mapping reference "LSIO1".
- Amends the Schedule to Clause 72.03 to list the three new LSIO-FO Maps.
- Amends the Glenelg Shire Local Floodplain Development Plan incorporated document to include the new overlay areas and makes associated changes to the Schedule to Clause 72.04.
- Amends the Schedule to Clause 72.08 to include the Summary Report from the 2017 Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study as a background document in the planning scheme.

Strategic assessment of the amendment

Why is the amendment required?

The amendment is required to implement the Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study that was completed in 2017 by the State Government. The study was initiated by the Department of Environment, Land, Water and Planning (DELWP) in order to define the extent and characteristics of flooding in the Fitzroy River and Darlot Creek catchment so that future planning decisions are soundly based and measures may be put in place to minimise risk to the community.

The amendment is required to insert mapping for the Land Subject to Inundation and Floodway Overlays. This will rectify the current lack of development controls across the entire extent of the

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mapped 1% Annual Exceedance Probability (AEP) floodplain in this area, but most importantly will address the current lack of flood risk related planning controls for the township of Heywood.

The inclusion of LSIO and FO mapping into the planning scheme will require the referral of applications proposing to develop flood-prone land to the Catchment Management Authority, thereby ensuring development decisions in the area fully account for flood risks.

How does the amendment implement the objectives of planning in Victoria?

The amendment is consistent with the objectives of planning in Victoria included in section 4(1) of the Act that state:

- (a) *to provide for the fair, orderly, economic and sustainable use, and development of land;*
- (b) *to provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity;*
- (c) *to secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria;*
- (d) *to conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value;*
- (e) *to protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;*
- (f) *to facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e)*

Furthermore, Section 6 (2)(e) of the Act identifies what planning schemes can provide for, including (among other things) the ability to:

- *regulate or prohibit any use or development in hazardous areas or in areas which are likely to become hazardous areas.*

How does the amendment address any environmental, social and economic effects?

The amendment will have positive environmental, social and economic effects by identifying land that is within the floodplain of the Fitzroy River and Darlot Creek to assist with the protection of life and property through development controls.

Does the amendment address relevant bushfire risk?

The amendment does not have any effect on bushfire risk.

Does the amendment comply with the requirements of any Minister's Direction applicable to the amendment?

The amendment is consistent with the requirements of the Ministerial Direction - The Form and Content of Planning Schemes (section 7(5) of the Act).

The amendment also complies with Ministerial Direction 11 Strategic Assessment of Amendments.

Pursuant to Ministerial Direction 19 written advice from the Environment Protection Authority (EPA) has been sought on the amendment. The EPA advised "...that the scope of the Amendment is such that it presents a low risk of harm to the environment and amenity as a result of pollution and waste."

How does the amendment support or implement the Planning Policy Framework and any adopted State policy?

Through the implementation of the Fitzroy River and Darlot Creek regional flood investigation the amendment is consistent with the objectives identified in Clause 13.03-1S Floodplain management and Clause 14.02-1S Catchment planning and management, to assist with the protection of:

- *Life, property and community infrastructure from flood hazard, including coastal inundation, riverine and overland flows.*

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- *The natural flood carrying capacity of rivers, streams and floodways.*
- *The flood storage function of floodplains and waterways.*
- *Floodplain areas of environmental significance or of importance to river, wetland or coastal health.*
- *...catchments, waterways, estuaries, bays, waterbodies...*

How does the amendment support or implement the Municipal Planning Strategy?

The amendment is consistent with Clause 02.03-3 Environmental risks and amenity, which states:

Floodplains

Parts of Portland, Heywood, Narrawong, Casterton and Sandford are at the risk of flooding from rivers. Some areas are also vulnerable to flooding from storm surge and sea level rise. The proper management of floodplains protects the natural environment and properties located in areas subject to inundation.

The Shire seeks to address floodplain issues by applying the precautionary principle approach to assess development in areas prone to flooding, sea level rise and landslip.

Water

Protecting the Shire's waterways and wetlands from development.

Retaining natural drainage corridors with vegetated buffer areas to function as drainage areas and habitat corridors.

Does the amendment make proper use of the Victoria Planning Provisions?

The amendment proposes to use the Victorian Planning Provisions consistent with the Ministerial Directions. The amendment proposes to utilise the FO and LSIO in accordance with Planning Practice Note 12 and as outlined in the Fitzroy Darlot Flood Overlay Methodology report.

How does the amendment address the views of any relevant agency?

Consultation has been undertaken with the Glenelg Hopkins Catchment Management Authority, DELWP and the EPA.

Does the amendment address relevant requirements of the Transport Integration Act 2010?

The amendment does not have a direct impact on the transport system.

Resource and administrative costs

- **What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?**

The amendment is to be undertaken within Council's operating budget with funding from the Risk and Resilience Grants Program and in-kind assistance received from the Glenelg Hopkins Catchment Management Authority.

The amendment will result in an increase in the number of planning permit applications where development is proposed within the floodplain or within 100 metres of a designated floodplain in rural zones. Future planning permit applications are expected to be processed within prescribed timeframes with current staffing levels maintained or increased as necessary.

Where you may inspect this amendment

The amendment can be inspected free of charge at the Glenelg Shire Council website at <https://www.glenelg.vic.gov.au/Our-Services/Planning-Services/Strategic-Planning>

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The amendment is available for public inspection, free of charge, during office hours at the following places:

Glenelg Shire Council
Portland Customer Service Centre
56 Percy Street
Portland VIC 3305

Heywood Customer Service Centre
77 Edgar Street
Heywood VIC 3304

The amendment can also be inspected free of charge at the Department of Environment, Land, Water and Planning website at www.planning.vic.gov.au/public-inspection or by contacting 1800 789 386 to arrange a time to view the amendment documentation.

Submissions

Any person who may be affected by the amendment may make a submission to the planning authority. Submissions about the amendment must be received by 8 August 2022.

A submission must be sent to:

Glenelg Shire Council
Planning Unit

- delivered in person at 56 Percy St, Portland 3305
- by mail to: PO Box 152, Portland VIC 3305
- by email to: planning@glenelg.vic.gov.au

Panel hearing dates

In accordance with clause 4(2) of Ministerial Direction No.15 the following panel hearing dates have been set for this amendment:

- directions hearing: week commencing 31/10/2022
- panel hearing: week commencing 28/11/2022

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ATTACHMENT 1 - Mapping reference table

Location	Land/Area Affected	Mapping Reference
Condah, Breakaway Creek	Darlot Creek and Lake Condah floodplain	26LSIO-FO
Drumborg	Fitzroy River floodplain	29LSIO-FO
Drumborg, Heywood	Fitzroy River floodplain	30LSIO-FO
Heywood	Fitzroy River floodplain	31LSIO-FO
Tyrendarra, Homerton	Fitzroy River and Darlot Creek floodplains	32LSIO-FO

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*Planning and Environment Act 1987***GLENELG PLANNING SCHEME****AMENDMENT C108gelg****INSTRUCTION SHEET**

The planning authority for this amendment is the Glenelg Shire Council.

The Glenelg Planning Scheme is amended as follows:

Planning Scheme Maps

The Planning Scheme Maps are amended by a total of 5 attached map sheets.

Overlay Maps

1. Amend Planning Scheme Map Nos 30LSIO-FO and 32LSIO-FO in the manner shown on the 2 attached maps marked "Glenelg Planning Scheme, Amendment C108gelg".
2. Insert new Planning Scheme Map Nos 26LSIO-FO, 29LSIO-FO and 31LSIO-FO in the manner shown on the 3 attached maps marked "Glenelg Planning Scheme, Amendment C108gelg".

Planning Scheme Ordinance

The Planning Scheme Ordinance is amended as follows:

3. In **Overlays** – Clause 44.03, replace Schedule with a new Schedule 1 in the form of the attached document.
4. In **Overlays** – Clause 44.04, replace Schedule with a new Schedule 1 in the form of the attached document.
5. In **Operational Provisions** – Clause 72.03, replace the Schedule with a new Schedule in the form of the attached document.
6. In **Operational Provisions** – Clause 72.04, replace the Schedule with a new Schedule in the form of the attached document.
7. In **Operational Provisions** – Clause 72.08, replace the Schedule with a new Schedule in the form of the attached document

GLENELG PLANNING SCHEME

Proposed C108gelg

SCHEDULE 1 TO CLAUSE 44.03 FLOODWAY OVERLAY

Shown on the planning scheme map as **FO**, **FO1** or **RFO**.

1.0

28/05/2021
C99gelg

Floodway objectives to be achieved

None specified.

2.0

28/05/2021
C99gelg

Statement of risk

None specified.

3.0

28/05/2021
C99gelg

Permit requirement

A permit is not required for the following buildings and works:

- Any buildings and/or works if appropriately detailed information is submitted to the satisfaction of the responsible authority showing that:
 - The land has been filled in accordance with the requirements of a planning permit for subdivision of the land, or other planning permit issued for the land where the finished ground level is at least 600 millimetres above the 100 year Average Recurrence Interval (ARI) flood level; or
 - The natural level of the land on which the buildings and works are proposed is at least 600 millimetres above the 100 year ARI flood level; and
 - Flood-free vehicular access is available for all flood events up to and including the 100 year ARI event.
- A replacement building where:
 - The floor level is finished at least 600 millimetres above the 100 year ARI flood level, or a higher level set by the responsible authority.
 - The footprint of the replacement building(s) is the same or less than the original building.
- The alteration of an existing building where the original building footprint remains and the floor level(s) are at and will be retained at least 600 millimetres above the 100 year ARI flood level.
- A pergola or carport that is open on all sides.
- An open sports ground excluding change rooms, pavilions, shelters, other buildings, and raised viewing areas, provided that the natural surface level is not altered.
- An outdoor recreation facility, excluding any buildings or structures that alter water movement across or storage capacity of the floodplain, and works that alter the topography of the land.
- Road works or works to any other access way (public or private) that:
 - Do not change the finished level of the road surface; or
 - Are limited to resurfacing of an existing road.
- Cycle or pedestrian tracks where there is no increase in the natural ground level.
- Works ancillary to an existing building (including landscaping) that do not alter the surface profile by more than 150 millimetres;
- Earthworks in accordance with a whole farm plan approved by the responsible authority and floodplain management authority.
- Works associated with vine or horticultural trellises or watering systems.

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- Routine and maintenance works that do not affect the height, length or location of a levee or embankment.
- A domestic rainwater tank of 4,500 litres capacity or less.
- A non habitable outbuilding, including sheds, including replacement of an existing outbuilding provided:
 - The footprint is no larger than 10 square metres.
 - The total footprint of existing outbuildings does not exceed 10 square metres.
- A lighting pole.

4.0

28/05/2021
C99gelg

Application requirements

None specified.

5.0

28/05/2021
C99gelg

Decision guidelines

None specified.

GLENELG PLANNING SCHEME

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Proposed C108gelg

SCHEDULE 1 TO CLAUSE 44.04 LAND SUBJECT TO INUNDATION OVERLAY

Shown on the planning scheme map as **LSIO** or **LSIO1**.

1.0

28/05/2021
C99gelg

Land subject to inundation objectives to be achieved

None specified.

2.0

28/05/2021
C99gelg

Statement of risk

None specified.

3.0

28/05/2021
C99gelg

Permit requirement

A permit is not required for the following buildings or works:

- Any buildings and/or works if appropriately detailed information is submitted to the satisfaction of the responsible authority showing that:
 - The land has been filled in accordance with the requirements of a planning permit for subdivision of the land, or other planning permit issued for the land where the finished ground level is at least 600 millimetres above the 100 year Average Recurrence Interval (ARI) flood level; or
 - The natural level of the land on which the buildings and works are proposed is at least 600 millimetres above the 100 year ARI flood level; and
 - Flood-free vehicular access is available for all flood events up to and including the 100 year ARI event.
- A replacement building where:
 - The floor level is finished at least 600 millimetres above the 100 year ARI flood level, or a higher level set by the responsible authority.
 - The footprint of the replacement building(s) is the same or less than the original building.
- The alteration of an existing building where the original building footprint remains and the floor level(s) are at and will be retained at least 600 millimetres above the 100 year ARI flood level.
- A pergola or carport that is open on all sides.
- A veranda or decking area with a floor raised on stumps or piers.
- The addition of a second story, or other additional stories, on top of an existing building where there is no increase in building footprint.
- An open sports ground excluding change rooms, pavilions, shelters, other buildings, and raised viewing areas, provided that the natural surface level is not altered.
- An outdoor recreation facility, excluding any buildings or structures that alter water movement across or storage capacity of the floodplain, and works that alter the topography of the land.
- Road works or works to any other access way (public or private) that:
 - Do not change the finished level of the road surface; or
 - Are limited to resurfacing of an existing road.
- Cycle or pedestrian tracks where there is no increase in the natural ground level.
- Works ancillary to an existing building (including landscaping) that do not alter the surface profile by more than 150 millimetres.

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- Earthworks in accordance with a whole farm plan approved by the responsible authority and floodplain management authority.
- Works associated with vine or horticultural trellises or watering systems.
- Routine and maintenance works that do not affect the height, length or location of a levee or embankment.
- A domestic rainwater tank of 4,500 litres capacity or less.
- An agricultural shed or hay shed that is open on all sides with a floor level at natural surface.
- A non habitable outbuilding, including sheds, including replacement of an existing outbuilding provided:
 - The footprint is no larger than 20 square metres.
 - The total footprint of existing outbuildings does not exceed 20 square metres.
- A lighting pole.

4.0

28/05/2021
C99gelg

Application requirements

None specified.

5.0

28/05/2021
C99gelg

Decision guidelines

None specified.

GLENELG PLANNING SCHEME

31/07/2018
VC148**SCHEDULE TO CLAUSE 72.03 WHAT DOES THIS PLANNING SCHEME CONSIST OF?****1.0****Maps comprising part of this planning scheme:**~~-----~~
Proposed C108gelg

- 1, 1ESO, 1BMO
- 2, 2ESO, 2HO, 2RFO, 2BMO
- 3, 3ESO, 3HO, 3RFO, 3BMO
- 4, 4ESO, 4BMO
- 5, 5ESO, 5BMO
- 6, 6ESO, 6RFO, 6BMO
- 7, 7AEO, 7DDO, 7DPO, 7ESO, 7HO, 7LSIO-FO, 7PAO, 7BMO
- 8, 8DDO, 8DPO, 8EAO, 8ESO, 8HO, 8LSIO-FO, 8BMO
- 9, 9ESO, 9HO, 9RFO, 9BMO
- 10, 10ESO, 10HO, 10RFO, 10BMO
- 11, 11EAO, 11ESO, 11HO
- 12, 12ESO
- 13, 13BMO, 13ESO
- 14, 14ESO, 14HO, 14RFO, 14BMO
- 15, 15ESO, 15HO, 15RFO, 15BMO
- 16, 16BMO, 16ESO
- 17, 17HO, 17BMO, 17ESO
- 18, 18HO, 18BMO
- 19, 19BMO
- 20, 20ESO, 20HO, 20SLO, 20BMO
- 21, 21ESO, 21SLO, 21BMO
- 22, 22ESO, 22HO, 22BMO
- 23, 23ESO, 23HO, 23BMO
- 24, 24ESO, 24BMO
- 25, 25ESO, 25HO, 25BMO
- 26, 26ESO, 26BMO, 26LSIO-FO
- 27, 27ESO, 27SLO, 27BMO
- 28, 28ESO, 28HO, 28BMO
- 29, 29ESO, 29BMO, 29LSIO-FO
- 30, 30DPO, 30ESO, 30HO, 30LSIO-FO, 30BMO, 30SCO
- 31, 31DPO, 31ESO, 31HO, 31BMO, 31LSIO-FO
- 32, 32DPO, 32ESO, 32HO, 32LSIO-FO, 32BMO
- 33, 33DPO, 33ESO, 33LSIO-FO, 33BMO, 33SCO
- 34, 34AEO, 34DDO, 34ESO, 34HO, 34SLO, 34BMO, 34SCO
- 35, 35AEO, 35DDO, 35DPO, 35ESO, 35HO, 35LSIO-FO, 35SLO, 35BMO, 35SCO

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- 36, 36DDO, 36ESO, 36BMO, 36HO, 36DPO
- 37, 37ESO, 37HO, 37BMO, 37DPO, 37SCO
- 38, 38DDO, 38DPO, 38HO, 38LSIO-FO, 38BMO, 38ESO
- 39, 39ESO, 39HO, 39LSIO-FO, 39BMO, 39DPO, 39EAO, 39SCO
- 40, 40DPO, 40ESO, 40HO, 40SLO, 40LSIO-FO, 40BMO, 40SCO
- 41, 41DPO, 41ESO, 41HO, 41LSIO-FO, 41BMO, 41SCO
- 42, 42DPO, 42ESO, 42HO, 42LSIO-FO, 42SCO

GLENELG PLANNING SCHEME

31/07/2018
VC148**SCHEDULE TO CLAUSE 72.04 DOCUMENTS INCORPORATED IN THIS PLANNING SCHEME****1.0****Incorporated documents**

Proposed C108gelg

Name of document	Introduced by:
Australian Standard AS2021-2015, Acoustics – Aircraft Noise Intrusion – Building Siting and Construction, Standards Australia Limited, 2015	VC107
Cape Nelson Livestock Assembly Depots, March 2005	C19
Coastal Land East of Portland between Dutton Way and Narrawong, Incorporated Document, April 2011	C60
Crown Allotments 1-18, Section 3A, Parish of Narrawong – Use and Development Controls, 2011	C70
Development Plan for DPO5A Area, Allestree, July 2006	C32
Glenelg Planning Scheme Heritage Overlay Permit Exemptions & Application Requirements, Incorporated Plan, June 2013	C55(Part 1)
Glenelg Shire Local Floodplain Development Plan, March 2022	C108gelg
Heywood Pulp Mill Site Layout Plan Drawing 31-16509-221-SK001 Rev B	C23
Lot 1, Ocean View Drive East, Narrawong (PS518204W), September 2012	C93
Lot 4, Ocean View Drive West, Narrawong (PS522386N), September 2012	C93
Lots 5, 7, 8 & 9, Ocean View Drive West, Narrawong (PS522386N), September 2012	C93
Portland Airport Obstacle Limitation Surfaces plan prepared by AUSLIG reference 3336/002	C5 (Part 1)
Portland Emergency Operations Helipad, Incorporated Document, 2010	C59
Portland Heritage Precincts Statements of Significance, Incorporated Document, 2019	C102gelg
Portland Wind Energy Project: Cape Bridgewater Wind Energy Facility, Cape Nelson Wind Energy Facility, Cape Sir William Grant Wind Energy Facility, May 2004	C15
Portland Woodchip Storage and Handling Facilities Master Plan 2008	C39

GLENELG PLANNING SCHEME

31/07/2018
VC148

SCHEDULE TO CLAUSE 72.08 BACKGROUND DOCUMENTS

1.0

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Proposed C108gelg

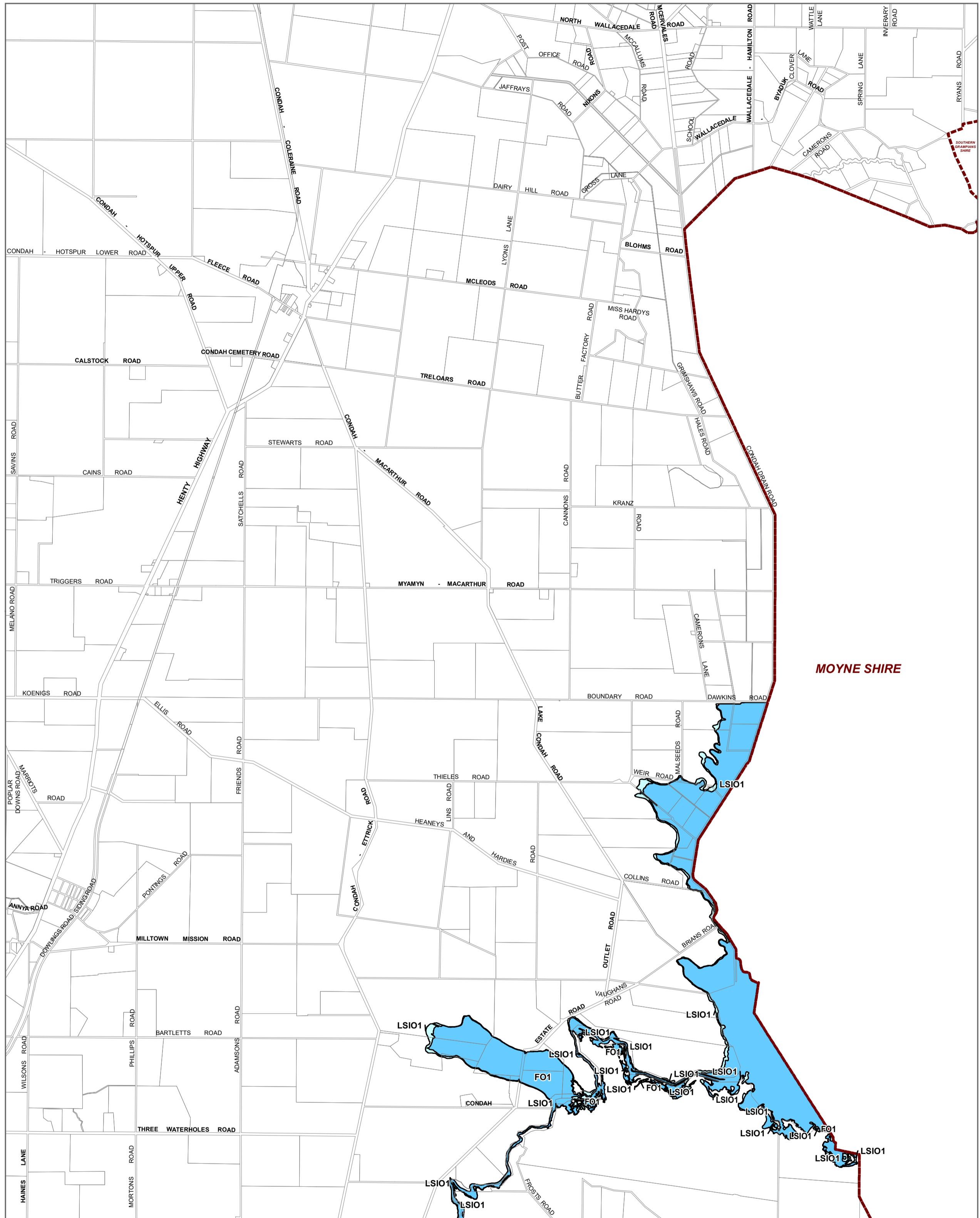
Background documents

Name of background document	Amendment number - clause reference
<i>Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study, 2017</i>	44.03, 44.04
<i>Portland Industrial Land Strategy (2016)</i>	02.03-6, 13.07-1L
<i>Recreation and Open Space Strategy (2007)</i>	02.03-8
<i>Roadside Vegetation management Plan (2014)</i>	02.03-2
<i>Coastal Spaces Landscape Assessment Study (2006)</i>	02.03-2, 12.05-2L
<i>Glenelg Coastal Action Plan (2004 as amended in 2012)</i>	02.03-2, 12.05-1L
<i>Glenelg Environment Strategy 2010-2020 (2010)</i>	02.03-2
<i>Bridgewater Bay Foreshore Master Plan (2014)</i>	02.03-2, 12.05-1L
<i>Narrawong Coastal Engineering Study (2011)</i>	02.03-2, 12.05-1L
<i>Portland Bay Coastal Infrastructure Plan (2007)</i>	02.03-2, 12.05-1L
<i>Coastal Spaces - Inundation and Erosion - Coastal Engineering Study (2010)</i>	02.03-3
<i>Glenelg Shire Municipal Fire Management Plan 2014-2017</i>	02.03-3
<i>Glenelg Flood Investigations (2008)</i>	02.03-3
<i>Portland Flood Study Implementation Works (2011)</i>	02.03-3
<i>Casterton Flood Investigations - Floodplain Management Report (2011)</i>	02.03-3
<i>Surry River Estuary Flood Study – Study Report (2008)</i>	02.03-3
<i>Wastewater Management Plan (2009)</i>	19.03-3L
<i>Glenelg Hopkins - Regional Catchment Strategy - 2013-2019</i>	02.03-2
<i>Recommended separation distances for industrial residual air emissions (Publication 1518 March 2013)</i>	02.03-3
<i>Guidelines - Noise from Industry in Regional Victoria (Publication 1411 October 2011)</i>	02.03-3
<i>Portland Urban Conservation Study (1981)</i>	02.03-1
<i>Glenelg Shire Heritage Study- An Environmental History Stage 1 (2002)</i>	02.03-5
<i>Glenelg Shire Heritage Study - Stage Two (a) (2006)</i>	02.03-5
<i>Portland Heritage Gaps Study (2017)</i>	02.03-5, 15.03-1L
<i>Glenelg Shire - Business Retention and Expansion Program - Regional Economy and Strategy Report (2010)</i>	02.03-6
<i>Glenelg Tourism Strategy (2015)</i>	02.03-6
<i>Port of Portland Land Use Strategy (2009)</i>	02.03-6
<i>Glenelg Transport Strategy (2008)</i>	02.03-7
<i>Portland Airport Masterplan 2009-2013(2009)</i>	02.03-7, 18.04-1L
<i>Casterton Aerodrome Masterplan (2013)</i>	02.03-7, 18.04-1L
<i>Glenelg Sustainable Settlement Strategy (2012)</i>	02.03-1

GLENELG PLANNING SCHEME

Name of background document	Amendment number - clause reference
<i>Portland Integrated Growth Plan (2011)</i>	02.03-1
<i>Portland Bay Coastal Infrastructure Plan (2007)</i>	02.03-7
<i>Casterton Active Transport Strategy (2010)</i>	02.03-7
<i>Heywood Active Transport Strategy (2010)</i>	02.03-7
<i>Casterton Urban Design Framework – ‘Embraced by the Glenelg River’ (2010)</i>	02.03-1
<i>Cape Bridgewater Structure Plan (2018)</i>	02.03-1, 11.03-6L
<i>Casterton Structure Plan (2018)</i>	02.03-1
<i>Infrastructure Design Manual (2019, Local Government Infrastructure Design Association)</i>	19.03-2L

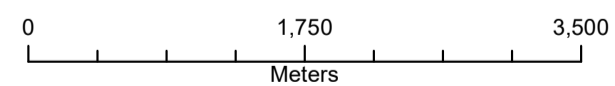
GLENELG PLANNING SCHEME - LOCAL PROVISION AMENDMENT C108gelg



- LEGEND**
- FO1 - Floodway Overlay - Schedule 1
 - LSIO1 - Land Subject to Inundation Overlay - Schedule 1

Municipal Boundary

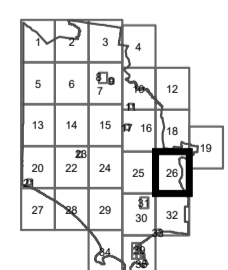
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LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 26LSIO-FO

GLENELG PLANNING SCHEME - LOCAL PROVISION AMENDMENT C108gelg



LEGEND
■ FO1 - Floodway Overlay - Schedule 1
 LSIO1 - Land Subject to Inundation Overlay - Schedule 1

Municipal Boundary

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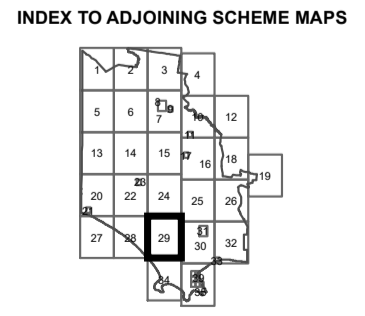
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NORTH

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Australian Map Grid Zone 54

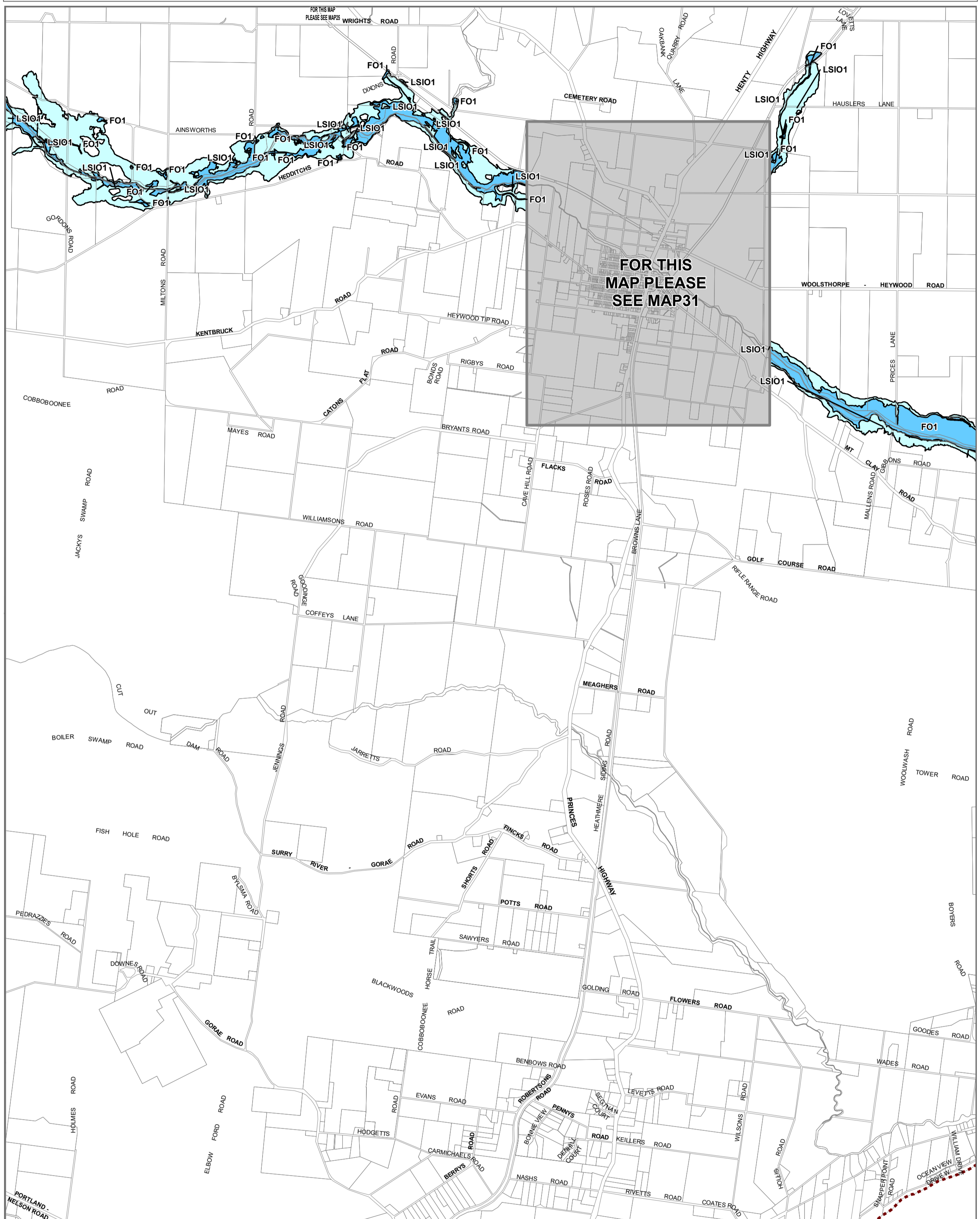
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LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 29LSIO-FO

GLENELG PLANNING SCHEME - LOCAL PROVISION AMENDMENT C108gelg



LEGEND
■ FO1 - Floodway Overlay - Schedule 1
 LSIO1 - Land Subject to Inundation Overlay - Schedule 1

Municipal Boundary

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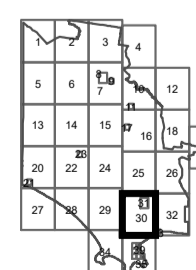
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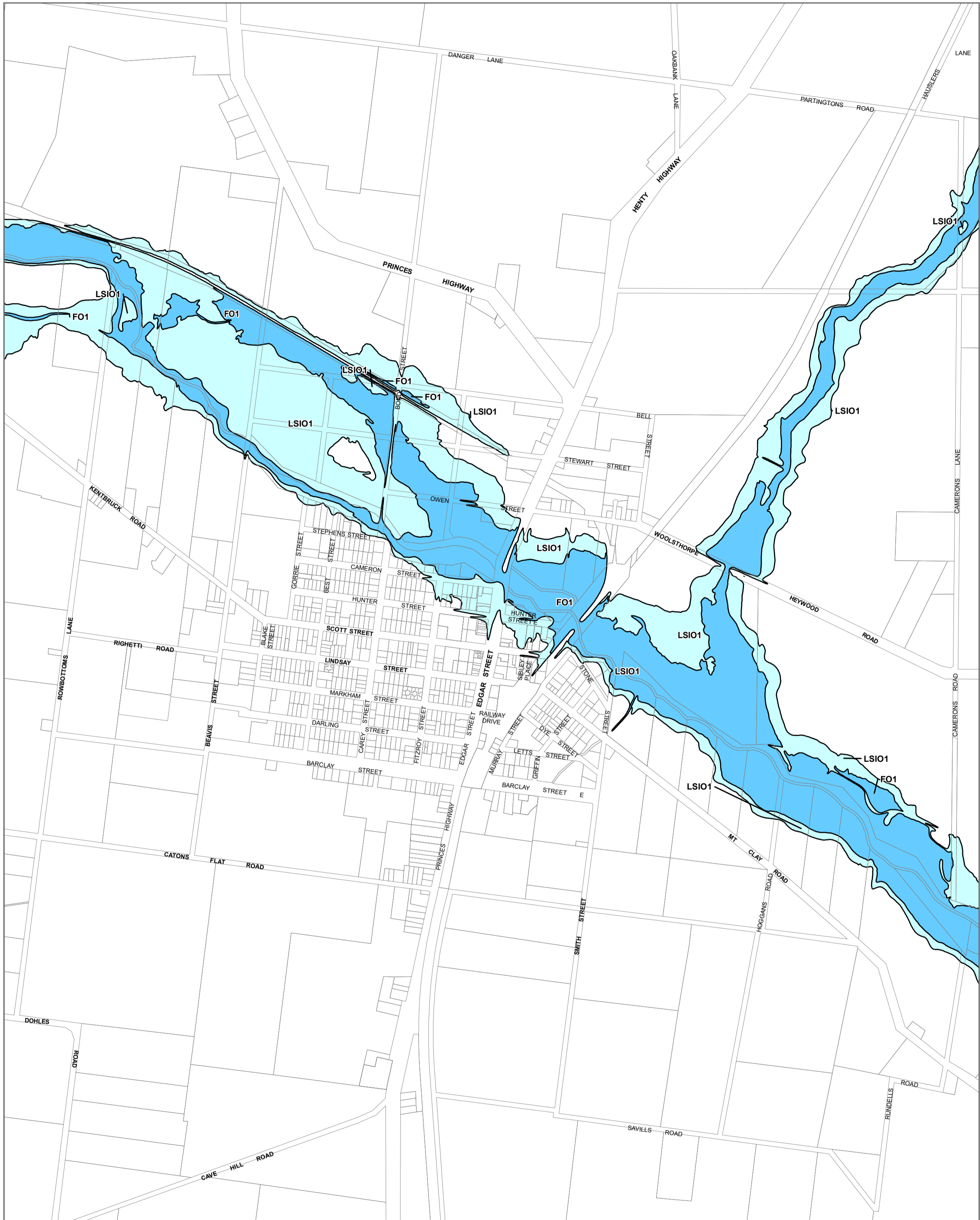
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LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 30LSIO-FO

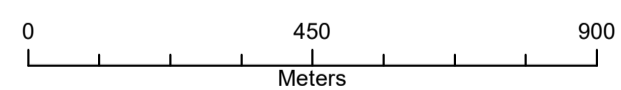
GLENELG PLANNING SCHEME - LOCAL PROVISION AMENDMENT C108gelg



- LEGEND**
- FO1 - Floodway Overlay - Schedule 1
 - LSIO1 - Land Subject to Inundation Overlay - Schedule 1

Municipal Boundary

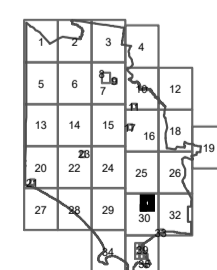
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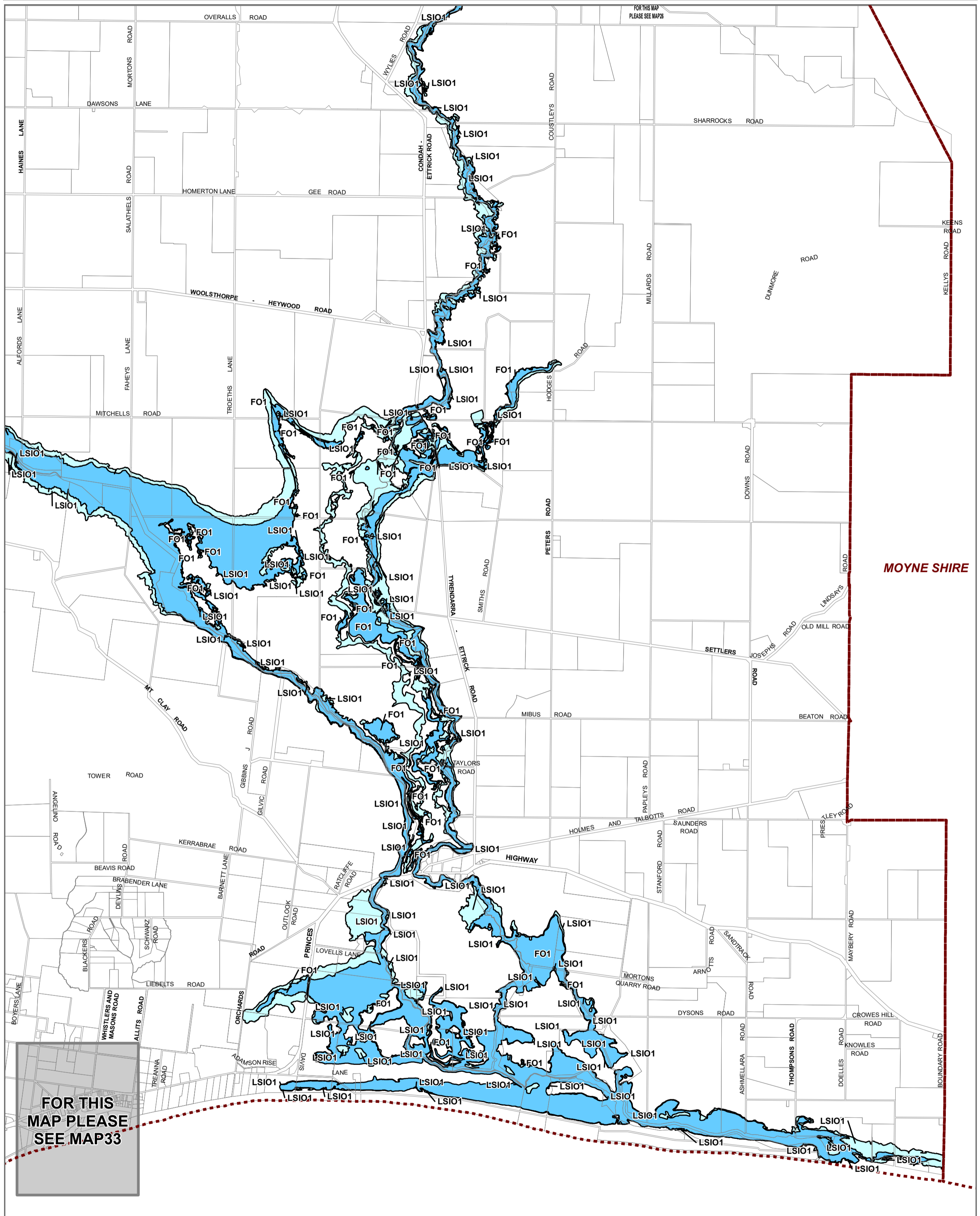
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LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 31LSIO-FO

GLENELG PLANNING SCHEME - LOCAL PROVISION AMENDMENT C108gelg



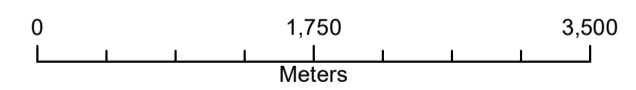
LEGEND

- FO1 - Floodway Overlay - Schedule 1
- LSIO1 - Land Subject to Inundation Overlay - Schedule 1

■ Municipal Boundary

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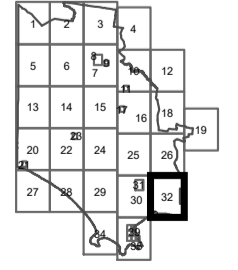
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LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 32LSIO-FO

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN**REVISED MARCH 2022****INCORPORATED DOCUMENT****Incorporated within Clause 72.04 of the Glenelg Shire Planning Scheme Pursuant to Section 6(2)(j) of the *Planning and Environment Act 1987*****1.0 APPLICATION**

This local floodplain development plan has been prepared under the Glenelg Planning Scheme.

The plan establishes minimum design & development criteria for use, buildings and works, and subdivision in the following areas:

- Urban and rural areas of Portland affected by the Urban Floodway Zone (UFZ), Floodway Overlay (FO1) and Land Subject to Inundation Overlay (LSIO1).
- Urban and rural areas of Casterton affected by the FO1 and LSIO1.
- Rural areas of Narrawong and the Surrey River and estuary affected by the FO1 and LSIO1.
- Urban and rural areas of Heywood, Drumborg, Condah, Breakaway Creek, Tyrendarra, and Homerton affected by the FO1 and LSIO1.

The locations of these areas are shown under zoning and overlay maps forming part of the Glenelg Planning Scheme.

This plan provides a performance-based approach to the assessment and determination of planning permit applications. An application for a planning permit to use or develop land affected by the UFZ (Clause 37.03) and to develop land affected by the FO (Clause 44.03) or LSIO (Clause 44.04) of the Glenelg Shire Planning Scheme must be consistent with the performance criteria established by this Local Floodplain Development Plan.

In addition to the decision guidelines in Clauses 37.03-6, 44.03-6, 44.04-6 and Clause 65, the responsible authority must also consider the Performance Criteria of this Local Floodplain Development Plan as appropriate.

2.0 BASIS OF THE PLANNING CONTROLS**2.1 Flood History**

One extreme flood event has been recorded in the Glenelg Shire. This occurred in March 1946 and impacted significantly on Casterton. It also affected Portland and Narrawong. The 1946 flood was a major event driven by an East Coast Low weather front. East coast lows mainly affect eastern Victoria and are seldom observed as far west as Glenelg Shire.

Riverine flooding in Portland is mainly associated with Wattle Hill and Finn Creeks. Extensive flooding occurs at the confluence of these creeks, starting at Fawthrop Lagoon spreading as far north as Otway Street and in the case of Wattle Hill Creek, westward beyond the Henty Highway. Flood depth in the 100 year ARI¹ event exceeds 2m in a majority of the

¹ Average Recurrence Interval (ARI) refers to the average or expected value of the period between exceedances of a given discharge or event. A 100-year ARI event would occur, on average, once every 100 years and can also be expressed as Annual Exceedance Probability (AEP). AEP refers to the probability or risk of a flood of a given size occurring or being exceeded in any given year. A 90% AEP flood has a high probability of occurring or being exceeded; it would occur quite often and would be relatively small. A 1% AEP flood has a low probability of occurrence or being exceeded; it would be

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

Portland floodplain. Given the influence of the lagoon, flow velocities are generally low downstream of the Henty Highway until water reaches the canal at the downstream end of the lagoon. Properties between Smith Street and Henty Street, including residences in Portland Court, are some of the most at risk. Two properties in this area almost flooded over-floor in the August 2013 flood which is the second largest recorded in Portland and considered to have approximated a 50 year ARI event.

Flooding in Casterton is associated with the Glenelg River. A number of significant floods have been recorded, including events in 1893, 1906, 1946, 1950, 1975, 1983, 1991, 1992, 1996, 2008, 2010 and 2011. Significant anabranches to the main Glenelg River channel are a feature of the Casterton floodplain. High hazard (deep and fast moving) floodwater is a feature of these anabranches during large floods. The topography at Casterton is such that the floodplain is broad upstream of the Glenelg Highway (Henty St) bridge but narrows substantially at the highway bridge. This brings about deep flooding over the residential land in and around Murray Street which extends up into the commercial centre of the town - over Henty Street, ultimately cutting the Glenelg Highway.

Flooding at Narrawong is associated with the Surry River. The impact of the 1946 flood at Narrawong was not documented in any detail - stream flow was not recorded at this time. The August 2013 Surry River flood flow (coincided with flooding in Portland) is the largest recorded. This caused widespread rural flooding but there were no significant impacts recorded at Narrawong. The October 1976 flood flow is the next largest on record. This event was slightly smaller than the August 2013 event.

2.2 Flood impacts

Flood impacts in the Shire can be significant. Large floods pose significant risks to life, health and wellbeing of residents and emergency service personnel, causing road closures, loss of access/egress for residents, property isolation and damage to buildings and infrastructure.

The 2011 Casterton Flood Investigations show that a total of 166 Casterton properties are subject to flooding during 100 year ARI floods. Dwellings on 80 of these properties are subject to over-floor flooding during events of this magnitude. Over-floor flooding in Casterton begins to occur when flows in the river reach 5 year ARI levels.

The 2011 Portland Flood Study has estimated that 23 residential properties are likely to be flooded during 100 year ARI events, with 10 dwellings likely to experience over-floor flooding. Given observations from the August 2013 event, over-floor flooding in Portland begins to occur in the Henty Street – Portland Court area when floods approach the 50 year ARI event.

The effects of flooding on Narrawong are limited. Impacts on the caravan park are most significant. This lies very close to sea level and can be impacted on by both wet weather flooding and flooding that occurs in relatively dry conditions as a consequence of natural closure of the river mouth by a sand bar. Land immediately west and east of the estuary is also impacted by direct inundation and loss of access due to both dry and wet weather flooding. Flooding at Narrawong occurs on an annual basis due to the periodic closure of the river mouth.

2.3 Flood information

The extent and likely impacts of flooding have been determined by the following flood studies and investigations

- *Surry River Flood Study* (Water Technology, 2008)
- *Portland Flood Study* (CARDNO, 2011)
- *Casterton Flood Investigations* (CARDNO, 2011)

fairly rare but it would be relatively large. A 100-year ARI event is equivalent to a 1%AEP event. A 1%AEP event has a 1% chance of occurring in any year.

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

- *Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study* (Water Technology, 2017)

The flood studies for Portland and Narrawong have also investigated the impacts of rising mean sea level on future riverine and coastal storm surge flood levels. Flood levels and flood extent maps have been produced showing the estimated impact of projected increase in mean sea level on riverine flooding, coastal storm surge flooding and a combination of the two. Scenarios assessed include a 0.8 metre rise in mean sea level and a 0.2 metre rise in mean sea level.

For Narrawong, the *Surry River Flood Study* determined that a 0.8 metre rise in mean sea level will result in a very minor increase flood extent and levels due to characteristics of the estuary. The extent of the LSIO at Narrawong therefore includes assessment of a 0.8 metre rise in mean sea level.

For Portland, both a 0.8 and 0.2 metre rise in mean sea level have been modelled. The results of this show that the extent and depth of flooding in Portland can be expected to increase noticeably along with rising mean sea level and the most significant impact will occur when a riverine flood occurs at the same time as a coastal storm surge or king tide. Given that the majority of Portland's undeveloped floodplain land is within the UFZ, infill development is the most significant planning challenge from a flood risk perspective. The extent of the LSIO within Portland therefore reflects the modelled impact of a 0.2 metre increase in mean sea level consistent with State Policy at the time the controls were inserted into the Glenelg Planning Scheme.

2.4 Purpose of the zone and overlays.

The planning controls ensure that risks associated with the use and development of floodplain land are recognised and responded to appropriately via the planning permit application process.

The UFZ, FO and LSIO areas are based on the relative flood risk assessed for different parts of the floodplain, considering factors such as flood depth, velocity, natural storage, flood duration and warning time.

The UFZ and FO within the Glenelg Planning Scheme denote floodway land. Floodway is the component of the floodplain required to provide adequate flood conveyance and storage and should remain free from obstruction during major flood events. Furthermore, floodway land is generally the high hazard portion of the floodplain where deep and fast flowing floodwater can be expected. Placement of buildings on floodway land substantially increases risk to life and community wellbeing and should therefore be avoided.

In general, the UFZ in Portland applies to wetlands forming the northern extension of Fawthrop Lagoon and serves to protect the natural values and function of the floodplain through prohibition of most forms of development - including residential, commercial and industrial. The FO recognises existing use of floodway land that may already be developed. Further development can be considered provided strict criteria are applied to approvals for buildings and works to minimise flood risks.

The LSIO within the Glenelg Planning Scheme generally denotes land where flooding is likely to be relatively shallow and slow moving. The level of hazard in this part of the floodplain is relatively low. This land is often on the fringe of the floodplain and development is possible provided strict criteria are applied to building and works approvals to minimise flood risks.

3.0 LAND USE AND DEVELOPMENT OBJECTIVES

The following objectives seek to guide decision making with respect to future use and development in the area covered by this local floodplain management plan:

- Minimise risk to life, health and wellbeing associated with flooding.

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

- Ensure that any use and development permitted on floodplain land:
 - does not increase the risk to existing residents, property and community infrastructure from flooding.
 - maintains to the maximum possible extent the free passage and temporary storage of floodwaters.
 - uses materials and is designed and constructed so that the likelihood of damage by floodwater is minimised.
 - will not cause any significant rise in flood level or flow velocity to the detriment of other land holders or property.
- Ensure that future flood damage costs are not compounded unduly.
- Ensure existing flood-prone development is maintained in ways that will minimise future impacts and costs associated with flooding.
- Discourage subdivision of land that would result in the intensification of development in areas affected by flooding and inundation.

4.0 EXERCISING DISCRETION

When exercising discretion in assessing and determining a planning permit application:

- Encourage construction of new buildings and works on land outside the UFZ, FO and LSIO.
- Discourage filling of the floodplain within the UFZ unless it can be demonstrated that balanced cut and fill can be achieved consistent with the Glenelg Hopkins CMA Guidelines for Floodplain Cut and Fill.
- Discourage the construction of private levees within the UFZ.
- With the exception of normal residential gardening activities, strongly discourage filling of the floodplain in all areas within the LSIO and FO unless it can be demonstrated that balanced cut and fill can be achieved consistent with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill.
- Discourage subdivision of parcels that could lead to intensification of development on flood prone land.
- Encourage the retention of natural drainage corridors with indigenous vegetation buffer areas along waterways. This will minimise erosion of stream banks and verges during large floods and maintain the natural drainage function, stream habitat, wildlife corridor and landscape values.

5.0 PERFORMANCE CRITERIA

5.1 Urban Floodway Zone

A dwelling or non-habitable building with a floor area exceeding 10m² may be constructed on land in this zone, only if it is to replace such a building that has an existing use right and will not (in the opinion of the Floodplain Management Authority) pose an unacceptable threat to:

- the orderly flow of flood waters across the subject land and either upstream or downstream land.
- the safety of persons who are resident on the land (having regard to flood depth, the velocity of flood waters, and the means of access available to the dwelling from non-flood prone land).

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

Any dwelling that is totally replaced must:

- be constructed on stumps or piers and bearers.
- have its lowest floor level set at least 600 mm above the 100-year ARI flood level (i.e. at or above the nominal flood protection level); and
- must be aligned with its longest axis parallel to the dominant direction of flood water flow.

If not more than 50% of an existing dwelling has been damaged or destroyed:

- a replacement ground floor area may be constructed with a floor level matching that of the existing building; and
- the replacement floor area may be up to 20m² greater than the damaged or destroyed ground floor area of the original building.

5.2 Floodway Overlay and Land Subject to Inundation Overlay

Buildings

Applications for new or replacement buildings and works including outbuildings and sheds with floor areas exceeding:

- 20m² within the LSIO; and
- 10m² within the FO

must satisfy the following criteria:

- New buildings must be on the highest available natural ground.
- New or replacement buildings must be constructed to minimise potential for disrupting flood water flow.
- New or replacement buildings must be constructed on stumps or piers and bearers unless the Floodplain Management Authority has advised otherwise in writing.
- New dwellings (excluding replacement dwellings) must be sited on land where the 100 year ARI flood depth is less than 500 mm above the natural surface level, and have an access way to the dwelling site from a main road that has a 100 year ARI flood depth not more than 500 mm.
- The floor level in a new dwelling must be finished at least 600 mm above the 100 year ARI flood level. This level is known as the Nominal Flood Protection Level (NFPL).
- New or replacement buildings must be aligned with their longest axis parallel to the direction of flood water flow unless it can be demonstrated that this cannot be practically achieved and/or the floodplain management authority has advised in writing that an alternative alignment is acceptable.
- Dwellings must use water resistant materials up to NFPL.
- Outbuildings including sheds and garages should be:
 - Aligned with their longest axis parallel to the direction of flood water flow.
 - Designed to minimise damage caused by flooding to the structure and its contents, such as by raising floor levels, using water resistant materials and raising electrical fittings above flood level.
- Cladding to the subfloor structure must have openings or be of an open style (such as spaced timber boards) to allow automatic entry and exit of flood water for all floods up to the 100 year ARI event.

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

- The size of building fill pads must be limited to as near as practicable to the building exterior.
- Building fill pads must be constructed in accordance with the balanced cut and fill principles of the Floodplain Management Authority *Guidelines for Floodplain Cut and Fill*, unless the Floodplain Management Authority has advised otherwise in writing.

Fences

- Fences should be designed and constructed to minimise the likely effects of flooding. Fences should not divert or obstruct floodwater unduly. The potential for fences to trap debris should be minimised.
- When considering an application for a fence on land within the FO or LSIO, consideration will be given to flood depth and flow velocity and ensure that the proposed fence is consistent with the Floodplain Management Authority *Guidelines for Fencing in Flood-prone Areas*.

5.3 Extensions to existing dwellings in the Urban Floodway Zone, Floodway Overlay and Land Subject to Inundation Overlay

Extensions must be constructed on stumps and bearers unless it can be demonstrated that this requirement cannot be practically achieved.

Where practicable, extensions should be aligned with their longest axis parallel to the direction of flood water flow.

The floor level of extensions must be finished at least 600 mm above the relevant 100 year ARI flood level except that if an existing dwelling has a ground floor level below the nominated flood protection level (i.e. 600 mm above the 100 year ARI flood level) it may be extended provided it is:

- within the UFZ or FO and the total floor area of the extension does not exceed 20m² and the total floor area of multiple extensions does not exceed this limit.
- within the LSIO and the total floor area of the extension does not exceed 40m² and the total floor area of multiple extensions does not exceed this limit.

5.4 Earthworks in the Urban Floodway Zone, Floodway Overlay and Land Subject to Inundation Overlay

Earthworks should not reduce the capacity of the floodplain to store and convey floodwater.

Earthworks should not divert or impede the flow of floodwater. The applicant may seek a formal advice letter from the Floodplain Management Authority as to the potential for impacts on floodwater flow and attach this letter in support of the application.

Any planning permit application for the construction of a dam or in-ground swimming pool should ensure that excavated material is removed off-site and away from land within the UFZ, FO or LSIO. The surface level of land surrounding the dam or pool, including embankments, should not cause a net decrease in flood storage volume.

Any planning permit application proposing filling of floodplain land must be consistent with the Floodplain Management Authority *Guidelines for Floodplain Cut and Fill*.

5.5 Subdivision in the Urban Floodway Zone, Floodway Overlay and Land Subject to Inundation Overlay

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

Subdivision applications for land that is either partly or wholly within the UFZ or FO must not create new lots wholly within the zone or overlay areas unless each new lot contains an existing dwelling.

Subdivision applications for land that is either partly or wholly within the LSIO or FO, must not create new lots wholly within the overlay areas, unless it can be demonstrated that:

- There is an adequate building envelope on each lot (which must be formally defined on the plan of subdivision) where the inundation depth is determined to be less than 300 mm.
- Access to the building envelope does not traverse land where the inundation depth is determined to be more than 300 mm.

Neither the building envelope nor the defined access route to it may be subject to a hazard rating more than 0.4 metres squared per second.².

5.6 Chemical Storage in the Urban Floodway Zone, Floodway Overlay and Land Subject to Inundation Overlay

Any planning permit application for the storage of chemicals within the UFZ, FO or LSIO should ensure chemicals are stored at a height of at least 1 metre above the 100 year ARI flood level.

5.7 Water Tanks in the Urban Floodway Zone, Floodway Overlay and Land Subject to Inundation Overlay

Water tanks can obstruct flood water flow and may float away and become battering rams or obstructions to flow downstream (e.g. when trapped against bridges or fences). Consequently, water tanks must comply with the following guidelines:

- Within the LSIO - fill/pads must be restricted as close as practicable to the footprint of on-ground water tanks.
- Within the UFZ or FO - water tanks exceeding 4500 litres capacity should be placed underground or raised on a stump and bearer tank stand to a height of at least 300 mm above the 100 year ARI flood level.

Where the above is demonstrated to be impracticable then:

- Fill/pads must be restricted as close as practicable to the footprint of on-ground water tanks.
- Multiple on-ground water tanks should not be placed in a continuous line unless the line of tanks is parallel to the direction of flood water flow.
- On-ground water tanks within the UFZ or FO must be secured in place to prevent floatation and transport downstream.

6.0 APPLICATION REQUIREMENTS

Unless the Floodplain Management Authority has advised otherwise in writing, every application for primary or secondary consent to construct a building, to construct or carry out works, or to subdivide land under Clause 37.03 (UFZ), Clause 44.03 (FO), or Clause 44.04 (LSIO) of the Glenelg Planning Scheme must be consistent with this Local Floodplain Development Plan.

² The product of depth (m) and velocity of flow (metres squared per second is also referred to as m²/s)

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

Applicants may attach a valid formal advice letter from the Floodplain Management Authority in support of their application.

All applications must be accompanied by plans and supporting documents, including photographs, that contain, to the extent that in the opinion of the responsible authority is relevant, the following information:

- Whether the proposed development could be located on flood-free land or land with a lesser flood hazard.
- The boundaries, dimensions, orientation, and slope of the site.
- Location, layout, size and use of existing buildings and works on the site and on surrounding properties.
- Location, layout, size and use of all proposed development.
- Elevations of all proposed buildings, drawn to scale.
- Floor levels of all existing and proposed buildings to Australian Height Datum.
- Relevant existing and proposed ground levels of the site, to Australian Height Datum, and the difference in levels between the site and surrounding properties.
- Details of existing and proposed internal driveways and pathways and their height in relation to the nominated flood level for the site.
- Adjoining roads, internal driveways, and access tracks.
- The layout and relevant provisions of any proposed subdivision, including a plan indicating the location of existing buildings.
- Details of the measures to be used to reduce the susceptibility of the development to flood damage.
- In the case of fences, a statement of compliance with the Floodplain Management Authority *Guidelines for Floodplain Fencing* or evidence demonstrating that the fence does not significantly obstruct flood flows.
- For proposals involving cut-and-fill earthworks, a statement of compliance with Floodplain Management Authority *Guidelines for Floodplain Cut and Fill* is required. The statement must include plans showing ground levels to Australian Height Datum of all fill and borrow areas, depths of cut and height of fill, and calculations showing the net level for level cut and fill volume balance.
- Consideration and assessment of the decision guidelines where relevant that are outlined under Clauses 37.03-6, 44.03-6, 44.04-6 and 65 of the Glenelg Shire Planning Scheme and Section 5.0 in this Incorporated Document.

6.1 Flood Risk Report

Unless the Floodplain Management Authority has advised otherwise in writing, in addition to the minimum application requirements stated above, any application that is not consistent with this Local Floodplain Development Plan must be accompanied by a Flood Risk Report consistent with the requirements set out under Clause 37.03-4 and Clause 44.03-3 of Glenelg Shire Planning Scheme.

7.0 REFERENCES

Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study (Water Technology, 2017)

Portland Flood Study (CARDNO, 2011)

GLENELG SHIRE LOCAL FLOODPLAIN DEVELOPMENT PLAN 2022

Casterton Flood Investigations (CARDNO, 2011)

Surry River Estuary Flood Study (Water Technology, 2008)

Guidelines for Coastal Catchment Management Authorities: Assessing Development in Relation to Sea Level Rise (Department of Sustainability and Environment, June 2012)

Building Code of Australia – Australian Building Codes Board - Construction of Buildings in Flood Hazard Areas – Information Handbook and Standard.

Floodplain Management Authority Guidelines for Fencing in Flood-prone Areas (Glenelg Hopkins CMA).

Floodplain Management Authority Guidelines for Floodplain Cut and Fill (Glenelg Hopkins CMA).

Floodplain Management in Australia – Best Practice Principles and Guidelines, Standing Committee on Agriculture and Resource Management [SCARM] (CSIRO, 2000).

Victoria Planning Provisions – Practice Note – Applying for a Planning Permit under the flood provisions.

Victoria Planning Provisions – Practice Note – Applying the Flood Provisions in Planning Schemes.



Summary Report

Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study

Department of Environment, Land, Water and Planning

October 2017





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EXECUTIVE SUMMARY

This report details the input data, approach and outcomes for the Fitzroy River, Darlot Creek and Heywood Regional Flood Mapping study.

The study has been initiated by the Department of Environment Land Water and Planning (DELWP) in order to define the extent and characteristics of flooding in the Fitzroy River and Darlot Creek catchment so that future planning decisions may be soundly based and measures may be put in place to minimise risk to the community.

The study provides information on flood behaviour and flood intelligence across the Fitzroy River and Darlot Creek catchment. The study involved a rigorous technical analysis of the drivers for flooding, which provided confidence in the use of this information to guide emergency management and future floodplain management in the catchment.

Community consultation was undertaken at various stages of the study, primarily in order to gather data and accounts of flooding and to benchmark the outputs of the calibration and preliminary design event mapping. The flood information provided by residents was invaluable in the development of the study outcomes.

A hydrologic analysis of the Fitzroy River, Darlot Creek and their tributaries was undertaken to determine design flood hydrographs for the 20%, 10%, 5%, 2%, 1%, 0.5% and 0.2% annual exceedance probability (AEP) flood events in the Fitzroy River and Darlot Creek catchment as well as the probable maximum flood (PMF). A rigorous approach has been applied to test and validate the design flows by utilising a number of hydrologic approaches including Flood Frequency Analysis, the development of a detailed hydrologic (RORB) model, and iterative hydrologic-hydraulic analysis. The adopted design flood inflows for the study are listed in Table 1.

Table 1 Design peak flows at major waterways

AEP	Fitzroy River at US Extent		Darlot Creek at US Extent		Darlot Creek at DS of Lake Condah		Durations modelled
	Design Flow (m ³ /s)	Critical Duration	Design Flow (m ³ /s)	Critical Duration	Design Flow (m ³ /s)	Critical Duration	
20%	7	72h	16	72h	8	72h	72h
10%	12	72h	34	72h	14	72h	72h
5%	20	72h	63	72h	22	72h	72h
2%	30	72h	110	72h	33	48h	72h, 48h
1%	37	72h	143	72h	44	48h	72h, 48h
0.5%	45	72h	180	72h	56	72h	72h
0.2%	59	72h	241	72h	79	72h	72h

To place the design peak flows in a historical context, the approximate AEP (and Average Recurrence Interval, ARI) of significant historical flood events are provided in Table 2. The March 1946 event is thought to be the largest event in living memory, but no gauge data was available at the time. The other calibration events in 2007, 2010 and 2013 were recorded as similar in scale to the final modelled 5% - 10% AEP events at the Heywood gauge.

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Table 2 Fitzroy River, Approximate AEPs for significant historical flood events observed flood information

Event	Peak flow (m ³ /s) and approximate AEP at Heywood		Available flood information	Use
	Peak Flow (m ³ /s)	Approximate AEP in Final Hydraulics (%)		
November 2007	30 (57)*	>5%	Observed flood marks: 21 Gauged flows and levels	Calibration
October 2013	24 (38)*	5%	Gauged flows and levels	Calibration
September 2010	18 (31)*	10%	Gauged flows and levels	Calibration
March 1946	- (103)*	0.5%	Observed flood levels: 2	Validation

* Bracketed number represents final calibrated/validated peak flow in hydraulics, which differs from measured flow due to flow breakout around the gauge site discussed in Section 5.2.1.

A digital elevation model (DEM) was developed from LiDAR survey. Using the DEM, a hydraulic model was established to simulate flood behaviour within the study area. Flood behaviour was assessed for flooding originating from tributaries as well as local catchment runoff within the floodplain. The hydraulic model was calibrated to three historic flood events (November 2007, October 2013 and September 2010) while the March 1946 event was used to further validate flood depths and extents across the floodplain. There was a significant amount of historic data available for the calibration events. This enabled a high level of model calibration to be achieved, lending confidence to the model performance.

A range of output data for all events have been produced. The model resolution of this study is suitable to inform land use planning and flood insurance pricing at a property scale. The timing of the flood peak and associated data is suitable to inform emergency response services. Key information on flooding throughout the catchment for each level of design event is presented in Table 4-3.

Sensitivity testing within Heywood, the major township which undergoes flooding in the catchment, suggests the railway bridge structure and embankments in Heywood present a major flow constriction. The capacity of the railway bridge opening will therefore impact the flood extents and depths through the town.

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ACKNOWLEDGEMENTS

Numerous organisations and individuals have contributed both time and valuable information to the Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping study. The study team acknowledges the contributions made by these groups and individuals, in particular:

- Rebecca Lett (Department of Environment Land Water and Planning & Project Manager)
- Graeme Jeffery and Ben Gaylard (Glenelg Hopkins CMA)
- Matt Berry and Billy Greenham (Glenelg Shire Council)
- Denis Rose (Gunditjmirring Traditional Owners Aboriginal Corporation)
- Ken Smith (VicSES)

The study team also wishes to thank all those stakeholders and members of the public who participated in the steering group and community information sessions and provided valuable records (including historic photos) and discussed their experiences and views on flooding in the Fitzroy River and Darlot Creek catchments.



GLOSSARY OF TERMS

Term	Definition
Annual Exceedance Probability (AEP)	Refers to the probability or risk of a flood of a given size occurring or being exceeded in any given year. A 90% AEP flood has a high probability of occurring or being exceeded; it would occur quite often and would be relatively small. A 1% AEP flood has a low probability of occurrence or being exceeded; it would be fairly rare but it would be of extreme magnitude.
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. A 10 year ARI flood is expected to be exceeded on average once every 10 years. 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.
Cadastral, cadastral base	Information in map or digital form showing the extent and usage of land, including streets, lot boundaries, water courses etc.
Catchment	The area draining to a site. It always relates to a particular location and may include the catchments of tributary streams as well as the main stream.
Design flood	A design flood is a probabilistic or statistical estimate, being generally based on some form of probability analysis of flood or rainfall data. An average recurrence interval or exceedance probability is attributed to the estimate.
Discharge	The rate of flow of water measured in terms of volume over time. It is to be distinguished from the speed or velocity of flow, which is a measure of how fast the water is moving rather than how much is moving.
Flood	Relatively high stream flow which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or overland runoff before entering a watercourse and/or coastal inundation resulting from elevated sea levels and/or waves overtopping coastline defences.
Flood frequency analysis	A statistical analysis of observed flood magnitudes to determine the probability of a given flood magnitude.
Flood hazard	Potential risk to life and limb caused by flooding. Flood hazard combines the flood depth and velocity.
Floodplain	Area of land which is subject to inundation by floods up to the probable maximum flood event, i.e. flood prone land.
Flood storages	Those parts of the floodplain that are important for the temporary storage, of floodwaters during the passage of a flood.
Geographical information systems (GIS)	A system of software and procedures designed to support the management, manipulation, analysis and display of spatially referenced data.

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Term	Definition
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 stage and velocity.
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 for given floods.
Intensity frequency duration (IFD) analysis	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.
LiDAR	Spot land surface heights collected via aerial light detection and ranging (LiDAR) survey. The spot heights are converted to a gridded digital elevation model dataset for use in modelling and mapping.
MIKE FLOOD	A hydraulic modelling tool used in this study to simulate the flow of flood water through the floodplain. The model uses numerical equations to describe the water movement.
Peak flow	The maximum discharge occurring during a flood event.
Probability	A statistical measure of the expected frequency or occurrence of flooding. For a fuller explanation see Average Recurrence Interval.
Probable Maximum Flood	The flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonably possible in a particular drainage area.
RORB	A hydrological modelling tool used in this study to calculate the runoff generated from historic and design rainfall events.
Runoff	The amount of rainfall that actually ends up as stream or pipe flow, also known as rainfall excess.
Stage	Equivalent to 'water level'. Both are measured with reference to a specified datum.
Stage hydrograph	A graph that shows how the water level changes with time. It must be referenced to a particular location and datum.
Topography	A surface which defines the ground level of a chosen area.

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Table 5-2 Darlot Creek at Homerton Gauge Heights for Design Flood Events

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1 INTRODUCTION

1.1 Overview

Water Technology was commissioned by the Department of Environment, Land, Water and Planning (DELWP) to undertake regional flood mapping for the Fitzroy River, Darlot Creek and Heywood. The project included detailed hydrological and hydraulic modelling of the Fitzroy River and Darlot Creek, with emphasis on detail through Heywood, and considering the downstream influences of the Portland Bay. Mapped outputs from the project will be used to satisfy a range of business requirements from planning, emergency response, to community awareness and for insurance purposes.

The study addressed the following aspects:

- Examine contributing factors to flood events within the Fitzroy River and Darlot Creek catchments including the main tributaries;
- Assess the sensitivity of flood mechanisms to a range of conditions, including channel roughness, pre-flood event catchment conditions, Portland Bay water levels, downstream berm condition, and structure blockage;
- Determine flood levels and extents for a range of flood modelling scenarios within the study area;
- Provide detailed flood intelligence outputs.

1.2 Study Catchment and Floodplain

The primary land use of the Fitzroy catchment is agriculture, accounting for approximately 75% of the land area (Mondon, et al, 2003). Apart from this agricultural land, a significant proportion of the catchment is forested. Within the study area are two main townships; Heywood and Tyrendarra.

Floodplains within the study area are of major cultural significance and parts of them are incorporated within the Budj Bim National Heritage Landscape, especially the area around Lake Condah and the Tyrendarra Indigenous Protected Area. The Fitzroy River and Darlot Creek catchments form part of the Gunditjmarra nation, with the local clan known as the Kilger gundidj (Victorian Corporation for Aboriginal Languages, 2002). The local indigenous settlements were based on a system of trapping and smoking eels in the lake and wetland systems. Since European settlement, the landscape has been through a history of rural drainage and conversion of swamps to farmland. Lake Condah was drained in the 1950s and then partially reinstated in 2010 by the construction of a weir and regulator structure.

Where the Fitzroy River meets the ocean a sand bar seasonally closes the river mouth. The actual location of the entrance channel is variable over time as it can break out across the sand dune barrier (Barton & Sherwood, 2004). The effect of closure of the entrance is an increase in the extent of inundation across the estuary and to mitigate this, artificial openings of the estuary entrance do occur.

The Fitzroy River catchment has an area of 1,460 km² extending 57 km north westerly from Portland Bay to a maximum elevation of 170 m AHD in the Cobboboonee State Forrest. The catchment also has one major tributary in Darlot Creek, which extends 73 km upstream of its confluence with the Fitzroy River, to a maximum level of 440 m AHD at the summit of Mount Napier. A number of other minor streams feed into the River throughout its course. The Surrey River to the west and Eumeralla River to the east have clearly defined catchments and are unlikely to exchange flows with the Fitzroy River.

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The main stream length of the Fitzroy River from the catchment divide to the mouth is 67 km with an equal area slope of 1.2 m/km. The main stream length of the Darlot Creek from the catchment divide to the confluence with the Fitzroy River is 95 km with an equal area slope of 1.4 m/km. Equal area slope is the averaged slope of a river, and if plotted as a straight line against the real topography will have an equal weighting of topographic error above and below the approximated line. It is commonly used in hydraulic and hydrological formulae. The catchment is relatively flat, except in the ranges around Mount Napier in the Upper Darlot Creek catchment area.

The Darlot Creek floodplain is dominated by swampy areas which have a history of artificial drainage for grazing land. The Condah swamp and Lake Condah were first drained in the 1890s, and the Condah Swamp Drainage Area was declared in 1948. In 2010, a weir and regulator was built in an attempt to reflow the lake and restore ecological and aboriginal heritage values to the area. The drainage and subsequent reflooding of the lake have had a profound impact on the hydrology of the system.

A consistent rainfall gradient exists over the catchment with average annual rainfall reaching 800 mm in the headwaters, while at the catchment centroid the average annual rainfall is around 700 mm. Some of the Upper Darlot Creek catchment reaches as low as 600 mm per year average rainfall.

1.3 Supporting Documents

A number of reports were prepared at each stage of the study. These reports were produced as separate standalone volumes, and a summary of each is provided in Table 1-1. In addition to these documents, flood intelligence outputs and GIS layers have been provided for each of the design flood events.

Table 1-1 Supporting documents

Report	Document Number	Title	Summary
1	R01	Preliminary Report	Review of flood related information for the study area, a review of available topographic and structure data (bridges and culvert information), and verification of topographic data.
2	R02	Hydrology Report	Hydrologic modelling and analysis report, summarising results of flood frequency analysis, RORB modelling, estimation of design event, and probable maximum flood hydrographs. This report has subsequently been superseded by R03, the combined hydrology and hydraulics report.
3	R03	Hydrology/Hydraulics Report	A combined hydrology and hydraulic modelling report providing details of hydrology and hydraulic model construction and calibration, sensitivity tests, and results of design event simulations.

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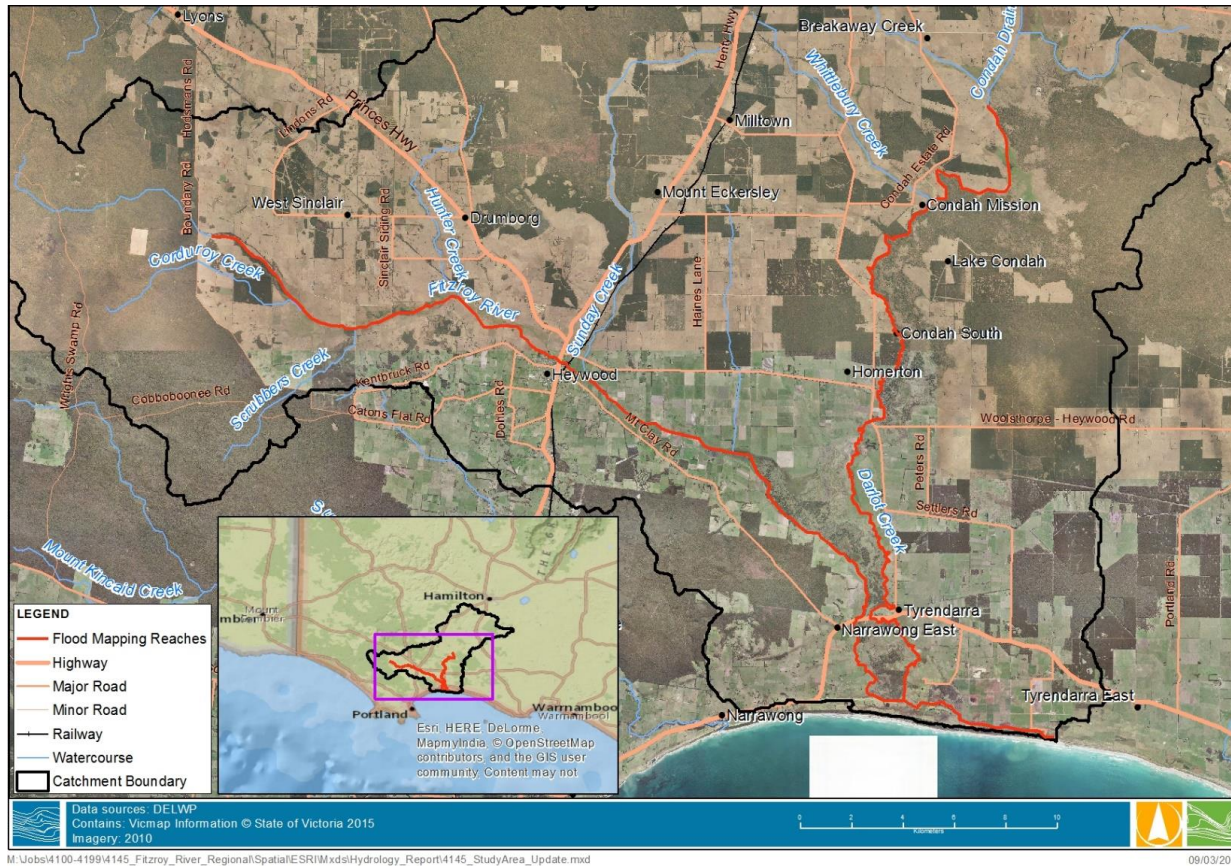


Figure 1-1 Fitzroy River Study Area



2 DATA REVIEW

On inception of the project a detailed review was undertaken of all available flood related information as well as topographic data, structure information, and hydrological data. Details of this review are provided in Report R01, while a short overview is provided herein.

2.1 Flood Related Studies

Due to relatively low levels of flooding recorded in the Fitzroy catchment in the past, there have been few flood related studies of the system. Early 20th century descriptions of the waterway, such as that by Schiller and Forbes (1946), suggest that extremely high rainfalls in the Fitzroy River catchment did not produce significant flood issues, and floodwaters dissipated relatively quickly. Darlot Creek was also described as causing little flood damage during major rainfall events.

Lake Condah (part of the Darlot Creek system) has been subject to hydrological regime modifications in the past. The lake was drained in 1908 as it was thought to exacerbate flooding (Gippel, et al, 2006). These drains were then variously upgraded and removed over the following years. In recent years the prevailing idea has been to restore Lake Condah to 'natural' conditions, as there would be major cultural and ecological benefits. To encourage this restoration Gippel, et al (2006), undertook a detailed analysis of the Condah Lake system. This analysis included a flood frequency analysis, development of a hydrological model, and a hydraulic analysis of the existing Condah system. From this study, a decision was made to attempt to return the hydrological regime of the Condah system more towards its original regime, by effectively blocking the Condah drain with a weir and re-flooding Lake Condah. This weir was built in 2010 and also has passing flow requirements so properties downstream of the weir still receive water from Darlot Creek.

In 2000, The Department of Natural Resources and Environment produced a series of '1% AEP' maps for the Shire of Glenelg, including the Fitzroy River and Darlot Creek for the Flood Data Transfer Project. Delineation of the '1% AEP' line was based on the 'Edge of High Ground' survey line from River survey, non-flood aerial photos and Rural land mapping which (based on alluvial soil deposits). This floodplain delineation was based on best available data, but is accepted that the base data has a low reliability, and the flood extent line is generally accurate to +/-100m.

A hydrologic and hydraulic investigation was previously undertaken on flooding in Heywood by Cardno (2008). The investigation utilised flood frequency analysis on the Fitzroy River at Heywood gauge and a hydrologic RORB model to define inflows into a hydraulic model. The hydraulic model only considers the township of Heywood for its hydraulic outputs and the results of this present study update and supersede this previous analysis.

2.2 Historic Flood Information

Significant historic flood events have been compiled from available sources and are listed in Table 2-1. There is little available information regarding major flooding before gauging was implemented in the 1970s. The largest floods on record differ between the three gauges with a substantial record; the Fitzroy River at Heywood, Darlot Creek at Myamyn and Darlot Creek at Homerton gauges. At Homerton and Heywood, two of three largest floods were in October 1976 and September 1983. Large floods were also recorded in October 1975 and August 1978. At Myamyn there is a shorter gauge record, however the largest floods recorded (between 1987 and 2010) were September 2010, October 1992 and November 2007. There is very little evidence of historic (before flood gauge installation) flooding.

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Table 2-1 Historic flood events

Event	Description	Data available
November 1906	Largest flood experienced at the time. Three inches of rain fell over 40 minutes. Water from the river reached the flood of the Presbyterian manse, and reached the floor of some houses.	Anecdotal newspaper report in <i>Portland Guardian</i> .
August 1939	Largest flood in 8-10 years, 235 points (83mm) of rain fell in two days. The Fitzroy River surged over its banks and was up to 300m wide in some places.	Anecdotal newspaper report in <i>Portland Guardian</i> .
March 1946	The south west of Victoria, including Heywood, receives its worst flood in living memory. Many rivers are in flood, including the Fitzroy River and Darlot Creek. High bridge over Darlot's Creek at Lake Condah was washed away.	Two flood mark at the railway bridge. Anecdotal reports in numerous newspapers.
August 1951	Flooding of some streets, the worst seen since 1946.	Anecdotal newspaper report in <i>Portland Guardian</i> .
November 1953	The worst flooding since 1946 in Condah swamp.	Anecdotal newspaper report in <i>The Age</i> .
October 1975	Largest recorded flood at Heywood.	Gauge records.
October 1976	Largest recorded flood at Homerton and third largest recorded flood at Heywood.	Gauge records.
August 1978	Second largest recorded flood at Homerton.	Gauge records.
September 1983	Second largest recorded flood at Heywood and third largest recorded flood at Homerton.	Gauge records.
November 2007	Only documented significant event in recent past.	Gauge records and numerous surveyed flood marks.

Historic flood data records as supplied by Glenelg Hopkins Catchment Management Authority is summarised in Figure 2-1.

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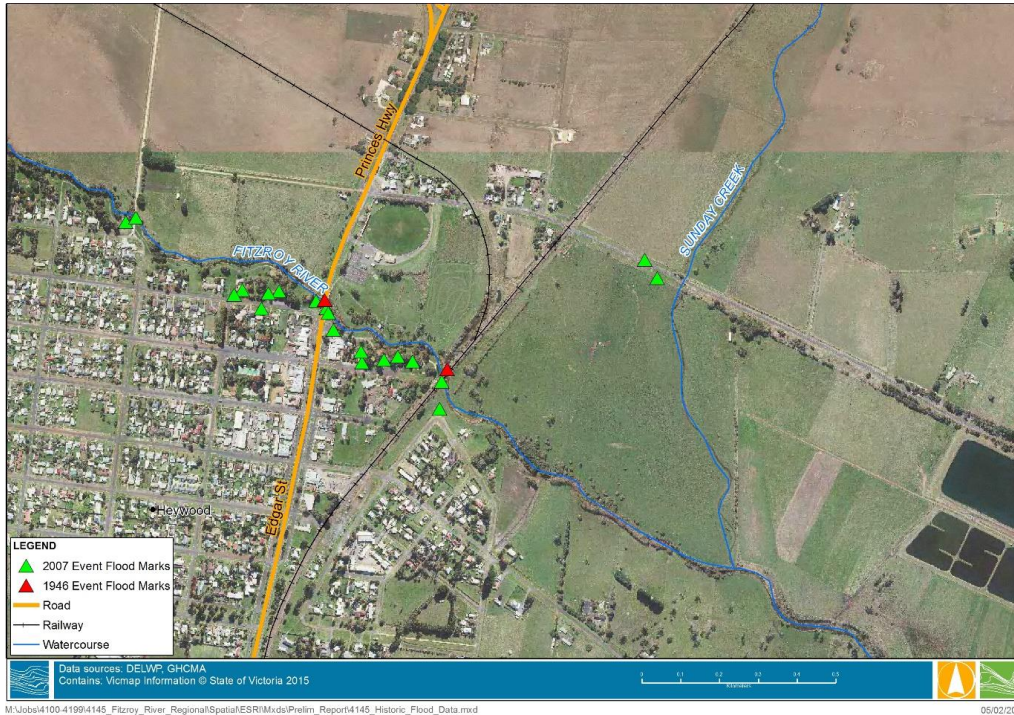


Figure 2-1 March 1946 and November 2007 flood information in VFD

2.3 Topographic Data

At the start of the project, it was recognised that Aerial LiDAR (Light Detection and Ranging) survey was available for the area from two different sources:

- 2009-10 Victorian State Wide Rivers LiDAR Project
- 2007-09 Vicmap Coastal LiDAR

Photogrammetric survey is available from one source:

- 2005 AEROMETREX Mt Eccles Lava Flow Photogrammetry

After beginning the project with these three data sources, two additional LiDAR datasets were made available for use in the flood study and were incorporated. This includes:

- 2011 Floodplains LiDAR (was not originally included in the original elevation dataset as it is not part of the VFD supplied by DELWP, but was made available mid-project by GHCMA).
- 2016 South West Towns Extension (a section of Heywood and downstream of Heywood thought to be critical to the floodplain modelling was flown and provided by DELWP in May 2016. This was flown specifically for this flood study as an extension to South West Towns LiDAR mapping that was underway in the area).

Key metadata for the three digital elevation models (DEMs) is given in Table 2-2, and their extents are shown in Figure 2-2. The Vicmap coastal LiDAR only covers the downstream section of the study area. The Rivers

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LiDAR covers most of the study area but only for a 1-2km wide corridor along watercourses. The photogrammetry captures a large portion of Darlot Creek, especially around Lake Condah. The floodplains LiDAR captures a large section of Heywood and Darlot Creek. The 2016 South West towns LiDAR covers the remaining section of Heywood and downstream of Heywood. A coarse (20 m resolution) DEM is available from Vicmap for the whole study area for catchment delineation purposes.

Table 2-2 Key metadata for LiDAR datasets

Dataset	Source	Date of Capture	Vertical accuracy (1 sigma)	Resolution
2009-10 Rivers LiDAR	LiDAR	Nov 2009	0.20 m	1 m
2007-09 Coastal LiDAR	LiDAR	Apr 2007	0.10 m	1 m
2005 AEROMETREX Photogrammetry	Photogrammetry	Apr 2005	0.40 m	5 m
2011 Floodplains LiDAR	LiDAR	Sep 2011	0.10 m	1 m
2016 South West Towns Extension	LiDAR	May 2016	0.10 m	1 m

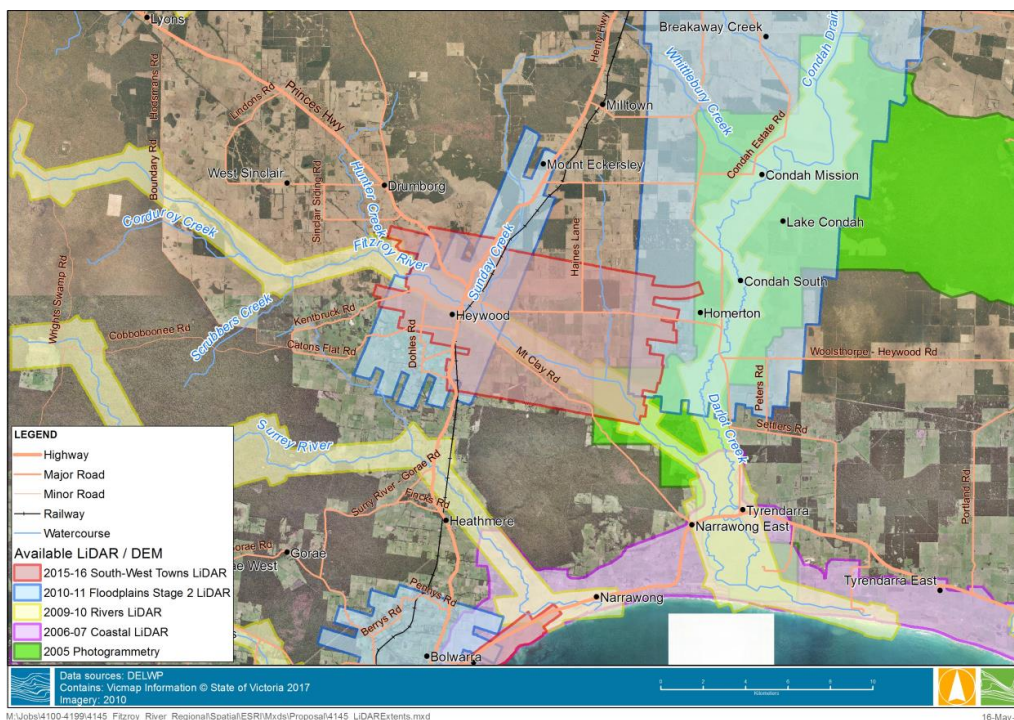


Figure 2-2 LiDAR and Photogrammetry Extents

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The final adopted DEM, with four primary LiDAR datasets, one photogrammetry dataset and coarse 20m DEM merged into a single DEM is shown in Figure 2-3 below.

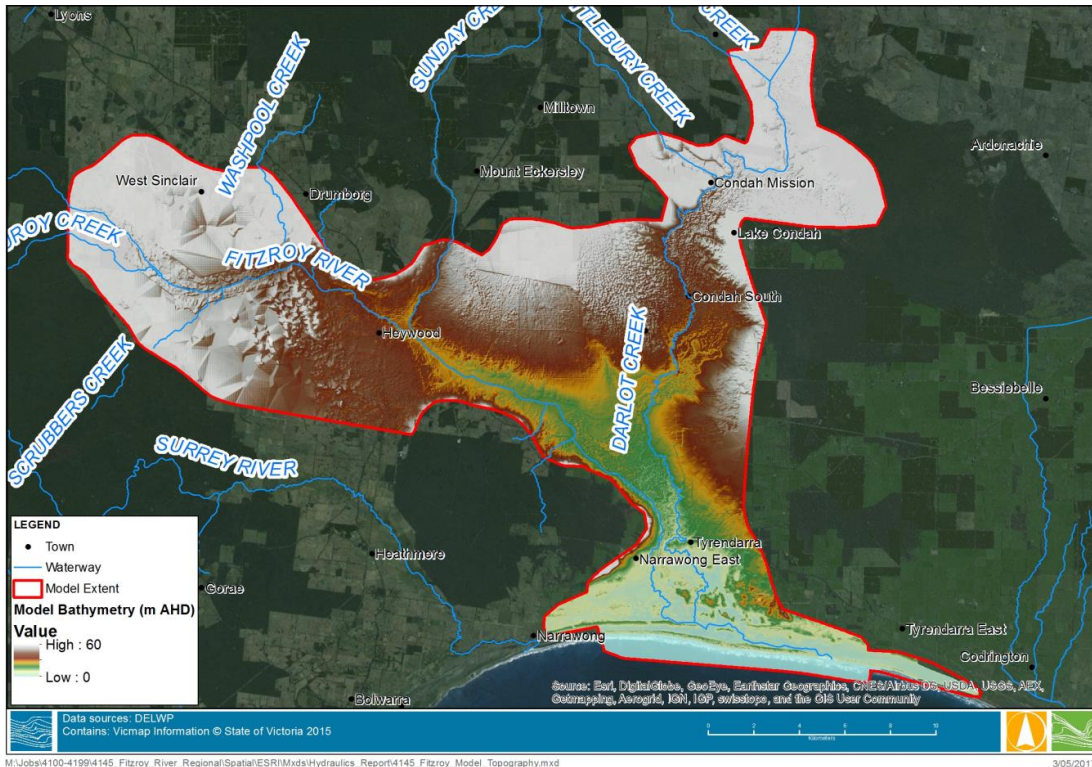


Figure 2-3 Adopted Model DEM

2.4 Structure Information

At the regional scale, hydraulic structures of interest are those that have the potential to impact the wider flood extent. These have been generally limited to bridges and weir crossings. The following structures are those that have been incorporated into the hydraulic model.

2.4.1 Road / Rail Crossings

The resolution of the model allows for key bridge and rail crossings of the waterways to be included. Data on these bridges has been provided by VicRoads, whilst railway track information has been accessed from VicTrack. Weir crossings for vehicles and large railway culverts were also measured and photographed during a site visit on the 02/12/15. Locations of key structures are shown in Figure 2-4 and details of the structures are listed in Table 2-3.

2.4.2 Channels

A number of open channels bisect the Darlot Creek floodplain, the most significant of which are located in the immediate vicinity of Lake Condah. Key channels in this area include Condah Drain and Louth Drain, and there are a number of unnamed drains that intersect these.

The channel banks of major channels which are known to impact on flooding have been sampled from the LiDAR and specifically incorporated into the hydraulic model.

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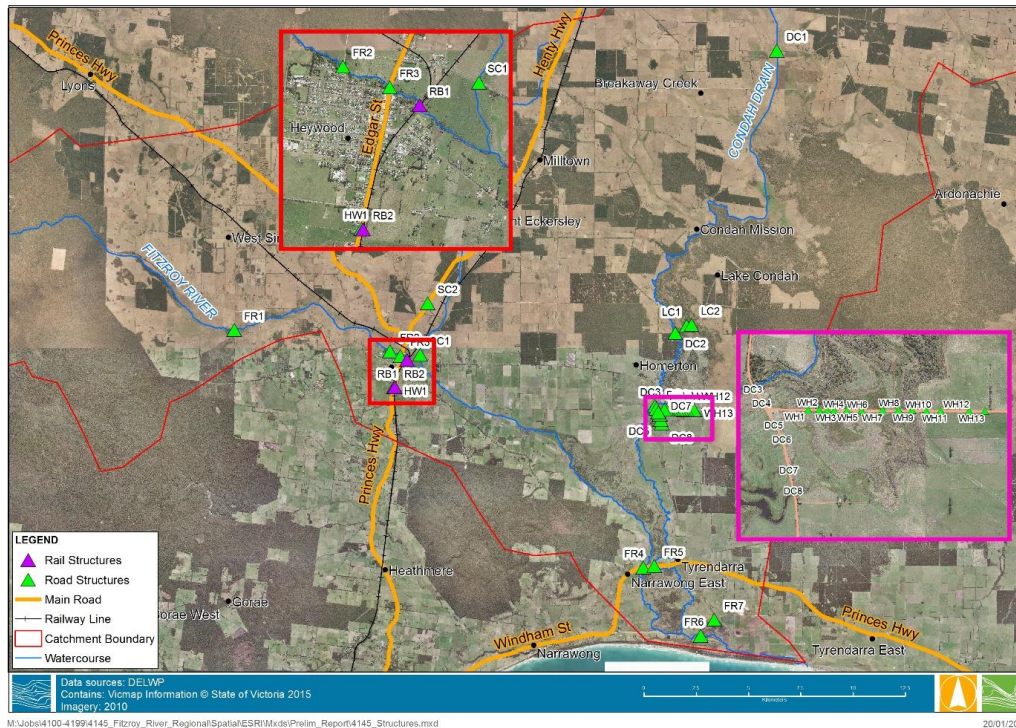


Figure 2-4 Key structures within study area

Table 2-3 Key details for surveyed bridges and culverts

Culvert ref.	Type	Description	Notes
RB1	Railway Bridge	Four-span rail bridge over Fitzroy River.	Structure data obtained from VicTrack.
RB2	Rail Opening	Two-span opening in railway embankment over unnamed Creek in Heywood.	Structure data obtained from VicTrack.
DC1	Road Bridge	Bridge over Condamine Drain on Condamine-MacArthur Rd. Named 'Reid's Bridge'.	Some structure details available from VicRoads.
DC2	Road Bridge	Small Bridge over Darlot Creek on Coustleys Rd	Unsurveyed
DC3	Road Bridge	Dual span road bridge over Darlot Creek on Ettrick-Tyrendarra Rd. Immediately downstream of Darlot Creek at Homerton gauge.	Some structure details available from VicRoads.
DC4	Road Culvert	Culvert under Ettrick-Tyrendarra Rd on Darlot Creek floodplain.	Unsurveyed.
DC5	Road Culvert	Culvert under Ettrick-Tyrendarra Rd on Darlot Creek floodplain.	Unsurveyed.

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Culvert ref.	Type	Description	Notes
DC6	Road Culvert	Culvert under Ettrick-Tyrendarra Rd on Darlot Creek floodplain.	Unsurveyed.
DC7	Road Culvert	Culvert under Ettrick-Tyrendarra Rd on Darlot Creek floodplain.	Unsurveyed.
DC8	Road Culvert	Culvert under Ettrick-Tyrendarra Rd on Darlot Creek floodplain.	Unsurveyed.
FR1	Road Culvert	Culvert under Miltons Rd on the Fitzroy River.	Unsurveyed.
FR2	Road culvert	Culvert under Bond St in Heywood on the Fitzroy River.	Bond St is a low-level road crossing on the Fitzroy. Unsurveyed.
FR3	Road Bridge	Five-span road bridge over the Fitzroy River on Princes Hwy.	Some structure details available from VicRoads.
FR4	Road Bridge	Road bridge over the Fitzroy River on Princes Hwy.	Some structure details available from VicRoads.
FR5	Road Bridge	Road bridge over the Fitzroy River on Princes Hwy.	Some structure details available from VicRoads.
FR6	Road Bridge	Road bridge over the Fitzroy River on Tyrendarra School Rd.	Unsurveyed.
FR7	Road Culvert	Culvert in the Fitzroy River floodplain on Tyrendarra School Rd.	Unsurveyed.
HW1	Road Culvert	Culvert under Princes Hwy in Heywood.	Some structure details available from VicRoads.
LC1	Road Culvert	Culvert under Coustleys Rd in Lake Condah.	Unsurveyed.
LC2	Road Culvert	Culvert under Coustleys Rd in Lake Condah.	Unsurveyed.
SC1	Road Culvert	Culvert under Princes Hwy on a tributary to Sunday Creek.	Some structure details available from VicRoads.
SC2	Road Bridge	Bridge over Sunday Creek on Woolsthorpe-Heywood Rd.	Some structure details available from VicRoads.
WH1 – WH13	Road Culvert	Culvert under Woolsthorpe-Heywood Rd in the Darlot Creek floodplain.	Unsurveyed.

During the hydraulic model build and testing specific structures were explicitly included based on model resolution and impact of the structures to model results. The key structures that were explicitly included as openings in the topography were FR3, RB1, SC1, DC3, FR4, FR5 and FR6.

2.4.3 Levees

Constructed levees are not a key feature of the Fitzroy River, however they have been constructed in the Lake Condah area on Darlot Creek historically. These levees were incorporated into the model as standard topography, as no construction details are available and they are included in the DEM information.

Of significance is the new weir that has been constructed in the downstream section of Lake Condah, which causes a significant flow blockage to Darlot Creek and was constructed in 2010. The weir is designed so water

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backs up behind and forces water into Lake Condah. The weir includes a regulating structure which transmits passing flows to downstream of the weir. The levee height is 52.0m AHD, and for modelling purposes a passing flow of 30ML/day or natural (if flow is less than 30ML/day) has been adopted as this is the current operating passing flow.



Figure 2-5 Location of Condah Weir

2.5 Hydrological Data

2.5.1 Rainfall Data

The average annual rainfall varies throughout the catchment, reaching 800 mm in the forested Upper Fitzroy area, and as low as 600 mm near the flat upper headwaters of Darlot Creek. At the catchment centroid the average annual rainfall is approximately 700 mm, with Condah gauge (090028) averaging 699mm of rainfall/year.

Numerous daily rainfall sites are in operation in and around the catchment. All stations within the catchment and close to the catchment are listed in Table 2-4. Stations operating during the calibration events in 1946, 2007 and 2013 are identified with a * as they were used during hydrological calibration analysis.

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Table 2-4 Daily rainfall stations around Fitzroy River catchment

Gauge No.	Location	Period	Years	Distance from catchment centroid (km)
090028	Condah*	1900 - 1954	55	6.9
090047	Heywood Post Office*	1887 - 1971	85	15.1
090190	Branxholme Inverary Rd	2004 - 2006	3	15.1
090038	Tyrendarra (Ellangowan)*	1902 - 2008	107	15.6
090009	Branxholme*	1909 - 2004	95	17.8
090010	Branxholme (Bassett)*	1883 - Present	113	17.8
090048	Heywood (Forestry)*	1949 - 2013	64	17.8
090055	Macarthur (Post Office)*	1936 - Present	80	19.7
090124	Narrawong	1892 - 1919	20	20.9
090122	Macarthur (Glenhuntly)	1884 - 1945	62	21.5
090097	Grassdale	1954 - 2002	48	25.5
090156	Mouny Yandyke (Lyons)	1888 - 1893	6	27.7
090121	Crawford Lower	1932 - 1939	8	28.4
090002	Yambuk (Avalon)*	1920 - 1969	50	32.1
090103	Hamilton Research Station	1962 - 2000	38	33.3
090075	Tahara*	1937 - 2004	67	34.3
090150	Gorae	1905 - 1921	17	34.4
090169	Hamilton Godfrey	1980 - 1981	2	37.6
090044	Hamilton*	1869 - 1983	115	38.2
090057	Merino*	1886 - Present	124	38.6
090088	Yatchaw (Amaroo)*	1903 - Present	113	38.8
090056	Merino (Glenorchy Estate)*	1886 - 1946	61	40.5
090036	Drik Drik*	1907 - Present	109	41.1
090050	Mount Richmond*	1940 - Present	76	41.2
090149	Yambuk	1970 - 1987	18	41.5
090162	Portland Aero	1973 - 1982	10	41.9
090171	Portland (Cashmere Airport)*	1982 - Present	34	41.9
090070	Portland*	1857 - Present	154	42.8
090032	Dartmoor*	1884 - 1980	77	43.5
089014	Kanawalla*	1908 - 1952	45	45.5
090194	Dartmoor*	2009 - Present	7	46.0
090013	Cape Bridgewater*	1905 - Present	111	46.2
090024	Coleraine Hospital*	1898 - Present	118	46.7

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Gauge No.	Location	Period	Years	Distance from catchment centroid (km)
090113	Coleraine (Wondo Dale)	1881 - 1917	37	47.0
090114	Coleraine (Mona Vale)	1903 - 1913	11	47.0
090063	Penshurst (Post Office)*	1882 - Present	134	47.7
090173	Hamilton Airport*	1983 - Present	33	48.3
090045	Hawkesdale (Post Office)*	1884 - Present	125	48.6
090046	Hawkesdale Shire Office*	1944 - 1995	52	48.6
089012	Dunkeld (Corea South)	1947 - 1986	40	48.9
090184	Cape Nelson Lighthouse*	1995 - Present	21	49.6

Pluviograph (sub-daily rainfall) stations around the Fitzroy River catchment that captured the 2007 or 2013 calibration events are listed in Table 2-5. There are no sub-daily gauges within the Fitzroy River catchment area. The 1946 event is not captured by pluviographs as it occurred before the installation of instantaneous rainfall gauging in the catchment. Whilst all gauges capture the 2013 event, the 2007 event occurred before installation of many of the gauges. The 2007 event was only captured at Casterton and Mount Gambier. Both of these gauges are in the far north western side of the catchment, so this gauge distribution is not ideal.

Table 2-5 Pluviograph stations around Fitzroy River catchment

Gauge No.	Location	Period	Years	Distance from catchment centroid
90171	Portland (Cashmore Airport)	2009 – 2016	6.8	41.5
90194	Dartmoor	2009 – 2016	6.4	45.9
90173	Hamilton Airport	2010 – 2016	5.7	48.6
90184	Cape Nelson Lighthouse	2010 – 2016	5.7	49.2
90175	Port Fairy AWS	2010 – 2016	5.7	57.2
90182	Casterton	2005 – 2016	6.8	61.9
90186	Warrnambool Airport Ndb	2010 – 2016	5.8	65.6
90176	Mortlake Racecourse	2010 – 2016	5.5	87.5
26021	Mount Gambier Aero	2003 – 2016	12.5	92.3
	Surrey River @ Heathmere	2006 - 2016		

2.5.2 Streamflow Data

Gauge Locations

Two streamflow gauges currently operate in the catchment, while historic data is also available for two other gauges (Table 2-6). The currently operating gauges, Fitzroy River at Heywood and Darlot Creek at Homerton Bridge gauges record streamflow at the two tributaries that are to be mapped – the Fitzroy River and Darlot Creek. The Fitzroy River at Heywood gauge catchment area of 234km² captures 17% of the Fitzroy catchment, and the Darlot Creek at Homerton captures another 56% of the catchment (760km²), therefore approximately 73% of the catchment is captured by gauging stations. Of the two currently operating gauges, both of them

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recorded data during the 2007 and 2013 calibration events. The other gauges were not deemed suitable for use in calibration. The available streamflow gauge data is shown in Figure 2-7.

Table 2-6 Streamflow gauges in Fitzroy River and Darlot Creek catchment

Gauge No.	Location	Period	Years	Catchment Area (km ²)
237202	Fitzroy River @ Heywood	1968 — 2015	48	234
		1948 — 1968*	20	
237205	Darlot Creek @ Homerton Bridge	1969 — 2015	47	760
		1963 — 1969*	6	
237209	Darlot Creek @ Myamyn	1987 — 2010	24	600
237204	Darlot Creek @ Lake Condah Bridge	1961 — 1964*	4	607

* Instantaneous flows not recorded – mean daily flows only

2.5.3 Water Level Data

One historic water level gauge has operated in Lake Condah (Table 2-7). The Lake Condah water level gauge does not have recorded data during the calibration events.

Table 2-7 Water level gauges in Lake Condah

Gauge No.	Location	Period	Years
227600	Lake Condah @ Lake Condah	1988 - 1993	4

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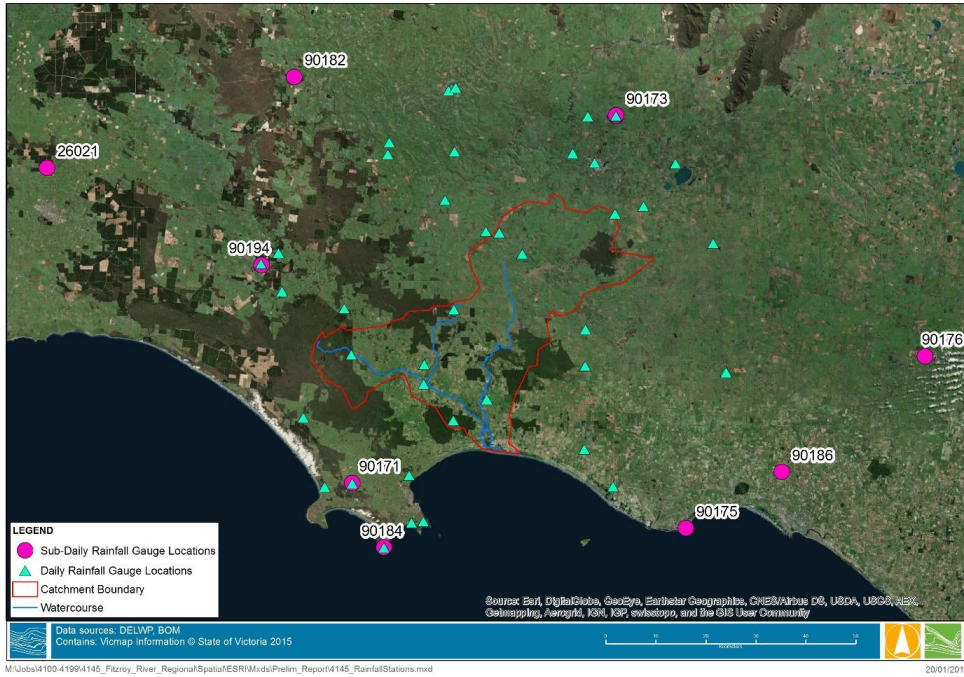


Figure 2-6 Rainfall stations in and around the Fitzroy River catchment

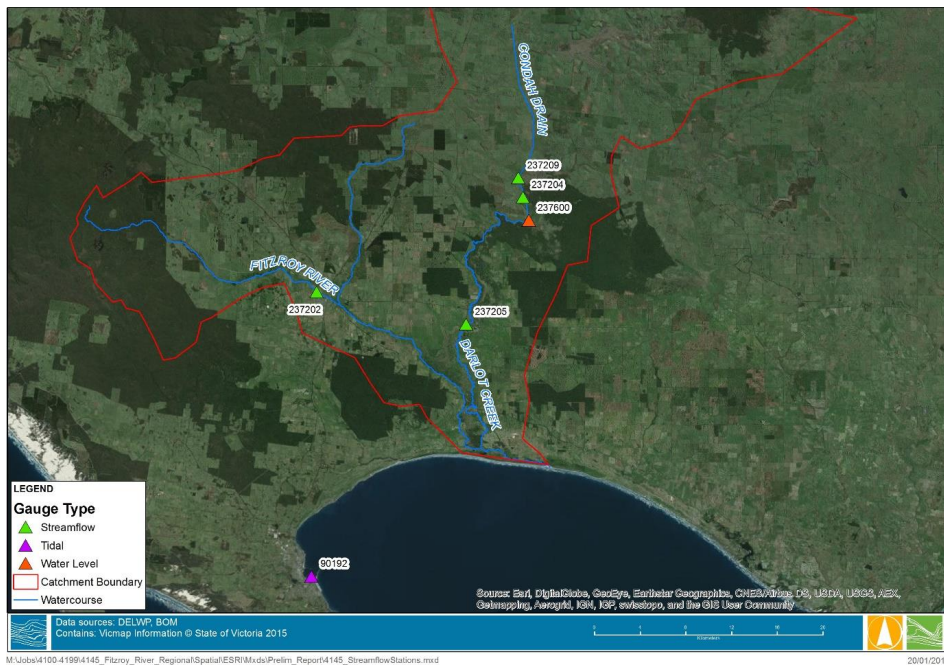


Figure 2-7 Streamflow and water level gauges in the Fitzroy River catchment

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2.5.4 Tidal Gauge Data

A tidal gauge is available in Portland Bay (Table 2-8), with data available from 1991. The site is part of the Australian Baseline Sea Level Monitoring Project. The water level variation in November 2007 (corresponding to a flood event in the catchment) is shown in **Error! Reference source not found.** Water levels relevant to calibration events (post 1991) have been extracted from the gauge information and used as boundary conditions in the hydraulic model.

Harmonic constituents for this port are available in the Royal Australian Navy's *Australian National Tide Tables*. These harmonic constituents allowed for generation of a synthetic water level data set for calibration events where no measured water level data is available.

Table 2-8 Tidal Gauges Data

Gauge No.	Location	Harmonic constituents					
		Z0	M2	S2	K1	O1	
90192	Portland	Amplitude	0.65	0.129	0.134	0.177	0.129
		Phase	0	334.7	51.8	44.3	16.5

Estimates of extreme coastal water levels (storm tides) have been developed for the Victorian coastline by the CSIRO (2009) for difference planning and sea level rise scenarios. The storm tide levels for Portland are presented in Table 2-9 for Climate Change Scenario 2. This scenario combines the sea level rise (IPCC 2007 A1F1) with increased wind speeds of 19% by 2100.

Table 2-9 Storm Tide Levels Incorporating Mean Sea Level Rise Scenarios (CSIRO 2009)

(m AHD)	Existing	2030 High	2040 High*	2070 High	2100 High
Mean Sea Level Rise	-	0.15	0.20	0.47	0.82
Portland (10% AEP)	0.79	1.00	1.05	1.39	1.81
Portland (1% AEP)	1.01	1.22	1.27	1.61	2.11

* Interpolated value for this study

For the design flood event simulations, the existing 10% AEP storm tide levels were used as the downstream boundary conditions.

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3 PROJECT CONSULTATION

3.1 Overview

An important element of the flood mapping study was the active engagement of residents in the study area. This engagement was developed over the course of the study through community consultation sessions and meetings with a Steering Committee. The aims of the community consultation were as follows:

- To raise awareness of the study and to identify key community concerns; and
- To provide information to the community and seek their feedback/input regarding the study outcomes including the existing flood behaviour and proposed flood mapping extents.

3.2 Steering Committee

The floodplain mapping study was led by a Steering Committee consisting of representatives from Department of Environment Land Water and Planning (DELWP), Glenelg Hopkins Catchment Management Authority (GHCMA), Glenelg Shire Council (GSC), Victorian State Emergency Service (VicSES) and a member of the Gunditjmirring Traditional Owners Aboriginal Corporation.

The Steering Committee met on four occasions at key points throughout the study, to review and manage the development of the study.

3.3 Community Consultation

The main aim of the community engagement process was to provide information regarding the development of the study and to seek feedback, both verbally and through the use of online methods. All community meetings were supported by media releases to local papers and meeting notices.

The public consultation process was coordinated by DELWP. The following community meetings were held as part of the consultation process:

- Initial community meeting, 18th February 2016 in Heywood – The first public meeting was held to outline the objectives of the study to the community and to receive any flood information the community may be able to provide;
- Second community meeting, 27th September 2016 in Heywood– This meeting presented the results of the flood modelling. Community feedback was sought on the flood modelling results.
- Second community meeting, 9th May 2017 in Heywood – This meeting presented the final outputs to the community, and allowed residents to see and discuss how the outputs will affect them.

The community provided knowledge of a range of previous floods, however the lack of recent major flood meant that the 1% AEP is a much larger flood than most residents have experienced.



4 FLOOD BEHAVIOUR

4.1 Overview

Flooding in the Fitzroy River and Darlot Creek catchment can occur due to widespread and prolonged rainfall. Apart from numerous rural properties, the primary township affected by floodwater is Heywood.

The flood behaviour associated with catchment flooding mechanisms has been assessed using a range of industry standard approaches and tools:

- Hydrological analysis – this involves the analysis of the magnitude of previous flood events in the catchment, the development of a rainfall-runoff model for the entire Fitzroy River and Darlot Creek catchment, and the prediction of the likelihood of future flood events of a given magnitude,
- Hydraulic analysis – the physical understanding of what a given flood event may look like in the lower Fitzroy River and Darlot Creek catchment was assessed through a hydraulic analysis. A hydraulic model was used to predict the extent of flooding, flood depths and flow velocities for a range of possible future flood events.

The different flood mechanism and the results of the hydrologic and hydraulic analysis for the study area are discussed in the following sections. Further detailed information is also provided in Report 3.

4.2 Hydrology

4.2.1 Streamflow Gauging

Two streamflow gauges currently operate in the catchment, while historic data is also available for two other gauges (Table 2-6). The Fitzroy River at Heywood and Darlot Creek at Homerton gauges record streamflow at the two tributaries that have been mapped. The Fitzroy River at Heywood gauge catchment area of 234 km² captures 17% of the Fitzroy catchment, and the Darlot Creek at Homerton captures another 56% of the catchment (760 km²), therefore approximately 73% of the catchment is captured by gauging stations.

It was initially thought that both gauges are located in suitable locations for model calibration, as they are generally downstream of most large tributaries and have a high quality gauging record. The Fitzroy River at Heywood gauge is also situated adjacent to the key township of Heywood, a critical location with respect to flood mapping. However, upon more detailed analysis, it was found that high flow gaugings at Fitzroy River at Heywood gauge was unreliable due to flow bypassing the gauge. A joint hydrologic-hydraulic calibration using the gauge water levels was therefore employed. A detailed analysis of each gauge was undertaken and is presented in the Section 2.3 of Report R03, the Joint Hydrology and Hydraulics report.

4.2.2 Flood Frequency Analysis

Flood frequency analysis (FFA) allows the estimation of peak flows of selected Annual Exceedance Probability (AEP) events based on a statistical analysis. FFA was undertaken for the Fitzroy River at Heywood and Darlot Creek at Homerton gauges in order to estimate the return periods of peak flow at the gauge for verification of the RORB model.

Hydrographs extracted from the hydrologic model at the Fitzroy River and Darlot Creek are used as direct inflows to the hydraulic model. It was intended to validate calibrated losses at these gauges with flood frequency analysis, however difficulties in calibrating the hydrologic and hydraulic models pointed to uncertainties in the rating curve at Heywood, and issues around the different hydrologic behaviour of the upper and lower Darlot Creek systems and the effect of Lake Condah, as discussed in Section 5.3 of Report R03,

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the Combined Hydrology and Hydraulics report. The FFA is also detailed in the Appendix of Report R02 and Section 3.5 of Report R02, the Hydrology Report, but was not used for the final design flood validation.

4.2.3 Hydrologic Modelling

A hydrological model of the catchment was developed for the purpose of extracting design flows to be used as boundary conditions in the Fitzroy River hydraulic model. The rainfall-runoff program, RORB (Version 6) was used for this study.

RORB is a non-linear rainfall runoff and streamflow routing model which is used for calculation of flow hydrographs in drainage and stream networks. The model requires catchments to be divided into subareas, connected by a series of conceptual reach storages. Design storm rainfall is input to the centroid of each subarea. Specified losses are then deducted, and the excess routed through the reach network.

The RORB model was at a resolution adequate to resolve the main drainage paths and sub-catchments, and to provide smooth hydrographs for the hydraulic model. 'Interstation areas' were introduced at Heywood and Homerton gauges, which allow for calibrated catchment routing parameters to be adopted for the upstream Fitzroy and Darlot Creek catchments, respectively. The areas downstream of the gauges initially adopted the upstream parameters.

As detailed in Report R03, the Joint Hydraulics and Hydrology Report, Lake Condah and other swampland in the upper Darlot Creek catchment provide significant flow storage capacity and retard the upstream flows. The result is that the upper Darlot Creek catchment responds differently to rainfall than the lower Darlot Creek catchment.

From a hydrologic modelling perspective, the system effectively requires two different flood hydrographs; one for the catchment upstream of Lake Condah and one for the catchment downstream of Lake Condah. The original hydrologic model was not able to replicate the effects of the upstream catchment storage using a single set of parameters, and it was therefore decided to split the hydrologic model into two; the first model consisting of the whole catchment, which provides inputs into upper Darlot Creek and the Fitzroy River catchment, and a second model focussing on a portion of the downstream catchment of Darlot Creek, between Lake Condah and the Homerton gauge.

After joint hydraulic-hydrologic calibration detailed in Report R03, the peak flow volumes shown in Table 4-1 were taken forward as design inflows in the hydraulic modelling.

Table 4-1 Recommended Design Peak Flows

AEP	Fitzroy River at US Extent		Darlot Creek at US Extent		Darlot Creek at DS of Lake Condah		Durations to be modelled
	Design Flow (m ³ /s)	Critical Duration	Design Flow (m ³ /s)	Critical Duration	Design Flow (m ³ /s)	Critical Duration	
20%	7	72h	16	72h	8	72h	72h
10%	12	72h	34	72h	14	72h	72h
5%	20	72h	63	72h	22	72h	72h
2%	30	72h	110	72h	33	48h	72h, 48h
1%	37	72h	143	72h	44	48h	72h, 48h
0.5%	45	72h	180	72h	56	72h	72h
0.2%	59	72h	241	72h	79	72h	72h

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4.2.4 Probable Maximum Flood

The Probable Maximum Flood (PMF) is the flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonably possible in a particular drainage area. The PMF was estimated through using the Probable Maximum Precipitation (PMP), then application of the PMP to the RORB model to generate PMF flood hydrographs.

The PMP rainfall totals, spatial and temporal patterns calculated using the regional GSAM method were input into the RORB model, with the calibrated routing parameters. An initial loss of 0 mm and a continuing loss of 1 mm/hr were adopted as recommended in Australian Rainfall and Runoff Book VI (1998). The resulting PMF peak flows are given in Table 4-2.

Table 4-2 PMF Peak Flow Estimates

AEP	Fitzroy River at Heywood		Fitzroy River at US Extent		Darlot Creek at US Extent		Darlot Creek at DS of Lake Condah	
	Design Flow (m ³ /s)	Critical Duration	Design Flow (m ³ /s)	Critical Duration	Design Flow (m ³ /s)	Critical Duration	Design Flow (m ³ /s)	Critical Duration
PMF	1483	24hr	382	24hr	3004	24hr	683	24hr

4.3 Hydraulics

4.3.1 Overview

This section discusses the application of the hydraulic model to simulate flood behaviour (extents, depth, velocities) for a range of flood magnitudes.

The hydrologic analysis, previously discussed, provided flood inflow hydrographs for the hydraulic model. These inflow hydrographs were routed through the calibrated hydraulic model. This enabled the modelling of flood depths, extents and velocities over a range of flood magnitudes. It also provided a tool for understanding the flood behaviour across the study area.

A detailed description of the hydraulic model setup, calibration, validation, sensitivity tests and design event simulation is provided in Report R03. This section summaries the general model development and key outcomes from the hydraulic modelling investigation.

4.3.2 Hydraulic Modelling

A two dimensional (2D) flexible mesh hydraulic model was developed for the study area using MIKE21FM GPU (Mike by DHI). MIKE21FM two-dimensional flexible mesh model systems is a 2D state-of-the-art tool for floodplain modelling which is run with a graphics processing unit (GPU). The GPU allows for greatly accelerated model runs, and represents a recent critical advancement in hydraulic modelling. Further details on the capabilities of the MIKE modelling system can be found at <http://www.dhisoftware.com>.

Adopting a flexible mesh modelling approach allowed the hydraulic model to incorporate greater detail in areas of importance, whilst maintaining computational efficiency through a larger element size in less sensitive regions of the modelled area. This allows features within the broader floodplain and the township areas (Heywood) to be resolved in varying detail in the same model whilst maintaining appropriate run times.

The model extent covered the full study area, as shown in Figure 2-3, and inflows were included from all tributaries (Darlot Creek, Fitzroy River), as well as runoff from Sunday Creek and the floodplain itself. Water

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levels in Portland Bay provided the downstream boundary of the model. Topography data was provided by LiDAR survey and photogrammetry.

The modelling process involved the following stages:

- Model setup and calibration,
- Validation and sensitivity tests,
- Design flood simulations,

The calibration, validation, and sensitivity assessments are an iterative investigative process and all outcomes from these stages inform the final design flood simulations.

4.3.3 Understanding Flood Behaviour

Table 4-3 describes the key flood characteristics in the Fitzroy River catchment for each design event. The key aspect to note is that properties in Heywood are inundated above floor level in the 2% AEP and larger flood events. There are also a number of key roadways that are inundated in 1% AEP events and larger.

It was assumed for all design events was that Lake Condah was already full when the design events commenced. This condition was adopted based on sensitivity tests undertaken for the model calibration and verification, detailed in the combined Hydrology and Hydraulics Report (R04). If Lake Condah is assumed to be initially empty, the available storage in the lake significantly reduces the flood depths and extents along Darlot Creek downstream and therefore may underestimate the flood impacts.



Table 4-3 Summary of Flood Behaviour for Modelled Flood Events

Event	Flood Characteristics	Key roadways inundated
20% AEP	<p>Sunday Creek is the first waterway to respond to flooding, and while it has overtopped its banks into adjacent land there is no significant roadways or key assets flooded. Sunday Creek starts receding 12 hours after flooding began.</p> <p>In the upper catchment area of the Fitzroy River (from upstream of Heywood to Boundary Rd), flooding peaks approximately 40 hours after flooding began.</p> <p>This floodplain area is typically at least 250m wide and is heavily vegetated floodplain. No major infrastructure or residential areas are affected in this area.</p> <p>The flood peak then continues towards Heywood, peaking at approximately 6 hours after the upper catchment. Upstream of Heywood, the flood becomes much more confined, restricted to an approximate 50m channel width, which continues into Heywood. Heywood is the critical location within the catchment for inundation, however for this event only parkland is inundated.</p> <p>Downstream of Heywood, at the start of the Fitzroy River - Darlot Creek swamp confluence area, the Fitzroy River splits into two major flow paths, with one flow path filling a large basin, whilst the other flow path continues towards the lower catchment.</p> <p>The lower catchment is typically characterised by inundation to low-lying swampland, and does not exhibit flooding of key infrastructure.</p> <p>In the upper Darlot catchment, Condah Swamp, Lake Condah and Whittlebury Creek storages inundate a large area of land. This is mostly swamp and farmland.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure.</p>	Bond St

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Event	Flood Characteristics	Key roadways inundated
<p>10% AEP</p>	<p>Sunday Creek has overtopped its banks into adjacent land there is no significant roadways or key assets flooded. Sunday Creek starts receding 12 hours after flooding began.</p> <p>In the upper catchment area of the Fitzroy River (from upstream of Heywood to Boundary Rd), flooding peaks approximately 33 hours after flooding began.</p> <p>This floodplain area is typically at least 250m wide and is heavily vegetated floodplain. No major infrastructure or residential areas are affected in this area.</p> <p>The flood peak then continues towards Heywood, peaking at approximately 6 hours after the upper catchment. Approximately 1.5km upstream of Heywood, there is a channel break out to the north of the river, abutting the Mount Gambier railway line. This breakout reconnects with the main Fitzroy River upstream of the Princes Hwy bridge, after passing over Bond St and Owen St on the northern side of the river in Heywood. Heywood is the critical location within the catchment for inundation, however for this event only parkland and floodplain is inundated.</p> <p>Downstream of Heywood, at the start of the Fitzroy River - Darlot Creek swamp confluence area, the Fitzroy River splits into two major flow paths, with one flow path filling a large basin, whilst the other flow path continues towards the lower catchment.</p> <p>The lower catchment is typically characterised by inundation to low-lying swampland, and does not exhibit flooding of key infrastructure.</p> <p>In the upper Darlot catchment, Condah Swamp, Lake Condah and Whittlebury Creek storages inundate a large area of land. This is mostly swamp and farmland.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure.</p> <p>After the confluence of Darlot Creek and Fitzroy River, the far downstream end of the catchment exhibits flooding of swampland as per upstream. However, it appears two roads become inundated, Tyrendarra School Rd and Thompsons Rd.</p>	<p>Bond St</p> <p>Owen St</p> <p>Tyrendarra School Rd</p> <p>Thompsons Rd</p>

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Event	Flood Characteristics	Key roadways inundated
5% AEP	<p>Sunday Creek has overtopped its banks into adjacent land, however there is no significant roadways or key assets flooded. Sunday Creek starts receding 11 hours after flooding began.</p> <p>In the upper catchment area of the Fitzroy River (from upstream of Heywood to Boundary Rd), flooding peaks approximately 28 hours after flooding began.</p> <p>This floodplain area is typically at least 250m wide and is heavily vegetated floodplain. No major infrastructure or residential areas are affected in this area.</p> <p>The flood peak then continues towards Heywood, peaking at approximately 4 hours after the upper catchment. Approximately 1.5km upstream of Heywood, there is a channel break out to the north of the river, abutting the Mount Gambier railway line. This breakout reconnects with the main Fitzroy River upstream of the Princes Hwy bridge, after passing over Bond St and Owen St on the northern side of the river in Heywood. Heywood is the critical location within the catchment for inundation. This event primarily inundates parkland and floodplain, however properties on the south side of the Fitzroy River at Heywood between Bond St and the Railway line become threatened by floodwater.</p> <p>Downstream of Heywood, at the start of the Fitzroy River - Darlot Creek swamp confluence area, the Fitzroy River splits into two major flow paths, with one flow path filling a large basin, whilst the other flow path continues towards the lower catchment.</p> <p>The lower catchment is typically characterised by inundation to low-lying swampland, and does not exhibit flooding of key infrastructure.</p> <p>In the upper Darlot catchment, Condah Swamp, Lake Condah and Whittlebury Creek storages inundate a large area of land. This is mostly swamp and farmland.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure.</p> <p>After the confluence of Darlot Creek and Fitzroy River, the far downstream end of the catchment exhibits flooding of swampland as per upstream. However, it appears two roads become inundated, Tyrendarra School Rd and Thompsons Rd.</p>	<p>Bond St</p> <p>Owen St</p> <p>Tyrendarra School Rd</p> <p>Thompsons Rd</p>

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Event	Flood Characteristics	Key roadways inundated
<p>2% AEP</p>	<p>Sunday Creek has overtopped its banks into adjacent land, however there is no significant roadways or key assets flooded. Sunday Creek starts receding 11 hours after flooding began.</p> <p>In the upper catchment area of the Fitzroy River (from upstream of Heywood to Boundary Rd), flooding peaks approximately 24 hours after flooding began.</p> <p>This floodplain area is typically at least 250m wide and is heavily vegetated floodplain. No major infrastructure or residential areas are affected in this area.</p> <p>The flood peak then continues towards Heywood, peaking at approximately 3 hours after the upper catchment. Approximately 1.5km upstream of Heywood, there is a channel break out to the north of the river, abutting the Mount Gambier railway line. This breakout reconnects with the main Fitzroy River upstream of the Princes Hwy bridge, after passing over Bond St and Owen St on the northern side of the river in Heywood. Heywood is the critical location within the catchment for inundation. This event inundates numerous properties in Heywood, with sections Cameron St and Hunter St East inundated.</p> <p>Downstream of Heywood, at the start of the Fitzroy River - Darlot Creek swamp confluence area, the Fitzroy River splits into two major flow paths, with one flow path filling a large basin, whilst the other flow path continues towards the lower catchment.</p> <p>The lower catchment is typically characterised by inundation to low-lying swampland, and does not exhibit flooding of key infrastructure.</p> <p>In the upper Darlot catchment, Condah Swamp, Lake Condah and Whittlebury Creek storages inundate a large area of land. This is mostly swamp and farmland.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure. In this event, a section of Tyrendarra-Ettrick Rd is inundated downstream of Homerton.</p> <p>After the confluence of Darlot Creek and Fitzroy River, the far downstream end of the catchment exhibits flooding of swampland as per upstream. However, it appears two roads become inundated, Tyrendarra School Rd and Thompsons Rd.</p>	<p>Bond St</p> <p>Owen St</p> <p>Tyrendarra-Ettrick Rd at Darlot Creek</p> <p>Tyrendarra School Rd</p> <p>Thompsons Rd</p> <p>Cameron St</p> <p>Hunter St</p>

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Event	Flood Characteristics	Key roadways inundated
1% AEP	<p>Sunday Creek is the first significant flooding. Sunday Creek does not flood any key infrastructure, apart from overtopping Woolsthorpe-Heywood Rd. Typically the flooding is restricted to farmland. Sunday Creek peaks after approximately 12 hours of flooding, then almost fully recedes 30 hours after flooding began.</p> <p>In the upper catchment area of the Fitzroy River (from upstream of Heywood to Boundary Rd), flooding peaks approximately 26 hours after flooding began.</p> <p>This floodplain area is approximately 500m wide and is typically heavily vegetated. No major infrastructure or residential areas are affected in this area.</p> <p>The flood peak then continues towards Heywood, peaking at approximately 2 hours after the upper catchment.</p> <p>Heywood is the critical location within the catchment for inundation, with numerous properties inundated to various levels in this event on the southern side of the River. Properties on Hunter St and Cameron St are the most inundated. The sporting fields on the north side of Heywood are also inundated. This event also causes inundation of the Princes Hwy in Heywood.</p> <p>Downstream of Heywood, at the start of the Fitzroy River - Darlot Creek swamp confluence area, the Fitzroy River splits into two major flow paths, with one flow path filling a large basin, whilst the other flow path continues towards the lower catchment.</p> <p>The lower catchment is typically characterised by inundation to low-lying swampland, and does not exhibit flooding of key infrastructure.</p> <p>In the Upper Darlot Catchment, Condah Swamp, Lake Condah and Whittlebury Creek storages inundate a large area of land. This is mostly swamp and farmland.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure. In this event, a section of Tyrendarra-Ettrick Rd is inundated downstream of Homerton.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure. In this event, a section of Tyrendarra-Ettrick Rd is inundated downstream of Homerton.</p> <p>After the confluence of Darlot Creek and Fitzroy River, the far downstream end of the catchment exhibits flooding of swampland as per upstream. Apart from two minor roads becoming inundated (Tyrendarra School Rd and Thompsons Rd) there is also inundation of the Princes Highway at Lovells Lane.</p>	<p>Bond St</p> <p>Owen St</p> <p>Woolsthorpe-Heywood Rd at Sunday Creek</p> <p>Princes Highway / Edgar St at Heywood</p> <p>Tyrendarra-Ettrick Rd at Darlot Creek</p> <p>Tyrendarra School Rd</p> <p>Thompsons Rd</p> <p>Princes Highway at Downstream end of Fitzroy River</p> <p>Hunter St</p> <p>Cameron St</p>

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Event	Flood Characteristics	Key roadways inundated
0.5% AEP	<p>Sunday Creek is the first significant flooding. Sunday Creek does not flood any key infrastructure, apart from overtopping Woolsthorpe-Heywood Rd. Typically the flooding is restricted to farmland. Sunday Creek peaks after approximately 11 hours of flooding.</p> <p>In the upper catchment area of the Fitzroy River (from upstream of Heywood to Boundary Rd), flooding peaks approximately 25 hours after flooding began.</p> <p>This floodplain area is approximately 500m wide and is typically heavily vegetated. No major infrastructure or residential areas are affected in this area.</p> <p>The flood peak then continues towards Heywood, peaking at approximately 2 hours after the upper catchment.</p> <p>Heywood is the critical location within the catchment for inundation, with numerous properties inundated to various levels in this event on the southern side of the River. Properties on Hunter St, Cameron St and Scott St are the most inundated. The sporting fields on the north side of Heywood are also inundated. This event also causes inundation of the Princes Hwy in Heywood on both sides of the Fitzroy road crossing.</p> <p>Downstream of Heywood, at the start of the Fitzroy River - Darlot Creek swamp confluence area, the Fitzroy River splits into two major flow paths, with one flow path filling a large basin, whilst the other flow path continues towards the lower catchment.</p> <p>The lower catchment is typically characterised by inundation to low-lying swampland, and does not exhibit flooding of key infrastructure.</p> <p>In the upper Darlot catchment, Condah Swamp, Lake Condah and Whittlebury Creek storages inundate a large area of land. This is mostly swamp and farmland.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure. In this event, a section of Tyrendarra-Ettrick Rd is inundated downstream of Homerton.</p> <p>After the confluence of Darlot Creek and Fitzroy River, the far downstream end of the catchment exhibits flooding of swampland as per upstream. Apart from two minor roads becoming inundated (Tyrendarra School Rd and Thompsons Rd) there is also inundation of the Princes Highway at Lovells Lane.</p>	<p>Bond St</p> <p>Owen St</p> <p>Woolsthorpe-Heywood Rd at Sunday Creek</p> <p>Princes Highway / Edgar St at Heywood</p> <p>Tyrendarra-Ettrick Rd at Darlot Creek</p> <p>Tyrendarra School Rd</p> <p>Thompsons Rd</p> <p>Princes Highway at Downstream end of Fitzroy River</p> <p>Hunter St</p> <p>Cameron St</p> <p>Scott St</p>

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Event	Flood Characteristics	Key roadways inundated
0.2% AEP	<p>Sunday Creek is the first significant flooding. Sunday Creek does not flood any key infrastructure, apart from overtopping Woolsthorpe-Heywood Rd. Typically the flooding is restricted to farmland. Sunday Creek peaks after approximately 11 hours of flooding.</p> <p>In the upper catchment area of the Fitzroy River (from upstream of Heywood to Boundary Rd), flooding peaks approximately 25 hours after flooding began.</p> <p>This floodplain area is approximately 500m wide and is typically heavily vegetated. No major infrastructure or residential areas are affected in this area.</p> <p>The flood peak then continues towards Heywood, peaking at approximately 2 hours after the upper catchment.</p> <p>Heywood is the critical location within the catchment for inundation, with numerous properties inundated to various levels in this event on the southern side of the River. Properties on Hunter St, Cameron St and Scott St are the most inundated. The sporting fields on the north side of Heywood are also inundated. This event also causes inundation of the Princes Hwy in Heywood on both sides of the Fitzroy road crossing.</p> <p>Downstream of Heywood, at the start of the Fitzroy River - Darlot Creek swamp confluence area, the Fitzroy River splits into two major flow paths, with one flow path filling a large basin, whilst the other flow path continues towards the lower catchment.</p> <p>The lower catchment is typically characterised by inundation to low-lying swampland, and does not exhibit flooding of key infrastructure.</p> <p>In the upper Darlot catchment, Condah Swamp, Lake Condah and Whittlebury Creek storages inundate a large area of land. This is mostly swamp and farmland.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure. In this event, a section of Tyrendarra-Ettrick Rd is inundated downstream of Homerton.</p> <p>The downstream Darlot Creek catchment typically inundates swamp and marshland, without affecting residential areas or key infrastructure. In this event, a section of Tyrendarra-Ettrick Rd is inundated downstream of Homerton.</p> <p>After the confluence of Darlot Creek and Fitzroy River, the far downstream end of the catchment exhibits flooding of swampland as per upstream. Apart from two minor roads becoming inundated (Tyrendarra School Rd and Thompsons Rd) there is also inundation of the Princes Highway at Lovells Lane.</p>	<p>Bond St</p> <p>Owen St</p> <p>Woolsthorpe-Heywood Rd at Sunday Creek</p> <p>Princes Highway / Edgar St at Heywood</p> <p>Tyrendarra-Ettrick Rd at Darlot Creek</p> <p>Tyrendarra School Rd</p> <p>Thompsons Rd</p> <p>Princes Highway at Downstream end of Fitzroy River</p> <p>Hunter St</p> <p>Cameron St</p> <p>Scott St</p>

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5 FLOOD BEHAVIOUR AND INTELLIGENCE OUTPUTS

5.1 Overview

The flood behaviour and intelligence outputs developed as part of the Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study are described in this section.

5.2 Model Results Outputs

The model result data including grids and extents have been provided in specified Victorian Flood Database (VFD) format for each flood event. The following result components were generated:

- Flood level, flood depth, flood velocity and flood hazard grids
- Flood elevation contours
- Flood extent data
- Hydrographs at key locations

Details are provided of the study outputs for emergency response, and land use planning mapping including:

- Data sets: grids and shapefiles (ESRI/VFD format), Data tables (Excel csv/xlsx format).

5.3 Data Sets

The following datasets have been provided. All GIS files were provided in ESRI VFD format or Excel csv/xlsx format. A summary of the datasets is provided below and shown in Figure 5-1.

5.3.1 Grids

Gridded datasets of model results were provided for the following:

- Design events (20%, 10%, 5%, 2%, 1%, 0.5%, 0.2% AEP and PMF events) – maximum depth, hazard, velocity and water surface elevation.
- Calibration events (1946, 2007, 2010, and 2013 events) – maximum depth and water surface elevation.
- Model Topography

The hydraulic analysis provides regular grid of flood elevations across the hydraulic model study area. The flood extent was defined by converting the 2m flood elevations grid to an extent polygon. The extent is smoothed to remove the sharp edges of the grid cells for cartographic / presentation purposes.

Flood depths were classified for mapping using the following classifications:

- 0 m to 0.25 m
- 0.25 m to 0.5 m
- 0.5 m to 1.0 m
- Greater than 1.0 m



5.3.2 Vector Data

ERSI shapefiles in VFD format were provided for the following:

- Peak flood extents
- Peak flood elevation contours
- Mapping limits

5.3.3 Data Tables

Data tables in excel CSV format were provided for the following:

- Stage height hydrographs at 50 points across the study area for 6 design events (20%, 10%, 5%, 2%, 1% and 0.5% AEP events).
- Water surface level profile along the Fitzroy River for 6 design events (20%, 10%, 5%, 2%, 1% and 0.5% AEP events). The long section profile location is shown in Figure 5-1.

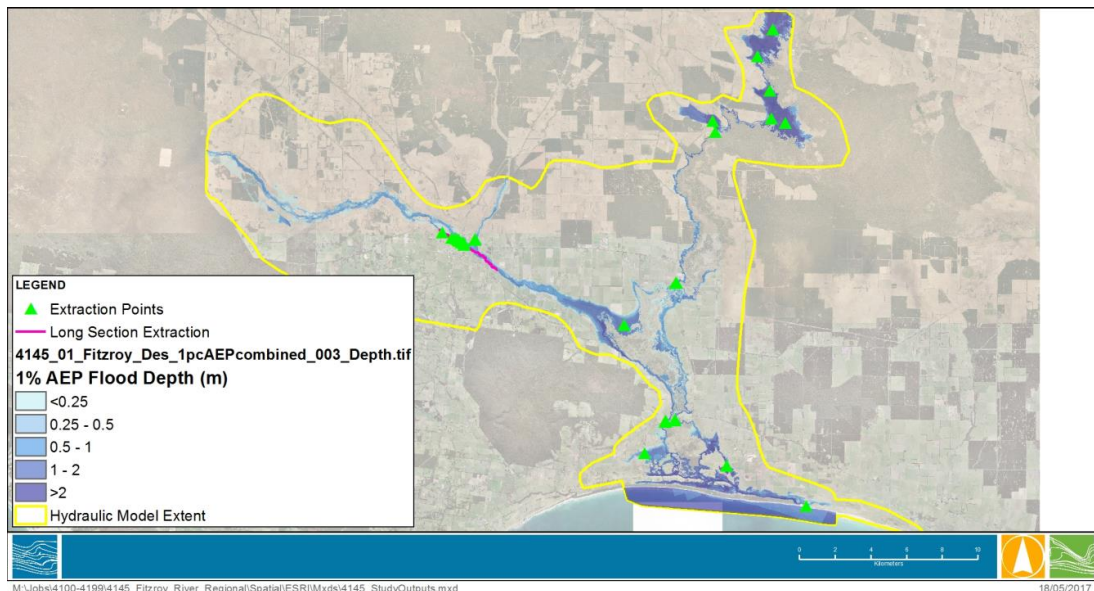


Figure 5-1 Long Section and Point Extraction Locations

5.3.4 Gauge Height Relationship

For each design flood event, the model results were interpreted to provide information on the relationship between the flood level at each of the gauges on the Fitzroy River and Darlot Creek and the equivalent design flood magnitude (in % AEP and ARI (years)). Table 5-1 and Table 5-2, results of the assessment.

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Table 5-1 Fitzroy River at Heywood Gauge Heights for Design Flood Events

Gauge Height ¹ (m)	Flood level at Gauge (m AHD)	Design Flood Event AEP (%)	Design Flood Event ARI (years)
1.95	25.77	20	5
2.25	26.07	10	10
2.44	26.26	5	20
2.61	26.43	2	50
2.70	26.52	1	100
2.78	26.60	0.5	200
2.90	26.72	0.2	500

Table 5-2 Darlot Creek at Homerton Gauge Heights for Design Flood Events

Gauge Height ² (m)	Flood level at Gauge (m AHD)	Design Flood Event AEP (%)	Design Flood Event ARI (years)
1.72	22.09	20	5
1.90	22.27	10	10
2.12	22.49	5	20
2.37	22.74	2	50
2.51	22.88	1	100
2.72	23.09	0.5	200
3.01	23.38	0.2	500

5.4 Study Deliverables

The study deliverables provide a comprehensive set of data that support the study outcomes. The deliverables are supplied on a study USB and consist of background data and outputs as listed below:

- Digital copies of study reports in PDF format.
- Digital copies of the maps (PDF format)
- GIS datasets for the model results (ArcGIS VFD format and Excel csv format)
- Digital elevation models

There is a readme.txt file on the USB that describes the directory structure of the data contained on the USB.

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¹ The Heywood gauge is located at Heywood on the Fitzroy River. Gauge zero is 23.82m AHD

² The Homerton gauge is located at Homerton on Darlot Creek. Gauge zero is 20.37m AHD



6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Overview

The Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study provides a comprehensive analysis and review of flood risk in the Fitzroy River catchment. The study has involved:

- Collection and review of a range of data relevant to the definition of flooding within the study area.
- A rigorous hydrologic analysis to develop robust design flood estimates for the study.
- Development of a detailed hydraulic model that is capable of predicting flood impacts across the entire floodplain under a range of conditions.
- Design and calibration model result outputs.

6.2 Key Outcomes

In undertaking this study, a number of important aspects of flood risk relevant to the Fitzroy River and Darlot Creek catchment have become apparent. These are summarised as follows.

Hydraulic Characteristics of the Fitzroy River – Overbank flows are common in the Fitzroy River catchment, however significant flooding does not occur in the key township of Heywood in floods less than a 1% AEP event. In the 2% AEP event and larger flood events. As the magnitude of a flood event increases the increase in flow results in an increase in depth and velocity and flood extent, especially on the northern side of town. There are also a number of key roadways at risk through the town and at the downstream end of the river

Hydraulic Characteristics of Darlot Creek – The Darlot Creek catchment exhibits two key types of flooding regimes, ‘dry catchment events’ and ‘staged wet catchment events’. A dry catchment event is characterised by a relatively dry catchment pre-flood event. This means there is minimal baseflow leading up to the event, and Lake Condah and the Condah Swamp area upstream are not holding a significant volume of water. The catchment is then subject to a significant rainfall event, which may cause flooding in the Fitzroy River catchment, but is unlikely to cause flooding in the Darlot Creek catchment.

A staged wet catchment event is characterised by a relatively wet catchment pre-flood event. This type of event consists of a series of rainfall events. This results in the steady rise of the water levels in Lake Condah over a period of months. There may also be one final large rainfall event which results in the peak flow in Darlot Creek over the entire period. These types of flood events have flood peaks in the catchment which slowly increase following rainfall (approximately one week), then have steadily increasing peaks throughout the wet period each time it rains.

Flooding does not appear to be common along Darlot Creek due to the major storages upstream of Tyrendarra. These storages dominate flood levels in the catchment and are capable of retaining enough volume to effectively remove the flood peak of major flood events that come from upstream. For the design floods, a conservative methodology was used, assuming a staged wet catchment event concluding with a design event.

6.3 Learnings and Recommendations

6.3.1 Learnings

Based on the study process and outcomes the following learnings are noted for future Regional Flood Studies:

- Traditional techniques for streamflow gauging is difficult in high flow events when there are flow breakouts around the gauge. This behaviour occurs at the Fitzroy River at Heywood gauge. The use of the hydraulic

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model in conjunction with traditional streamflow gauging could better construct an extrapolated gauge rating curve suitable for estimating flows in events the break out of channel.

- In complex catchments without quality streamflow data, where there are major uncertainties in the hydrology, a joint hydrology-hydraulic calibration such as that adopted in this study can be highly beneficial.
- Sharing of major datasets between different Government agencies remains an issue, as evidenced by the different LiDAR datasets that were uncovered throughout the project. Improved sharing of this data is encouraged.

6.4 Recommendations

With regard to the study outcomes, the following recommendations are provided:

- Flood levels in Darlot Creek are sensitive to pre-event catchment conditions, especially Lake Condah levels. It is recommended that Condah Weir operating procedures and management are reviewed, taking into account environmental and cultural assets that the lake provides, along with the implications on water supply and flooding.
- Whilst the wider catchment is not affected by Fitzroy River outlet berm conditions, there is a noticeable impact in the downstream end of the model. Whilst management of the berm is currently regulated by GHCMA, it is recommended that an official management plan be designed and implemented.
- The Heywood gauge is currently significantly bypassed during flows greater than the 10% AEP, via a flowpath to the north of the main river and gauge. This severely impacts the quality of the output data from this site. Re-location of the site is recommended, with the railway crossing at Heywood appearing to be an appropriate site. It should be noted that DELWP has already commissioned high-flow gauging updates based on model results from this study.
- If flood class levels are to be introduced at the Fitzroy River at Heywood gauge, it would be recommended to introduce Minor Flood Class at 25.7 m AHD (1.88 m at gauge), Moderate Flood Class at 26.0 m AHD (2.18 m at gauge) and major flooding at 26.3 m AHD (2.48 at Gauge). These levels are based on the BOM guidelines, with the Minor Flood Class level starting to inundate the Heywood parkland areas, the Moderate Flood Class level beginning to inundate properties in Heywood above floor level and roadways, and the Major Flood Class Level causing extensive inundation of roadways and properties in the catchment.
- The GHCMA and Glenelg Shire Council adopt the determined design flood levels and proceed to incorporate them into planning scheme amendments.
- The GHCMA and Glenelg Shire Council continue to engage the community in the treatment of flood risks through regular flood awareness programs such as the VICSES FloodSafe program. This project has already lead to the commissioning of a Municipal Flood Emergency Plan (MFEP) outputs that will allow for a local flood guide for Heywood to be developed.
- Flood levels in Heywood are sensitive to the rail bridge opening, and potential increases in the bridge culvert capacity should be considered for flood mitigation.
- DELWP should incorporate the results of this study into the Victorian Flood Database and upload to FloodZoom.

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15. CONFIDENTIAL REPORTS

Nil.

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