COUNCILLOR BRIEFING RECORD

DATE: 22 July 2025
START TIME: 4.05 pm

ATTENDEES:

Councillors:
Cr Karen Stephens (Mayor), Cr Robyn McDonald (Deputy Mayor), Cr Matt Jowett, Cr Michael Carr, Cr Duane Angelino, Cr John Pepper.

Officers:
CEO (Helen Havercroft), Director Corporate Services (David Hol), Director Community Services (Brett Jackson), Director Infrastructure Services (Aaron Moyne)

Other attendees:

APOLOGIES:

Cr Michael Noske

Declaration of Conflict of Interest:	• Cr Carr item 9.3 - LATM
Items Discussed:	• Items on the Council meeting agenda • Primary Producers Support Program
Councillor Items	
Other Items	

FINISH TIME: 5.15 pm

COUNCILLOR BRIEFING RECORD

DATE: 29 July 2025
START TIME: 4.00 pm

ATTENDEES:

Councillors:
Cr Karen Stephens (Mayor), Cr Robyn McDonald (Deputy Mayor), Cr Matt Jowett, Cr Michael Carr, Cr Duane Angelino, Cr John Pepper.

Officers:
CEO (Helen Havercroft)

APOLOGIES:
Cr Michael Noske

Declaration of Conflict of Interest:	• None
Items Discussed:	• Notice of Bereavement • Drought Relief Communications • Leases and Licenses Policy • Geographical Street Numbering • Tourism next steps • Rating Plan • Quality of Road Surfaces and line markings • Current State led enquiries into Councils (not Glenelg) • Budget timelines for 2026/27

FINISH TIME: 6.15 pm

COUNCILLOR BRIEFING RECORD

DATE: 12 August 2025
START TIME: 4.05 pm

ATTENDEES:

Councillors:
Cr Karen Stephens (Mayor), Cr Robyn McDonald (Deputy Mayor), Cr Matt Jowett, Cr Michael Carr, Cr Duane Angelino, Cr John Pepper, Cr Michael Noske.

Officers:
CEO (Helen Havercroft), Director Corporate Services (David Hol), Director Infrastructure Services (Aaron Moyne).

Other attendees:
Item 1
Liz McKinnon – EHM Advisory Manager Planning and Development (Matt Berry).

Item 2
Manager Projects and Engineering (Chris Saunders), Team Leader Design and Assets (Ricky Luke). McDonald Consultancy (Antony King, Sandy Muir)

APOLOGIES:
Director Community Services (Brett Jackson)

Declaration of Conflict of Interest:	• Nil
Items Discussed:	• Hardwood Manufacturing Hub Feasibility study. • Asset Plan 2025-2035 • Council Policy – Gifts, Benefits & Hospitality
Councillor Items	• Traditional Owners NoM update • ESVF and United Firefighters Union • Councillor Photographs • Councillor Professional Development Training • MAV State Council • GORRT & Tourism marketing • Victorian Freight Strategy • Printing of Documents • Rail Freight Alliance Policy Document • Coles update • Casterton Railway precinct
Other Items	• Nil

FINISH TIME: 6.46 pm

COUNCILLOR BRIEFING RECORD

DATE: 19 August 2025
START TIME: 4.07 pm

ATTENDEES:

Councillors:
Cr Karen Stephens (Mayor), Cr Robyn McDonald (Deputy Mayor), Cr Matt Jowett, Cr Michael Carr, Cr Duane Angelino, Cr John Pepper, Cr Michael Noske.

Officers:
CEO (Helen Havercroft), Director Corporate Services (David Hol), Director Infrastructure Services (Aaron Moyne), Director Community Services (Brett Jackson).

Other attendees:
Item 1 - Chief Finance Officer (Rebecca Campbell)
Item 2 - Manager Planning and Development (Matt Berry), Strategic Planner (Jacob Clements).

APOLOGIES:
Nil

Declaration of Conflict of Interest:	• Cr McDonald Item 2.4 – Lease & Licensing Policy • Cr Noske item 2.1 – Madeira Packet Precinct • Cr Carr item 2.1 - Madeira Packet Precinct
Items Discussed:	• Finance update 24/25 • Madeira Packet Precinct Review • C115 Planning amendment • Items on the Council agenda
Councillor Items	• Waste in CBD • FOGO • LTFP scheduling • Witches hat issue • Lease - Goodnight Paris • Foreshore funding agreement status • Waste query • Financial reporting • Percy St property • Glenelg St resealing works • Portland town entry • Parking • Henty St Toilets • Bridgewater works • Heywood Service Station • Boat on trawler wharf • Renewable Energy Zones • Dept Transport meeting outcomes

COUNCILLOR BRIEFING RECORD

Other Items	• South-West Vic Alliance advocacy • Business and Tourism Awards

FINISH TIME: 6.35 pm

NOTICE OF RECISSION

In accordance with the Glenelg Shire Council Governance Rules adopted 23rd January 2024, I hereby submit a Notice of Rescission to rescind the adopted motion at the Glenelg Shire Council Meeting held on 22nd July 2025 for Agenda Item 9.5 – the Lease Agreement between Glenelg Shire Council and 3RPC Incorporated

That this Notice of Rescission be tabled at the next available council meeting.

And that we the undersigned wish to move that council maintain the current lease arrangement with 3RPC Incorporated until the current Council Property Leasing and Licensing Policy (document number: CPO-ASSETS-OP-002) is reviewed and adopted by council.

Signed:

Cr Matt Jowett .....

Cr Duane Angelino.....

Cr John Pepper.....

31th July 2025

9.5. LEASE AGREEMENT BETWEEN GLENELG SHIRE COUNCIL AND 3RPC INC.

Copy of Motion as Carried at the 22 July 2025 Meeting.

MOTION

MOVED Cr McDonald

That Council:

1. **Approves a new four (4) year lease with one (1) x five (5) year extension options with 3RPC Inc. for the ground floor of the property known as Ruth Martin Memorial Building, 34 Julia Street, Portland.**

2. **Sets a peppercorn rental amount of $1.00 (incl GST) per annum for the lease proposed in part one (1) of this resolution.**

3. **Approves a new four (4) year lease with one (1) x five (5) year extension options with 3RPC Inc. for the first-floor apartment of the property known as Ruth Martin Memorial Building, 34 Julia Street, Portland.**

4. **Sets the rental figure at $9,152.00 (incl GST) per annum, with rent to be adjusted annually in accordance with the March quarter All Groups CPI figure for Melbourne for the lease proposed in part three (3) of this resolution.**

5. **Authorises the Director Corporate Services to finalise and sign all documents relating to the proposed leases in parts one (1) and three (3) of this resolution.**

SECONDED Cr Angelino

An amendment was moved and lost. The original motion was therefore put to a vote.

CARRIED

FOR: Cr McDonald, Cr Angelino and Cr Stephens
AGAINST: Cr Jowett, Cr Pepper and Cr Carr

The Mayor Cr Stephens (Chairperson) exercised the power of a casting vote in accordance with Governance Rule 44 and voted for the motion.

Full details of the motion, amendment and division can be located in the Minutes of the 22 July 2025 meeting on Council's website.

15/8/2025

Ms Helen Havercroft
Chief Executive Officer
Glenelg Shire Council
PO Box 152
Portland, VIC 3305.

Dear Helen

Ref: Provision of a Disabled Parking facilities in Bentinck Street

In accordance with the Council's Governance rules, I give notice of my intention to move the following motion at the Council meeting to be held on August 26th, 2025.

1. That Council requests a report outlining the provision of disabled parking and all abilities access across the bluestone gutters along the western side of Bentinck Street between Henty and Tyers Street.
2. That Council requests a report outlining the provision of disabled parking and footpath access along the west side of Bentinck Street between Otway Court and Fern Street.
3. That the reports be provided to Council at the September 23rd Council Meeting.

Yours Sincerely

Michael Noske

Cr Mike Noske

GLENELG SHIRE

MUNICIPAL PUBLIC HEALTH AND WELLBEING PLAN

Action Plan Report

2024 - June 2025



GLENELG SHIRE

ACKNOWLEDGEMENT TO COUNTRY

TRADITIONAL OWNERS

Glenelg Shire Council respectfully acknowledges the traditional lands and waters of the Gunditjmara people, Boandik people, Jardwadjali people and their respective cultural heritages.

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.

OVERVIEW OF REPORT

THE ICONS BELOW ARE USED THROUGHOUT THIS REPORT AS A KEY TO REPRESENT THE PROGRESSION STAGES OF EACH TASK, PROJECT OR OBJECTIVE IDENTIFIED BY THE GLENELG SHIRE COUNCIL.



Achieved

The Achieved icon will be used when a project/plan has been successfully completed.



Delayed

The Delayed icon will be present in this report when a project/plan has been identified as postponed, not on track or redefined.



In Preparation

The In Preparation icon will be used in this report when a project/plan is in its planning stage and the details are being prepared.



On Track

The On Track icon will be used when a project/plan is progressing, and is likely to achieve what is required within the time identified in the scheduling plan.



Ahead of Schedule

The Ahead of Schedule icon will be used when a project/plan is likely to be completed earlier than planned.

PARTNER AND LOCAL HEALTH ORGANISATION LOGOS

	Kyeema Support Services		Salvation Army		Hands Up Casterton		Western District Food Share
	Brophy Family and Youth Services (Brophy)		Casterton Memorial Hospital (CMH)		United Way Glenelg		Belgravia Leisure and Aquatic Centre
	Dartmoor Bush Nursing Centre		Dhauwurd Wurrung Elderly and Community Health Service Inc. (DWECH)		The Sexual Assault & Family Violence Centre		Department Energy Environment Climate Action
	Department of Education and Training (DET)		Alcoa		South West Health Care (SWHC)		Men's Shed
	Gunditj Mirring Traditional Owners Aboriginal Corporation (GMTOAC)		SEAchange Portland		Australian Breastfeeding Association		Wellways
	Headspace		Beyond the Bell		Portland Aluminium		Vic Health
	Heywood Rural Health (HRH)		Merino Community Health Centre (Merino CHC)		Wannon Water		Neighbourhood House
	Portland District Health (PDH)		Barwon South West Public Health Unit		Are-Able		Rotary Club of Portland
	Glenelg and Southern Grampians Local Learning and Employment Network (LLEN)		Winda Mara Aboriginal Corporation (WMAC)		Victoria Police		Youth Live 4 Life
	Women's Health and Wellbeing Barwon South West (WHWBSW)		South West Sport		L2P		FReeZA

ACTION PLAN CONTEXT

Shire Council Municipal Public Health and Wellbeing Plan, 2021 – 2025. There are a number of partners to this Action Plan, who are contributing to the support and increased health and wellbeing of our Shire. The following action plan demonstrates clear lines of responsibility to actions in the recognition of both the lead and supporting partners.

Annual action plans are reported on every year in October to the Department of Health and Human Services as required by Section 26 of the Public Health and Wellbeing Act 2008. The annual report is also made available to the public via the Glenelg Shire Council website.

The Action Plan report is for 18 months, being the calendar year of 2024 through to June 30 2025.



OUR COMMITMENT TO WORKING TOGETHER

Glenelg Shire communities can reach full potential when we work in collaboration, share resources and build our capacity to deliver change. By embracing risk, learning and building upon previous experience and supporting new and innovative practices, together we can foster thriving communities now and into the future.

We aim to work together to implement the Glenelg Shire Municipal Public Health and Wellbeing Plan in new and innovative ways. We will report on the work we do and the growth we make in this area.

COMMITMENT 1:

Fostering leadership and building collaboration

Together we will:

- advocate to create systemic change
- take a cross-sector and intersectional approach to address complex issues
- foster community leadership and utilise lived experience
- collaborate, share resources and strengthen partnerships
- implement the Glenelg Shire Municipal Public Health and Wellbeing Plan.

COMMITMENT 2:

Building a culture of innovation and learning

Together we will:

- develop skills, capacity and mentoring opportunities
- develop shared measurement, evaluation and learning plans
- support opportunities for idea generation and shared problem solving
- implement new and responsive community-led solutions
- track and learn from our collective experiences.

GUIDING PRINCIPLES

Four principles guide the work that we do towards the goals and objectives:

Although the Guiding Principles are all equally important, they may not be relevant to all initiatives within this Municipal Public Health and Wellbeing Plan. As part of the planning process, the Guiding Principles will be considered and underpin initiatives, where Integrate Glenelg is a new initiative that will oversee, facilitate, evaluate and report on the implementation of the Commitments outlined in this Plan.

The Glenelg Shire area has many great collaborative initiatives that are focussed on tackling single components and issues that impact on the community's health and wellbeing. Integrate Glenelg aims to facilitate stronger integration across multiple and inter-related issues and initiatives to achieve even better community outcomes. Integrate Glenelg aims to 'work smarter not harder' by addressing these common challenges together in a more strategic and integrated way.

Workshops and discussions between local collaborative initiative partners, have identified many common challenges and a desire to work together to address these. Many of these challenges have informed the Commitments in the Glenelg Shire Municipal Public Health and Wellbeing Plan 2021-25.

Integrate Glenelg aims to be accessible for all stakeholders to contribute to and benefit from the outcomes.



BY COMMUNITY FOR COMMUNITY:

We will work with our communities wherever possible to ensure they are empowered to solve and act on issues affecting them.



EVIDENCE INFORMED:

We will collect, share and use local and regional data, trends and learnings to inform our practice.



SUPPORTING INNOVATION:

We will embrace new thinking and approaches, take calculated risks and challenge the status quo.



SYSTEMS APPROACH:

We will work together with community members to identify all conditions that contribute to health and wellbeing problems. We aim to address these explicit, semi-explicit and implicit conditions in a holistic manner.

GOALS AND OBJECTIVES

GOAL 1:

BUILDING HEALTHY AND WELL COMMUNITIES

A healthy and well community is one where people have a range of opportunities to participate in daily life, be physically active and mentally well.

To support physical and mental wellbeing, individuals require safe environments, access to and knowledge about healthy food and lifestyle options. Research suggests that diversity, inclusion and culture all support the social and economic health of a community. Through acknowledging and embracing our differences, we can instil even more pride and belonging in our Glenelg Shire communities.

OBJECTIVE 1.1:

Initiating opportunities for healthy and active living

OBJECTIVE 1.2:

Building mentally well communities

OBJECTIVE 1.3:

Creating respectful, inclusive, culturally aware & safe communities



OBJECTIVE 1.1 Initiating opportunities for healthy and active living

ACTION	LEAD ORGANISATION	PARTNER ORGANISATION	STATUS	OUTCOME
Establish a project team and project plan to deliver the Quality Water for Wannon project to improve the aesthetic water quality in Portland, Heywood and Port Fairy.	wannonWATER	Glenelg Shire Council, Moyne Shire Council.		The Quality Water for Wannon project team have a governance structure now in place. A project plan has been established to guide the delivery of the program where we have completed year one of the 5-year project to improve the aesthetic water quality in Portland, Heywood and Port Fairy.
Submit funding application to Australian Sports Commission for Play Well funding aimed to initiate contact for entry level participants in organised sport.	GLENELG SHIRE Community Services	Local Sporting Clubs, Primary Schools.		The application was successful with the Play Your Way come and try event for Grade 3 and 4 students from schools across Portland, Bolwarra, Heywood and Narrawong being held at Alexandra Park in November 2024. Five sports were offered at the event including cricket, soccer, netball, AFL, and hockey. Students were invited to register for one of those sports, with reimbursement of registration fees available. A funding milestone progress report was submitted to Australian Sports Commission in November 2024, with the project scheduled to be completed and final funding reporting submitted by end of 2024/25 financial year.

Incentivise Glenelg Sporting clubs to deliver programs under This Girl Can in October.	Community Services	Local Sporting Clubs.		13 Clubs and Community Groups conducted 29 free or low cost activities during This Girl Can Week in October 2024. There were 47 total participants, with 21 of those being new to the activity. 9 of those 21 new participants continued to engage in the activity, or become a member following the initiative. Glenelg Shire partnered with Portland District Health to facilitate the program
Enable athletes with disabilities from Victoria, South Australia and New South Wales to compete in the Tri State Games. The games run for a week, with four days of sport, swimming and games.		Glenelg Shire Council, Service Clubs and Community Groups.		Kyeema hosted the Portland Tri State Games on 9-14 November 2025 with over 300 competitors. Kyeema will host the games again in November 2025.
Rebrand and promote the name change of the Skittles LGBTIQA+ social support program to Yumcha in alignment with other South West Region groups to strengthen connection, advocacy and support for LGBTQIA+ young people, their families and allies.	Community Services			The Glenelg Shire Youth Team rebranded the Skittles LGBTIQA+ social support program to align with the widely recognised YUMCHA branding, as used by other LGBTQIA+ youth groups across the South West Region. By aligning with other regional groups under the YUMCHA banner, LGBTQIA+ identifying young people, their families, and allies will benefit from a more cohesive network of support and increased access to shared resources and events.

Develop and endorse the Glenelg Shire Council Organisation Recreational Facilities Access Plan to support increased access for community who face additional barriers to active participation in organised sport and recreation settings.	Community Services			The Recreational Reserves and Facilities Access Policy was endorsed in July 2023, with an Action Plan developed in 2024. The Recreation Unit work with stakeholders across the business and community to report to the Office for Women in Sport on these actions annually.
Under the Vic Health funding develop and implement a healthy rewards program for Heywood Children and Youth – recognising young people who are role modelling healthy lifestyles and habits to their peers.	Community Services	VicHealth		The 2025 Healthy Rewards sponsorship program was developed with two streams available for young people in Heywood. The rewards program was to recognise healthy habits and activities. The first round was open for the month of April, with no applications received. The Healthy Rewards Program will no longer proceed, with the allocated money being redirected to support delivery of initiatives under the Heywood Recreation Reserve Master Plan.
Initiate opportunities for local mothers to attend safe and inclusive outings such as picnics and walk & talks.		Dhauwurd-Wurrung Elderly and Community Health Services.		Monthly Connect and Share meetings are held at the Portland Library with between 4 – 16 mothers attending with their babies and children. The sessions are social but also include learning opportunities which are accessible and inclusive. Two sessions were held at the Botanic Gardens during the warmer months, and a Christmas event at the Fawthrop Lagoon.

Ensure provision of healthy meal options at all Council lead events.	Community Services			Healthy meal options have been successfully incorporated into all Council-led events promoting better nutrition and community wellbeing.
Support partners to strengthen place based action to prevent harm from vaping among young people.	City Greater Geelong	Glenelg Shire Council, Health Services, Schools, Casterton Memorial Health.		Backbone support provided to Barwon South West Vaping Prevention Coalition including BATForce professional development and parent/carer information sessions. Provision of opportunities for youth leaders to become Vaping Prevention Champions and receive YACVic leadership training. Held a forum to strengthen a regional approach to reducing harm from nicotine and facilitated a Regional E-cigarette and Tobacco (RET) working group to enable collaborative action and information sharing opportunities.
Provide support to place based community health and wellbeing initiatives.		SEA Change Portland, Hands Up Casterton, Live4Life Glenelg.		Facilitation of the Live4Life Glenelg annual Strategic Planning workshop and ongoing participation in the L4L Partnership Group, Hands Up Casterton's backbone group and Glenelg Southern Grampians Local Learning and Employment Network (GSGLLEN).

Work with Western District Food Share to create healthy eating resources for emergency food relief recipients.	PORTLAND DISTRICT HEALTH	Western District Food Share, United Way Glenelg, Southwest Healthcare, Salvation Army.	Worked with Western District Foodshare and other support services to develop and distribute 6 'Easy Eats' recipe cards and videos to support emergency food relief recipients.
Increase resourcing to implement a Fresh Fruit Program in Portland.	PORTLAND DISTRICT HEALTH	Stephanie Alexander Kitchen Garden Foundation Healthy Kids Advisors, VicHealth, Portland Aluminium, Portland Secondary College.	PDH Health Promotion worked with the Re-Engagement School to secure funding for the program to be re-implemented in 2024 and 2025, providing fresh fruit to all schools throughout the shire each week.
Increase opportunities to imbed food literacy through collaborative, settings based activities across the shire.	PORTLAND DISTRICT HEALTH	Portland Neighbourhood House, Glenelg Shire Council.	Delivered 4 community Food Security workshops. Highlighting safe storage, emergency food relief access and logistics, mapping and supports.
Promote and support the Implementation of the Department of Health's Healthy Choices policy directive for Victorian Public Health Services.	PORTLAND DISTRICT HEALTH	Healthy Eating Advisory Service.	Healthy Choices Policy Directive implemented at Portland District Health. Healthy food options now available for staff, visitors and volunteers at PDH and PDH events.
Develop a Vic Kids Eat Well (VicKEW) Canteen Cookbook.	PORTLAND DISTRICT HEALTH	Bolwarra Primary School.	Worked with Bolwarra Primary School to develop a healthy 'canteen cookbook' to support parent volunteers in the canteen.

Promote and support the implementation of Vic Kids Eat Well in key settings	PORTLAND DISTRICT HEALTH VicHealth	Stephanie Alexander Kitchen Garden Foundation Healthy Kids Advisors.		Individual support provided to schools implementing program as requested. Sports club canteen support offered.
Explore and support the implementation of the Cancer Council's Achievement Program at Portland District Health.	PORTLAND DISTRICT HEALTH	Cancer Council Victoria		Mental health and wellbeing, healthy eating and physical activity benchmarks explored. The Workplace Achievement Program is now being wrapped up by the Cancer Council.
Commence construction on new Medical Clinic, and Integrated Family Services Building.	Winda-Mara	Victorian State Government		Winda Mara opened their new medical centre in March 2025. The construction of the new medical clinic was funded through the Victorian Health Building Authority (VHBA), the Aboriginal Community Infrastructure Program (ACIP), alongside Winda-Mara's own investment to provide high-quality, culturally safe healthcare for community.

Achieved **Delayed** **In Preparation** **On Track** **Ahead of Schedule**

OBJECTIVE 1.2 Building mentally well communities

ACTION	LEAD ORGANISATION	PARTNER ORGANISATION	STATUS	OUTCOME
Increase presence and support within the Heywood Community.	wellways mental health | disability | rehabilitation	Winda Mara Aboriginal Corporation, Heywood Mens Shed.		Wellways have supported the Heywood Mens Shed with delivering health forums, and providing community support at Safe Talk Suicide Prevention Training when delivered in Heywood.
Engage with Live4Life Glenelg school and community partners to review and renew MOUs with Live4Life Glenelg school partners.	Live 4LIFE	Portland Secondary School, Heywood District Secondary College, Bayview College, Casterton Secondary School.		All partners and schools remain committed and actively engaged with the Live 4 Life Glenelg Program, renewal of MOUs has not yet been undertaken. MOU renewal is scheduled to take place in the second half of 2025.
Increase Youth Mental Health First Aid Training in Live4Life Glenelg schools & partners.	Live 4LIFE	Portland Secondary School, Heywood District Secondary College, Bayview College, Casterton Secondary School.		Portland Secondary College enrolled 20 of their staff to undertake the Youth Mental Health First Aid training in mid-December 2024. A total of four accredited community Youth Mental Health First Aid training sessions were delivered in 2024 by three trained instructors. With three sessions held in Portland and one in Heywood. A total of 48 people over the age of 18 years attended the 14-hour accredited courses for 2024.

Implement actions under year 3 of Youth Live4Life and Portland Aluminium partnership.	Live 4LIFE	Portland Aluminium		The third and final year under the Live4Life Glenelg and the Portland Aluminium partnership was successfully delivered and acquitted at the end of 2024.
Work with the Live4Life Glenelg Partnership Group to deliver community events and forums to draw awareness to and support for issues specific to young people in Glenelg and their support networks.	Live 4LIFE	Casterton Memorial Health, Wellways, Portland District Health, Barwon South West Public Health Unit, GSGLLEN, YACVIC, Brophy Services, Headspace, Beyond the Bell, Youth Live4Life.		The Live4Life Glenelg Partnership Group is working to deliver community events and forums in 2025/26 financial year.
Adopt an organisation wide acknowledgment and celebration of RUOK? Day hosting activities to promote conversations amongst staff and commence planning for an RUOK? Day Workplace Champion.	are-able Education and Training			Are Able have implemented a RUOK Workplace champion. Each site celebrates the recognised day.
Provide 4 health and wellbeing focussed sessions for the community as part of the Libraries After Dark Program.	GLENELG SHIRE Community Services	Portland District Health, Possum House.		Multiple LAD sessions were held focussing on health and wellbeing. The program included Pilates, PDH dietician, Neurodivergence and Adulting, Dementia Week Workshop, Passive & Active Exercise class and an independent mental health advocacy workshop.

To create new informal recreation opportunities for young people and families through the VicHealth Local Government Partnership project.	Community Services	VicHealth, Local Community Organisations, Schools.	✓	Education resources provided to existing programs to integrate informal recreation opportunities into everyday activities including Standing-Tall Heywood, Bundarra PS Kupa Ngal, Casterton Youth HQ, Playgroups and Glenelg Library Children's & Youth Programs.
Explore and support the Royal Commission into Victoria's Mental Health Systems recommendation to implement Social Inclusion Action Groups (SIAGs) to support local communities to promote social connection and inclusion.		Victorian Department of Health.	✓	Exploration was undertaken. SIAGS will be a stepped rollout, with the Glenelg region not yet on agenda.
Develop and deliver ATSI Youth Mental Health First Aid to community.		Girraway Ganyi Consultancy, Live4Life Glenelg.	✓	Two staff from Winda Mara Aboriginal Corporation were trained as Youth Aboriginal Mental Health First Aid Facilitators during 2024. Making Glenelg the first ever Youth Live4Life community to have a Youth Aboriginal and Torres Strait Island Mental Health First Aid Instructor. This collaboration will enable Winda Mara Corporation to provide Aboriginal specific youth mental health training to adults across Gunditjmara Country from 2025.

Develop resources to support young Aboriginal and Torres Strait Islander Peoples to support their mental health.			WMAC works with young people through their family and youth service programs to codesign health & wellbeing resources that are relevant and meaningful.

Achieved **Delayed** **In Preparation** **On Track** **Ahead of Schedule**

OBJECTIVE 1.3 Creating respectful, inclusive, culturally aware & safe communities

ACTION	LEAD ORGANISATION	PARTNER ORGANISATION	STATUS	OUTCOME
Increase support for walk against family violence as part of 16 days across the shire.	Community Services	Rotary SayNo2Familyviolence.		Council partnered with Rotary SayNo2FamilyViolence to deliver an event and community walk in Heywood for the 16 Days of Activism Campaign. Schools, Organisations, Vic Pol, Council Staff and community all in attendance, with approximatley 150 people present for the walk. Guest speakers at the event included Winda Mara Family Violence Unit, Vic Police Family Violence Unit and the Rotary SayNo Committee.
Promote Are You Safe at Home messaging and collateral internally and on Council's website.	Community Services	Women's Health and Wellbeing Barwon South West.		Are You Safe At Home Day was promoted across Council Social Media in May of 2024 along with collateral internally, both including reference to Respect 2040 and regional actions across the Barwon South West.

Installation of foreshore pathway lighting at the Portland Foreshore as part of the Foreshore Redevelopment Infrastructure project.	Infrastructure Services	Department of Energy, Environment and Climate Action.		Installation of 73 lights along the 1.3km of connecting pathways on the Portland foreshore from the Trawler Wharf to Nuns Beach was completed in December 2024. This lighting enables extended hours of usage of the pathways, a popular source of fitness and recreation for the community and visitors.
Upgrade facilities and support with fees and charges for Council owned and managed recreation reserves to meet requirements for delivery of 2024 and 2025 Tri State Games in Glenelg Shire.	Community Services	Kyeema, Portland Little Athletics.		The 2024 Tri State Games were held at numerous Council-owned facilities across Portland in November 2024. The Recreation Unit worked with the Parks and Gardens Team to develop Alexandra Park for an athletics event. To assist the Tri-State Games Committee in conducting the event, Council waived fees for hire and sourced cleaning of Recreation facilities over the course of the week. Planning is currently underway for the November 2025 Tri-State Games to be held in Portland.
Planning underway for International Day of Older Persons project 'These Hands...' Exhibition for October 2024.	Community Services			All participants have been photographed and interviewed with a 2025 launch date at Portland Library yet to be confirmed.

Develop Accessible Communication Guidelines.	Community Services			Draft guidelines have been developed and are pending review and finalisation.
Develop and implement Reconciliation Action Plan's across all six Glenelg Shire Council Children's Services Unit services.	Community Services			All 6 early years services have well established and published individual RAP's. The RAP's per service ensures that actions are developed in the context of the local community, children, families and educators. Staff are committed to embedding actions to increase cultural safety.
Develop a series of actions endorsed by Glenelg Shire Council to progress the work of the Colonial Impact Register to address the imbalance in naming and recognition for Traditional Owners and Women across the Glenelg Shire.	Community Services			Glenelg Shire Council has committed to a series of cultural awareness sessions for Councillors in 2025 with the intention to develop a pathway forward post these sessions.
Engage and deliver workforce capacity building training within staff at the Glenelg Shire Council around healthy masculinities. Seek to extend the training to external organisations and community.	Community Services			Initiative was not funded in the 2024/2025 budget. A formal budget submission has been provided for consideration in the2025/2026 financial year to fund healthy masculinities training for staff and community.

Target appropriate funding to develop and install the artistic elements in the Gunditjmara Traditional Owners Ceremony and Dance Space on the Portland Foreshore.	Community Services			Funding for the provision and installation of the artistic elements, being totems, ochre bowls and a Coolamon for the Gunditjmara Traditional Owner Ceremonial Dance Space was sourced for the Local Roads and Community Infrastructure Program Phase 4. Installation of these items was completed in May 2025.
Ensure First Nations mothers and their children are included in ABA Portland in a culturally appropriate way.				The group is in conversations with DWECH promoting their services and assessing how best they can engage First Nations mothers into the group activities.
Ensure accessibility as a priority at Council lead events.	Community Services			Accessibility has remained a key focus, with event planning consistently integrating inclusive practices into all phases of event planning. Council's Access and Inclusion Officer is actively involved in event planning to ensure inclusive practices and full participation for all community members.
Increase awareness of the barriers LGBTQIA+ experience within the community to enable staff to provide appropriate support.				Are Able have increased awareness through a range of LGBTQIA training sessions for all staff through Minus 18. All Are Able sites also host a day of annual celebrations in recognition of the LGBTIQA community.

Adopt a place-based approach for the Glenelg community with a consortium of partners, to deliver health promotion campaigns around prevention of gendered based violence, gender equity and healthy masculinities across multiple settings such as schools, sports clubs and community service organisations.	Community Services			Glenelg Shire Council has re-signed as a regional partner to the Respect2040 initiative which will support both regional action, and localised campaigns to be co-ordinated and cohesive with shared messaging, training opportunities and resources.
Support and implement The Australian Breastfeeding Association (ABA) *Breastfeeding Welcome Everywhere Program* promoting community support of breastfeeding in public.				11 new businesses took up the opportunity to become recognised as Breastfeeding Welcome Everywhere sites, including 12Fold Café, Portland Neighbourhood House, Port of Call Cafe, and Bahloo Café.
Strengthen commitment to Aboriginal Health service provision in Heywood through partnerships.				Winda Mara continues to maintain existing partnerships and develop new partnerships to ensure Aboriginal Health needs are provided for and that the community are connected and supported across a variety of determinants. The successful build of the new health clinic in Heywood is a demonstration of this commitment to strong health service provision.

Submit Big Housing Build funding application to provide long-term housing for residents on the Victorian Housing Register.				Winda Mara has been announced as one of the successful applicants to the Big Housing Build, which will invest more then $153 Million across Victoria, delivering up to 348 new homes.
Seek partnership opportunities to activate youth voice in Casterton.				Partnerships have successfully been established with Bendigo Bank, Casterton Rotary Club, Vic Pol, Old Community Courthouse Casterton, Casterton Lions Club, United Way Glenelg, Headspace, Brophy, Safer Spaces (Deakin University and NCFH), GSG LLEN, Glenelg Shire Council (Youth Team and Library Services), YacVic and local community members to activate youth ideas in Casterton.
Enable localised access to specialist services and referral pathways for rural and regional patients.				Public physiotherapy and counselling service is now based in Casterton with a visiting podiatry, dietician, occupational therapy and speech therapy services available. Supported use of Telehealth by CMH admin/nurses to access specialists. Community Health Nurse able to provide referral to Mental Health/Wellness Services.

Increase local access to family violence support in Casterton.			Launch of The Orange Door Violence Prevention and Support Outreach Service, based at Casterton Memorial Hospital occurred in early 2025. Support also includes referrals to additional supports related to Family Violence like; financial support, housing and counselling services.

Achieved **Delayed** **In Preparation** **On Track** **Ahead of Schedule**

GOAL 2:

GOALS AND OBJECTIVES

BUILDING STRONG COMMUNITIES

A strong community is one where people can live, work and play in a safe environment and be resilient when faced with challenging situations.

Addressing such needs as secure housing, financial stability, community connectedness, access to education and employment, as well as addressing the impacts of climate change, all contribute to the foundations of a strong and resilient community. Whilst Glenelg Shire has a vibrant community spirit, safe neighbourhoods and high rates of volunteerism, we can still do more to support community resilience and active participation in community life.

OBJECTIVE 2.1:

Enhancing accessible neighbourhoods, services and activities

OBJECTIVE 2.2:

Building resilient and socially connected communities

OBJECTIVE 2.3:

Support participation in education, lifelong learning and employment



OBJECTIVE 2.1 Enhancing accessible neighbourhoods, services and activities

ACTION	LEAD ORGANISATION	PARTNER ORGANISATION	STATUS	OUTCOME
Connecting paths to infrastructure upgrades progressing in the All Abilities Playspace, at the Fawthrop Lagoon BBQ Rotunda and Casterton Caravan Park Camp Kitchen.	Community Services			The Butterfly Seat within the All abilities play space is yet to be relocated within playground so it is accesible by footpath. Fawthrop Lagoon BBQ Rotunda pathway is not progressing due to availability of funds in the 24/25 financial year. Casterton Caravan Camp Kitchen connecting pathway was completed August 2024.
Support social connection opportunities within the Heywood Community Garden under the VicHealth funding.	Community Services	Heywood District Secondary College, VicHealth.		Establishment of a permanent shed structure within the Heywood Community Garden is in process. This structure will be divided into two sections, one designated for equipment storage and the other, featuring a covered veranda, intended for community gatherings that will include a BBQ facility. The Heywood Men's and Women's Shed have made picnic tables and planter boxes for herb and edible flower gardens to surround the gathering area. Additionally, the structure will be connected to the existing water tank, enabling the collection of fresh water for the garden, and will incorporate a community-accessible water fountain.

Commence the second round of community consultation on the Portland CBD Amenities, with a focus on accessibility, inclusion, and safety as key elements to the concept design.	Community Services			The second round of community consultation on the Portland CBD Amenities was completed in January 2025. Final designs have been completed, incorporating key elements of the feedback received, and works to construct the new amenities have commenced.
Design and install a communication board in the Pulambeet Playspace to allow for users with complex communication needs to engage with their carers in how they interact and use the space.	Community Services			A 'Two Way Street' Playground Communication Board has been installed in the Pulambeet Playspace, with the community response being so positive, a second board has been installed within the playground at Island Park, Casterton. Casterton and Portland are the only town(s) between Mount Gambier and Melbourne that have Two Way Street Playground Communication Boards continuing to highlight Glenelg Shire as an accessible and welcoming area for all.
Increase awareness of ABA Portland Group Connect and Share Sessions.		Glenelg Libraries.		The group currently has 66 members who are connected via email, social media and messenger, where event information and photos are shared. All events are free and open to all.

Facilitate events workshops to support event management across the Shire.	Community Services	Victorian State Government.		A range of events and workshops have been delivered, strengthening local capacity in event planning across the Shire. In addition, targeted one-on-one sessions have provided tailored support to meet the diverse needs of event organisers, ensuring a responsive and inclusive approach to community-led initiatives.
Offer an outreach site in Heywood to assist people with no transport get to appointments. This is ongoing with participants having access to are able employment consultants in Heywood on a fortnightly basis.	are-able Education and Training			Workforce Australia and Disability participants have the opportunity to be serviced at the outreach centre every 2nd Thursday of the month. The outreach service is held at the Glenelg Shire Council library in Heywood.
Incorporate recommendations from consultation with the Australian Disability Network for Access and Inclusion Action Plan to improve are-able's accessibility & inclusion.	are-able Education and Training			In 2024 Are Able welcomed its Access and Inclusion 2024 – 2026 Plan demonstrating Are Able's commitment to fostering an environment where everyone can thrive through empowering individuals via employment pathways and community participation.
Provide are-able foundation community grants to promote inclusiveness and access for people with a disability.	are-able Education and Training			In 2025 Are Able will give out over $100,000.00 of grants to communities. Within the Glenelg 2 community grants have been administered to the Heywood Men's shed and United Way Glenelg.

Achieved **Delayed** **In Preparation** **On Track** **Ahead of Schedule**

OBJECTIVE 2.2 Building resilient and socially connected communities

ACTION	LEAD ORGANISATION	PARTNER ORGANISATION	STATUS	OUTCOME
Provide opportunities for social connection through community meal sharing.	The Salvation Army	Portland Community Mealshare.	✓	Portland Community Mealshare exists to improve the health and wellbeing of our community, through the provision of hearty, nutritious meals, in a supportive and respectful environment. Mealshare is on every Monday night from 5:15pm at The Salvation Army.
Provide social media workshops to support local businesses and organisation with identified community connection.	Community Services	United Way Glenelg.	✓	Council actively supported local businesses and community organisations by promoting relevant Business Victoria social media training opportunities. This helped connect participants with high-quality resources and provide linkages to relevant state-supported training opportunities, strengthen their digital presence and community engagement.
Add a performing arts component to the Dreams and Aspirations exhibition showcasing and celebrating local artists and performers from the disability community.	Community Services	Kyeema, Portland Bay School, Portland Neighbourhood House, Local Artists/NDIS support staff.	✓	All-abilities workshops in Voice Performance and Movement were delivered. With the inaugural performing arts showcase being delivered at the launch of the exhibition to the delight of the participants and the audience.

Increase youth participation in Arts and Culture activities.	Community Services			As part of the 2025 Casterton Kelpie Muster, the Glenelg Shire Youth Team, in partnership with Youth HQ, is delivering an inclusive, hands-on creative experience for young people in the community. This initiative will feature a pottery activity facilitated by Portland Bay Pottery. Collaboration of existing services including PAC, GSC Youth & Glenelg Libraries has delivered integrated & sustainable Youth Arts programs including Music Mondays, Digital Art Drop-In, Glenelg Libraries Exhibitions & Youth-led workshops. The 2 day youth theatre intensive THEATREPALOOZA was also delivered for the third year, continuing to grow the number of participants. This has led to an unprecedented increase in the number of young people auditioning for local theatre group roles.
Identify, promote, and support new iteration of SEA Change Portland and develop SEA Change Portland Communication Plan.				Activity has been superseded. The SEAChange initiative does not exist anymore. Health Promotion work continues under PDH Health Promotion Team.

Provide low cost social connection opportunities for older residents in Casterton.			Casterton Memorial Health provided the following low cost/free activities for older residents, including: • Weekly Walking Group and cuppa • Weekly low-cost exercise classes/socialisation for all abilities (including Strength & Balance, Just Move & Going Strong) • Monthly Carer Support Group • Monthly Men's Lunch • Movie Mornings at Youth HQ Cinema • Free all-day Activities at the Kelpie Festival (including Smoothie bikes, Painting and Pottery Classes) • Free CMH Colour Run/Walk

Achieved **Delayed** **In Preparation** **On Track** **Ahead of Schedule**

OBJECTIVE 2.3 Support participation in education, lifelong learning and employment

ACTION	LEAD ORGANISATION	PARTNER ORGANISATION	STATUS	OUTCOME
Develop a comprehensive Early Years Workforce Plan.	Community Services			Early Years Workforce Plan developed and endorsed at Council July 2024.
Build relationships with Indigenous early-years services to encourage families to enrol their children in Dolly Parton's Imagination Library from birth.		Winda Mara Aboriginal Corporation, Dhauwurd Wurrung Elderly and Community Health Services.		United Way Glenelg has established strong relationships with Winda-Mara Aboriginal Corporation and Dhauwurd-Wurrung Elderly & Community Health Service to support early literacy by encouraging families to enrol their children in Dolly Parton's Imagination Library (DPIL) from birth, ensuring greater access to culturally appropriate, high-quality books.
Include partners and support persons in Breastfeeding Education Classes.		Portland District Health.		All partners and support persons are warmly invited to attend the Breastfeeding Education Classes. Around 50% of the mums-to-be are accompanied by either their partner or mother. Our relationship with Portland District Health who provide free ABA membership to the women birthing at PDH, including a Breastfeeding Education Class is invaluable in promoting these sessions to the women and their partners/support persons.

L2P are continuing to engage with employment and other agencies to foster partnerships with staff who work with clients to gain skills enabling learners (clients) on the wait list to be mentored during business hours.		Are Able, Brophy Youth Services.		The L2P program proudly partners with local agencies Are Able and Brophy to support young people across both programs to gain their licence. Are Able currently have one staff member trained as a mentor, with Brophy Youth Services having two. This allows the young people to do their driving lessons during business hours with their mentors whom they already have established relationships with.
Delivery of school leavers employment program in a face to face setting, one on one or in group session's to build confidence, grow skills and independent living capabilities.				This program continues to grow, with participants learning valuable skills in relation to employment and independent life skills. Industry visits along with work experience opportunities are offered within the program, which has led to participants gaining paid employment.
Work with local Partners such as GSGLLEN to assist in the delivery of passport to employment and Future Leaders of Industry Programs.				Are Able have been partnering with the GSGLLEN for over 11 years to assist in delivering programs for young people across the Glenelg Shire.

Build workforce capability including provision of Introduction to Prevention and Population Health training.	BARWON SOUTH WEST Public Health Unit | Barwon Health			BSWPHU have provided a variety of capacity building sessions across the Southwest including: • Two sessions on the Introduction to Prevention and Population Health training in the southwest, including two online. • Two tailored sessions for Council's MPHWP Planning Committee & Executive Team on the development of an integrated plan. • Introduction to Mental Health Promotion training in the southwest. • Facilitation of collaborative partnerships including the Local Government MPHWP Planning Network, Health Services Practice Exchange, the BSW Prevention Collaboration and the South West Health Promotion Network.
Support partners to access population health data to support their planning processes.	BARWON SOUTH WEST Public Health Unit | Barwon Health			Provision of population health data to a range of organisations including Glenelg Shire Council and local health services. In conjunction with BSWPHU Epidemiologists, BSWPHU is also developing a comprehensive data dictionary that will support partners' ongoing access to population health data

Deliver a program of Seniors Festival activities across the Shire including arts, information, health and wellbeing activities.	Community Services			State Government funded show What's New Pussycat was delivered at the Portland Civic Hall in October, including free ticketing and lunch. A bus was also provided to transport seniors from northern ends of Shire. Tea and treasures events were delivered in Digby, Dartmoor, Casterton, Merino to planned activity groups in early November, with a final event held in Portland in December. These sessions were facilitated by Glenelg Arts in partnership with Glenelg Libraries featuring items, photographs and historic books from Council's Cultural Collection and the libraries Local History Collection.

Achieved **Delayed** **In Preparation** **On Track** **Ahead of Schedule**

MEASURING OUR PROGESS

Glenelg Shire Council will work with its health and wellbeing partners to develop an annual integrated action plan. This plan will outline what initiatives will be undertaken within a 12 month period to achieve the goals and objectives of the Health and Wellbeing Plan. This will ensure a collaborative approach is undertaken to identify and deliver opportunities to improve health and wellbeing across population groups and service delivery areas.

Each annual action plan will identify progress evaluation measures to ensure actions can be tracked and reported to Council and key stakeholders. Action plans will be reviewed and updated annually.

In order to meaningfully evaluate the impact of the Health and Wellbeing Plan, a biennial survey will be developed by Council in collaboration with Integrate Glenelg and its partners. This will facilitate impact and outcome evaluation, allowing for the tracking of goals and objectives and assisting in the identification of emerging health and wellbeing issues.

Alongside the quantitative data evaluating the Health and Wellbeing Plan (e.g. survey results, state government reported data and pre-post program evaluations), case studies, narratives and storytelling will be utilised. These detailed and innovative reporting techniques allow for an in-depth exploration of how health and wellbeing programs impact on individuals and communities. This can often be lost when looking at data collated across programs, objectives or goals. Case studies, stories and narratives facilitate a rich understanding of the community's experience and the far-reaching impact of the Glenelg Shire Health and Wellbeing Plan. This method will also be used to measure the impact of Commitment 1 and 2 on the health and wellbeing partners.

LEVEL	EVALUATION TYPE	EXAMPLES OF EVALUATION METHODS	REPORTING FREQUENCY
Goals	Outcome Evaluation	• Survey • State Gov Data (e.g. VicHealth Indicators).	Biennial
Objectives	Impact Evaluation	• Survey • State Gov Data (e.g. VicHealth Indicators).	Biennial
Actions and Commitments	Progress Evaluation	• Narrative • Case Studies • No. of Participants • Program evaluation (e.g participant knowledge or behaviour change)	Annually

CASE STUDY

LPHU POP health training and symposiums

Barwon South West Public Health Strategy

A highlight of 2024 was the launch of the Public Health Strategy for the Barwon South West Region. Launched in March, at Camperdown on Djargurd Wurrung country, the plan outlined the goals and priorities for the region for the next ten years.

The strategy articulates a vision for the region to achieve their best possible health and wellbeing. Over the past twelve months the BSWPHU has collaborated and partnered with many stakeholders to address the key priorities.

A key feature of the strategy is to address health inequities, and to bring a health equity lens to the planning and implementation of public health interventions. This lens underpinned two forums held in Camperdown during the year. You can click here to read the strategy.

Community Partnerships

Our Community Partnerships team have been working with our regional partners to improve collaboration and the public health ecosystem. In September, over 70 representatives came together to mobilise our public health ecosystem to optimise health outcomes and reduce health inequities through a strengthened approach to reducing harm from nicotine. We were joined by Rachel Anderson, the Director of QUIT to provide highly valuable insights.

In December, another well attended forum was held, focussing on strengthening food systems and healthy eating to improve health equity. We were joined by the CEO of VicHealth, Dr Sandro Demaio, who provided us with a thought-provoking presentation. At both forums we were fortunate to hear from our partners about exciting projects and initiatives from across the region supporting these initiatives.

Other significant regional health initiatives were launched in 2024, including the Health Promotion and Prevention Practice Exchange which brought together eleven health services to enhance regional health promotion planning, implementation, and evaluation. The first exchange event in December fostered peer learning and collaboration across the region.

In October, the BSWPHU Municipal Public Health and Wellbeing Planning network was created following a planning session for 23 council staff from the region's 10 Local Government s (LGAs) with support from the Victorian Department of Health and the Municipal Association of Victoria (MAV). The network's inaugural meeting included 13 planners from the 10 LGAs.

Additionally, the Regional E-cigarette and Tobacco (RET) Working Group, initially focused on tobacco and e-cigarette harm in Barwon, expanded its reach across the BSW region, incorporating seven health services, seven LGAs, and three not-for-profit agencies to collectively reduce tobacco-related harm.

During consultations for the Barwon South West Public Health Strategy and Population Health Catchment plans, ecosystem partners highlighted the importance of providing accessible workforce development opportunities in population health and prevention. In response, the BSWPHU developed and delivered an Introduction to Prevention and Population Health, a four-hour short course across the BSW catchment to more than 112 participants in 10 locations. **The team also continued to work with partners on a number of regional initiatives.**

GLENELG SHIRE

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GLENELG SHIRE

COUNCIL PLAN
2021 - 2025

QUARTER 4 REPORT
2024 - 2025

GLENELG SHIRE

ACKNOWLEDGEMENT TO COUNTRY

TRADITIONAL OWNERS

Glenelg Shire Council respectfully acknowledges the traditional lands and waters of the Gunditjmara people, Boandik people, Jardwadjali people and their respective cultural heritages.

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.

OVERVIEW OF REPORT

THE ICONS BELOW ARE USED THROUGHOUT THIS REPORT AS A KEY TO REPRESENT THE PROGRESSION STAGES OF EACH TASK, PROJECT OR OBJECTIVE IDENTIFIED BY THE GLENELG SHIRE COUNCIL.



Achieved The Achieved icon will be used when a project/plan has been successfully completed.



Delayed The Delayed icon will be present in this report when a project/plan has been identified as postponed, not on track or redefined.



In Preparation The In Preparation icon will be used in this report when a project/plan is in its planning stage and the details are being prepared.



On Track The On Track icon will be used when a project/plan is progressing, and is likely to achieve what is required within the time identified in the scheduling plan.



Ahead of Schedule The Ahead of Schedule icon will be used when a project/plan is likely to be completed earlier than planned.

MAJOR PROJECTS

The below table provides an update on major projects as identified in the Council Plan 2021-2025

PROJECT	UPDATE	STATUS
Portland Foreshore	All planned components throughout the four-year Council Plan 2021-2025 including pathways, boardwalks, lighting, bollards, and the ceremonial dance space have been delivered as envisioned and in alignment with the Grant Agreement. The project has enhanced cultural representation, improved safety, and accessibility, and strengthened community connection across the Portland Foreshore. This project is complete.	
Cape Bridgewater Infrastructure	Community engagement was undertaken in the fourth quarter with a total of eighty-four submissions received to help shape the refurbishment of the amenities. Council has undergone the procurement process to award the works, and the Marine and Coastal Act (MACA) consent is in progress. Significant progress has been made across all stages of the project throughout the four years of the Council Plan 2021-2025. Once Stage 3 is delivered, the upgrade will offer a fully revitalised coastal destination that supports both local community use and visitor experiences.	
Portland Employment Precinct	The Portland Employment Precinct Project has reached successful completion after four years of strategic planning, stakeholder engagement, and civil infrastructure delivery. Bunnings Warehouse is the first development to use the space and officially opened in the fourth quarter. The project was designed to unlock industrial and commercial land in Portland, providing critical infrastructure to support business development, investment attraction, and long-term job creation in the Glenelg Shire.	

Multi-purpose Facility – Portland Foreshore	Over the past four years, the project has progressed through extensive planning, design, consultation, and statutory approvals. While early progress was in line with agreed milestones, a change in project direction during Year 4 has resulted in a shift from a new-build approach to a refurbishment of existing facilities. In the fourth quarter a funding agreement request for building refurbishment was being finalised to submit to Regional Development Victoria for consideration.	
Alexandra Park Upgrade	The Alexandra Park Upgrade was a major infrastructure project aimed at revitalising one of the region's key recreational and community hubs. During the Council Plan 2021-2025 cycle the project successfully progressed from design and procurement to construction and handover, delivering enhanced facilities that are now in active use by the community. Project Complete.	

PRIORITY PROJECTS

The below table provides an update on priority projects as identified in the Council Plan 2021-2025

PROJECT	UPDATE	STATUS
Multi-Purpose Sporting facility	Councillors have been briefed on the feasibility and needs analysis work that will be undertaken in the in the 2025-2026 financial year. The actions for the Council Plan 2021-2025 were focused on monitoring funding and/or grant opportunities for upgrades/new facility improvements. Council has laid a foundation for future progress. The project will now be reintegrated into Council's long-term planning framework, informed by updated feasibility and community needs analysis, and reactivated when aligned funding becomes available.	
Aquatic Strategy Implementation	Council is still awaiting the outcome of the application to the Regional Community Sporting Infrastructure Fund to upgrade Heywood Pool Amenities. The Aquatic Engineering Assessment has been received and will be reviewed as part of further asset planning and management in the next FY, with a wider strategic review of the Aquatic Strategy to also be undertaken in 2025-2026 financial year. The Aquatic Strategy Implementation project has been a key priority for Council over the 2021–2025 Council Plan cycle, focusing on the long-term viability and renewal of aquatic facilities across the Glenelg Shire, particularly the Heywood Pool and the Portland Leisure and Aquatic Centre (PLACE). While major works have not yet been delivered, critical planning, technical assessments, and funding applications have positioned the project for future progression.	

Arts & Culture Strategy Implementation	The Arts and Culture Strategy Implementation has progressed steadily during the Council Plan 2021-2025 cycle, despite periods of staffing disruption. With core action plans completed or underway, Council is well-positioned to continue delivering on the 2022–2026 strategic vision, supporting a vibrant and resilient cultural sector across the Glenelg Shire. Year 4 Action marked as complete in Quarter 2.	
Portland Renewable Energy Project – Civic Precinct Construct	Stages 1 to 3 are complete with the remaining pipeline to be replaced pending future funding availability. The Portland Renewable Energy Project – Civic Precinct District Heating Loop Upgrade has progressed from concept through to construction within the 2021–2025 Council Plan period. It reflects Glenelg Shire's commitment to sustainable infrastructure and energy efficiency. The project is set to deliver lasting environmental and operational benefits for the community.	
Tracks & Trails Construct	The Tracks and Trails Construct project has been a successful four-year initiative focused on building a connected and accessible pedestrian network in Portland North. Delivered in two well-planned stages with strong community engagement and cultural heritage consideration, the project now provides lasting benefits to residents and visitors, promoting healthy, safe, and sustainable mobility options. This project is completed. Actions from the Tracks and Trails Strategy remain for further review, planning and delivery, which will be considered in alignment with the Council and Wellbeing Plan 2025-2029.	

Local Freight Roads Project-Precinct	The Local Freight Roads Project – Portland delivered strategic road improvements across four key freight routes, supporting the region's transport infrastructure and economic activity. Initiated in Year 2 and fully completed in Year 4, the project is a major achievement for Council, enhancing safety and reliability for freight operators and local industry across the network. In quarter four the Wilsons Road, Mumbannar Wanwin Rd, Heathfield Lindsay Rd, and Fitzgerald St upgraded were completed in accordance with the funding agreement. This project is now complete.	

 **Achieved**

 **Delayed**

 **In Preparation**

 **On Track**

 **Ahead of Schedule**

STRATEGIC PRIORITY

COUNCIL HAS IDENTIFIED THE FOLLOWING STRATEGIC PRIORITIES THAT ALIGN TO THE SIX GLENELG 2040 COMMUNITY PLAN THEMES. THE BELOW TABLES PROVIDE UPDATES ON EACH OF THE PRIORITIES.



OUR NATURAL ENVIRONMENT

Striving towards a carbon neutral future to protect and enhance the natural environment for future generations.



OUR EDUCATION, EMPLOYMENT AND INDUSTRY

Adapting and growing a diverse economy to embrace employment of the future and educational opportunities.



OUR HEALTH AND WELLBEING

Supporting the Glenelg community to thrive by being healthy, inclusive and well.



OUR LIFESTYLE, NEIGHBOURHOOD AND CULTURE

Creating enriched and vibrant lives through experiences, safe and well planned neighbourhoods.



OUR ACCESS, TRANSPORT AND TECHNOLOGY

Making it easier for people to connect in and around the Glenelg Shire.



OUR VOICE AND ACTION

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

OUR NATURAL ENVIRONMENT

INITIATIVE	ACTION	UPDATE	STATUS
Protect Our Natural Environment			
Review planning scheme to ensure wetlands, rivers and streams areas are clearly outlined.	Initiative completed in Year 2 of the Council Plan.	Initiative complete.	
Support programs to identify, protect**,** and celebrate natural waterways, wetlands, estuaries, and cultural heritage sites.	Continue to support other agencies where applicable.	The RAMSAR management Plan has been released for comment. Council continues to participate in the renewal of the RAMSAR Wetland Management Plan in partnership with GHCMA.	
Review and improve the use of planning scheme tools to protect biodiversity on Shire owned or managed land.	Initiative completed in Year 2 of the Council Plan.	Initiative complete.	
Work with the Glenelg Hopkins Catchment Management Authority to investigate the extent of flooding and inundation to guide the appropriateness of future development.	Undertake and finalise the Dartmoor/Nelson flood study of the Glenelg River.	The final draft of the Dartmoor/Nelson Flood Study is completed and is awaiting State Government approval for the draft planning scheme amendment to undertake final steps of community consultation prior to Council endorsement.	

Explore funding opportunities for weed and vermin eradication.	Continue to implement roadside weed and pest control program in alignment with funding requirements. Continue to monitor grant options.	Council has delivered the roadside weed spraying and management program in accordance with the plan and funding agreement.	
Review Council's planning and policy controls to ensure they protect and green Glenelg.	Initiative complete.	Initiative complete.	
Work with partners to ensure natural corridors are spatially mapped and habitat connectivity improved.	Support agencies and advocate where applicable.	Council will continue the ongoing commitment to support agencies and advocate as opportunities arise.	
Review and implement the Domestic Animal Management Plan to ensure responsible pet ownership and control measures.	Continue implementation of the 2021 - 2025 DAMP.	Development of the new Domestic Animal Management Plan (DAMP) has commenced. Community engagement outcomes from the Council and Wellbeing Plan 2025-2029 development will inform the development of the new DAMP. Council continues to monitor the number of domestic animals per household with 41 Excess Animal/Keeping of non-domestic animal in Schedule Area permits issued. Officer responded to 739 Dog, Cats and Livestock complaints.	

Prepare Glenelg Shire's response to Victoria's Circular Economy			
Increase energy efficiency of Council buildings, reducing costs and Council's carbon footprint.	Continue to explore cost and energy efficiency as opportunities arise across the organisation.	Council will investigate principles within the upcoming Environmental Sustainability Strategy, which will look at building operation, use and emissions. Actions to be identified for future work.	
Seek funding to establish a Bioenergy Plant to offset gas for heating public buildings.	Continue to monitor funding opportunities.	No applicable funding opportunities have arisen in this reporting period. Council continues to monitor and review funding opportunities.	
Continue to use natural and recycled products for infrastructure projects and ongoing commitment to the Planet Ark Wood Encouragement Policy.	Undertake a review of the Environmental Sustainability Strategy.	Officers have commenced the preparation for review and scoping of the Environmental Sustainability Strategy, with preparation and delivery to occur in the 2025-2026 financial year.	
Transition fleet to environmentally friendly vehicles and seek renewable alternatives for fuel.	Transition Council light fleet and plant to environmentally friendly options.	Council continues to integrate hybrid vehicles into its fleet where practical. This will be addressed further within the Environmental Sustainability Strategy, which is currently in the preliminary stages of development and will consider future actions and fleet policy.	

Explore installation of electric vehicle charging stations at Council facilities.	Initiative complete.	Initiative complete.	
Implement the Resource Recovery, Waste Minimisation and Management Strategy to: • Plan for the introduction of the Victorian Governments "A New Economy (Recycling Victoria)" policy. • Work regionally on kerbside aggregation reforms including Food and Organics Waste Service (FOGO) and glass. • Prepare for soft plastic reform introduction in 2023. • Advocate for the State Government transition planning, education, and change grants. • Provide education and incentives for residents to compost green waste at home/work. • Continue the rehabilitation and monitoring of landfill sites, whilst maintaining separation distances. • Provide Container Deposit sites.	Implement action plans for the introduction of the Victorian Governments "A New Economy (Recycling Victoria)" policy. Advocate for the State Government transition planning, education and change grants.	Council is awaiting the Ministerial review to be completed on the options paper relating to the "A New Economy" policy. At the April Council Meeting Council endorsed to Finalise the Waste Transition Plan for introduction of FOGO. Budget for Transition Plan adopted at the June Council Meeting. Council will continue to advocate for funding for transition planning, education and change permits.	

 **Achieved**

 **Delayed**

 **In Preparation**

 **On Track**

 **Ahead of Schedule**

OUR EDUCATION, EMPLOYMENT AND INDUSTRY

INITIATIVE	ACTION	UPDATE	STATUS
Increase the Economic value of regional food fibre production within the Shire			
Support Southern Rural Water, Wannon Water and Glenelg Hopkins Catchment Management Authority to advocate for increased ground water usage.	Continue to partner and advocate with relevant regional bodies in their advocacy.	Council will continue the ongoing commitment to support agencies and advocate as opportunities arise.	
Create a Glenelg Shire Council Food and Fibre Strategy to realise the potential of the food and fibre industry in Glenelg.	Initiative complete.	Initiative complete.	
Partner with Great South Coast Food and Fibre Council to grow and support the region's primary producers.	Partner and provide financial support to the Great South Coast Food and Fibre Council.	Year 4 Action was completed in the quarter two.	
Continue to support the Great South Coast Designated Area Migration Agreement to attract skilled workers to the region.	Continue to collaborate with neighbouring Councils to implement the initiatives within the latest DAMA agreement.	Council continued collaboration with neighbouring councils to implement initiatives outlined in the current Designated Area Migration Agreement (DAMA). Council has also provided ongoing support to local businesses seeking endorsement to participate in the DAMA labour agreement.	

Work with Agriculture Victoria, sector peak bodies and associations to support accessibility of training in agricultural best practice.	Promote training and upskilling opportunities by supporting careers expos, employment agencies and industry bodies.	Council advocated to the relevant peak body for increased drought support for the agricultural sector in South-West Victoria. While there were no direct opportunities for Council to support training and upskilling initiatives during this period, advocacy efforts focused on addressing broader sector needs.	
Explore funding opportunities to ensure saleyards infrastructure is fit for purpose and enhance online sales and connectivity.	Seek funding opportunities to ensure saleyards infrastructure is fit for purpose.	Recent upgrades at the saleyards included new automatic gates on cattle scales, a larger B-double forcing yard, elevated platforms, safety gates, and loading ramp improvements. A strategic review is planned to assess long-term asset needs and explore master planning options	
Build on Glenelg Shire's tourism to create culturally appropriate and high value experiences with tourism industry participants and community organisations			
Create regional tourism campaigns to encourage visitation across the townships.	Investigate and participate in State and Regional tourism campaigns via Great Ocean Road Regional Tourism (GORRT) membership.	Marketing opportunities were presented to Council by GORRT to participate in but were not pursued. Council will continue to review opportunities as they are presented in alignment with budget and strategic direction.	
Continue to improve and invest in the delivery of the Tracks and Trails Strategy.	Investigate funding and/or grant opportunities for implementation of Tracks and Trails Strategy. Complete Stage 2 Portland North Pathways.	No applicable funding opportunities have arisen in this reporting period. Council continues to monitor and review funding opportunities. Stage 2 Portland North Pathway is complete.	

Support the Gunditj Mirring Traditional Owners Corporation, Gunditjmara People, and local Aboriginal Community in their work to preserve and promote the Budj Bim Cultural Landscape and to share the history and significance of their ancestral lands through the review and implementation of the Shire's Aboriginal Partnership Agreement.	Work with the Aboriginal Partnership to deliver initiatives that align to the agreed actions of the Partnership Agreement 2023 - 2028.	The Ceremonial Dance Space has been completed this quarter. Planning for an opening event and associated media has begun with Koondoom Yarkeen Dance Group and the Traditional Owner Organisations. A Councillor Cultural Awareness program is in development in collaboration with traditional Owner Organisations. Delivery of the program will take place with Councillors in the second half of 2025.	
Work with Federal and State Government to progress the rail trail projects.	Implement Casterton Rail Trail Stage 1.	Consultation was undertaken via Your Say Glenelg, in person this quarter. This included the provision of the design for the Casterton Railway Precinct and an opportunity for community to select the equipment they would like to see in the playground located within the Casterton Railway precinct. Delivery of the project is expected to be completed in the second half of the year.	
Collaborate with Great Ocean Road Regional Tourism (GORRT) and Limestone Coast Tourism to increase marketing of the Shire.	Continue membership with Great Ocean Road Regional Tourism (GORRT) body. Participate in partnering in cross boarder opportunities with Limestone Coast Regional Tourism.	Council officers participated in networking partnerships to explore cross-border tourism opportunities in collaboration with Limestone Coast Regional Tourism. The contract with GORRT expired at 30 June and the decision has been made to not renew the membership.	

Recognising land owned by Traditional Owners through the planning scheme to enable these sites to be managed in a culturally sensitive way.	Council Plan initiative complete following State Government undertaking the relevant planning scheme work via GC213.	Initiative complete.	

Support educational pathways that promote lifelong learning

Deliver quality childcare and kindergarten services to meet the needs of the community across the Shire.	Initiative complete.	Initiative complete.	
Continue to work with education and health partners to increase engagement in playgroups and three-year-old kinder programs.	Continue to promote the benefits of 3-year-old kindergarten to families. Continue to promote kindergarten using social media platforms. Continue to support Portland District Health with the promotion of Supported Playgroups to targeted families.	Year 4 Action was completed in quarter two.	

Undertake a feasibility study into the expansion of the Portland Child and Family complex to meet the demand for service and improve the financial viability through places offered.	Develop and deliver early years infrastructure plan.	Due to organisational changes this has been delayed. A six month extension has been requested from the Department of Education.	
Support families and agencies to access programs and continue to enhance the Central Enrolment Process for Children's Services. Provide leadership support to Beyond the Bell, Stepping Stones to School Program and other initiatives to encourage educational attainment across the Shire at all key transition points.	Expend Central Registration and Enrolment Scheme (CRES) resource funding to support enrolment process. Continue to partner with Beyond the Bell and Stepping Stones program.	The appointment of a project officer is still in progress and due to be finalised in the second half of 2025. Year 4 Action was completed quarter two.	 
Expand library outreach services to extend the reach across the Shire and continue to deliver contemporary library resources and programs.	Continue to deliver library outreach services and commence roll out of the VicHealth Partnership program across the Shire.	Library outreach services continued in Dartmoor, Merino, Digby, and Nelson. VicHealth-supported youth programs included Illustration and Digital Art workshops, Music Mondays (with the Youth Development Team and Portland Arts Centre), and support for Casterton Youth HQ. Upcoming school holiday activities were planned through engagement with local schools.	

Support groups and community organisations that encourage lifelong learning.	Partner and support with organisations and community groups to conduct programs and events to all age groups across the Shire.	This quarter's partnership programs and events included a variety of community-focused activities such as wellness and creative workshops, early childhood sessions, fresh food swaps, and information sessions. Collaborations involved local volunteers, schools, health services, and community groups, with highlights including Rhythm and Rhymes sessions, art workshops, Justice of the Peace services, trading card game events, and educational sessions on gardening and mental health.	
Expand the traineeship and apprenticeship program within Glenelg Shire Council.	Investigate opportunities to continue to broaden the traineeship and apprenticeship program.	Initiative complete.	
Provide Aboriginal educational scholarships.	Work with Aboriginal Partnership to determine suitable methods of vocational support for Aboriginal students.	Year 4 Action was completed in quarter two.	
Continue to support the Future Leaders of Industry Program.	Provide annual financial support and professional development opportunities to the program via Glenelg and Southern Grampians, Local Learning and Employment Network.	Initiative complete.	

Work with educational providers to harness the demand for construction, early childhood educators, independent living, agriculture, and manufacturing sectors in line with skills commission report.	Advocate for and pursue funding opportunities to implement the Early Year Workforce Plan.	No Applicable funding applicable funding opportunities have arisen in this reporting period. Council continues to monitor and review funding opportunities.	
Support businesses within the Glenelg Shire			
Implement a system to offer targeted support, training, and relevant information to local businesses.	Partner with Regional Development Victoria (RDV) to provide targeted training and support to businesses in Glenelg Shire.	Workshops were scheduled to take place this quarter however due to low registration numbers not meeting the minimum required they were postponed. Council will continue to collaborate with RDV for development opportunities to support small business in Glenelg.	
Support the development of digital hubs/shared workspaces through the region.	Remain as a key stakeholder on the Country University Centre (CUC) Portland Steering Committee. Seek funding opportunities to create digital study / work hubs.	Senior Executive leadership team continues to represent Council on the community led CUC steering committee. A previous funding application submitted was unsuccessful. The committee have expressed that an application will be submitted in future rounds.	
Provide minor financial grants to support small business (e.g., facade upgrades, business planning and development).	Initiative complete.	Initiative complete.	

Explore opportunities to activate vacant or empty shop fronts throughout Glenelg.	Continue to support local business associations.	Council continued to collaborate and work closely with local associations across the Shire but due to resourcing no actions were undertaken or outcomes delivered specifically to empty to shop fronts this quarter.	

 **Achieved**

 **Delayed**

 **In Preparation**

 **On Track**

 **Ahead of Schedule**

OUR HEALTH AND WELLBEING

INITIATIVE	ACTION	UPDATE	STATUS
Plan and monitor municipal public health			
Develop and deliver an Annual Action Plan and Report for the Municipal Public Health and Wellbeing Plan.	Report on the year 3 action plan and develop year 4 action plan.	The year 3 Action Plan Report has been prepared covering the last 18 months of deliverables under the Municipal Public Health and Wellbeing Plan 2021-25. This report will go to Council for endorsement and will then be made publicly available on the Council Website.	
Implement a biennial survey during years 2 and 4 to measure progress initiatives of the Municipal Public Health and Wellbeing Plan.	Replicate the year 2 Health and Wellbeing survey to collate comparative data against year 2, to help determine an understanding of the impact of health and wellbeing initiatives.	There was not enough data captured from the year two survey to develop a baseline of health and wellbeing outcomes across the Shire. Surveying in year 4 is therefore not going to be useful as there is not enough comparative data to measure or determine any change. Alternative measures for health and wellbeing have been incorporated into the development of the new Council and Wellbeing Plan 2025 - 29.	
Develop a framework to support our ageing population across the Shire.	Initiative complete.	Initiative complete. The Ageing Well Framework was delivered in the first year of the Council Plan 2021-2025.	

Conduct an annual satisfaction survey with families to understand the level of satisfaction with Maternal and Child Health Services and identify areas for improvement.	Continue to conduct annual satisfactions surveys with all children's services users across the Shire. Monitor Portland District Health feedback from service users. Implement identified areas of improvement.	Due to organisational changes this has been delayed. This will be completed in the second half of 2025.	
Monitor delivery of the Maternal and Child Health and Early Years Immunisation Programs against the contract management requirements.	Attend monthly contract management meetings for data reporting including Local Government Performance Reporting Framework (LGPRF).	Year 4 Action was completed in quarter two. Council will continue ongoing attendance at the monthly contract meetings.	
Continue to provide First Time Parent Groups (FTPG's), appropriate childcare and high-quality kindergarten services to 0–5-year-olds across the Shire.	Support Portland District Health (PDH) to continue to promote participation in Maternal and Child Health (MCH) First Time Parents Groups. Kindergarten and Long Day Care Services enrolment processes to be promoted to participants.	This action was marked as completed in the third quarter.	

Enhance physical health and emotional wellbeing			
Work with existing clubs and community organisations to deliver other social recreation opportunities.	Plan and deliver "Play Your Way" project for primary aged students to come and try a range of inclusive organised sports.	The play Your Way Come and Try Event received a total of six registration reimbursements for participation, a number lower than the project hoped for. Participation reports from all sports are not yet finalised, however all five sports successfully conducted entry-level participation programs in the season immediately following the "Come and Try Event". A project review will determine the suitability of similar events in Glenelg in the future.	
Incentivise events to provide healthy food options reflective of funding criteria.	Initiative complete.	Initiative complete.	
Work with sports clubs to provide healthy food options at training and game days.	Support clubs to engage with the Vic Kids Eat Well Health Program to support small bite changes and provide healthy food options.	The Heywood Recreation Reserve Master Plan has been adopted by Council and planning for priority projects has commenced with stakeholders. The Island Park Master Plan will undergo further public exhibition prior to Council endorsement.	
Support increased food security by providing additional access points and frequency of food share distribution initiatives across the Shire.	Engage with and provide support to external partner initiatives.	Year 4 Action was completed in quarter one.	

Advocate for additional mental and allied health services across the Shire.	Continue to engage with Barwon South West Interim Regional Body under the Mental Health and Wellbeing reform to advocate for services across the Shire.	Interim Regional Bodies are no longer active. No further action to report in this quarter.	
Supporting safe, engaged, and inclusive communities			
Carry out Gender Impact Assessments across the delivery of services, assets, policy development and projects that Council delivers.	Embed the process for undertaking GIA into operational procedures across the organisation.	The requirement to undertake an Impact Assessment has now been imbedded into Executive and Council Report templates to ensure accountability in undertaking them as prescribed by the Gender Equality Act 2020. The online app continues to be used across the business to undertake the assessments.	
Deliver programs that support gender equality and the prevention of family violence.	Implement recommendations from Impact Assessments where viable. Deliver annual 16 Days of Action events and programs.	Impact Assessments were undertaken on the Foreshore Multipurpose Facility upgrade, and the Organisational Street and Road Naming Policy. A report on the policy was presented for endorsement on a range of recommendations to increase representation in naming across Glenelg. 16 Days of Activism occurs late in 2025, as such planning for this initiative has not yet commenced.	
Explore the use of oval lighting to create safer places to walk/run when ovals are not being used for formal sporting activities.	Initiative complete - Exploration of the use of oval lighting is not viable due to associated costs and impact on surrounding residential areas due to light pollution.	Initiative complete. Exploration of the use of oval lighting is not viable due to associated costs and impact on surrounding residential areas due to light pollution.	

Support community led projects and events to increase social connection within neighbourhoods.	Consider Community Connection and social impact when undertaking assessments for community funding and support.	Year 4 Action was completed in quarter one.	
Recognise and support volunteer organisations.	Continue to host Annual Volunteer week to recognise individuals and organisations. Provide support to volunteer organisations via Community Funding and Support program.	Volunteer Recognition Receptions were held from the 20 - 23 May in Heywood, Portland, Casterton, and Nelson to honour local volunteers and to pay tribute to local volunteers and their significant contribution to the Glenelg Shire. The events were also a chance to pay tribute to some outstanding local achievers, with the official presentations of the 2025 Glenelg Shire Community Awards. Eight awards were presented to individuals and community groups from across the Shire.	
Explore funding opportunities to improve community safety within the Shire.	Investigate and communicate relevant funding opportunities across the organisation.	Action on hold pending resourcing.	

Support placement opportunities for young people within various volunteer organisations, Council events and programs.	Engage with young people shire wide through volunteer opportunities in civic and community events and programs.	170 year 8 students from local secondary colleges worked with the Live4Life Crew in May to co-design youth-led mental health activities for a future Mental Health Awareness event. Fifteen young people from the Re-engagement School in Portland have been working to create a short film as part of the Vic Health regional Anti Vaping Campaign. Students have been storyboarding, developing props and posters for the film that is due to start filming in September with a local production company. Monthly Music Monday sessions have been held at the Portland Arts Centre, to support young musicians with skill development and access to instruments. Six regular participants are actively engaged. Thirty-three young people are currently engaged in the L2P Learner Driver Program, with four young people successfully gaining their license this quarter.	

 **Achieved**

 **Delayed**

 **In Preparation**

 **On Track**

 **Ahead of Schedule**

OUR LIFESTYLE, NEIGHBOURHOOD AND CULTURE

INITIATIVE	ACTION	UPDATE	STATUS
Prepare and plan for the changing housing needs for Glenelg's population			
Prepare structure plans for Dartmoor, Heywood, Narrawong and Nelson to review existing land uses and provide direction for future use.	Complete the Narrawong and Dutton Way Structure Plans.	Community engagement sessions were held in Narrawong, Allestree and Portland this quarter to exhibit the draft Plan. Submissions were reviewed and changes where were made. Finalisation of the draft plan is in progress with anticipation of completion in the next financial year.	
Prepare guidelines to assist residents/developers to understand the requirements of building and investing in Glenelg.	Initiative complete.	Initiative complete.	
Adopt the draft Portland Strategic Framework Plan and draft Rural Land Strategy to provide a coordinated approach to the use and development of urban and rural land.	Initiative complete.	Initiative complete.	
Prepare a housing strategy to encourage and increase housing choice, diversity, and affordability to meet population forecasts and objectives.	Investigate strategy development with consideration to the changing economic landscape and in alignment with the Barwon South West "Key Worker Housing" strategy.	The key worker housing strategy is an ongoing consideration in the development of current strategic planning projects.	

Deliver Fit for Purpose Multi-Use Facilities			
Continue to replace, renew, and consolidate council owned assets to ensure facilities are financially viable, fit for purpose and multiuse.	Commence the consultation, review, and development of the Asset Plan.	The Asset Plan is under review and will be submitted to Council for feedback and to endorse the Plan for public exhibition. The Plan is on track to be endorsed as required under the Local Government Act 2020.	
Develop and implement a Library Strategy to ensure Library facilities are contemporary, fit for purpose and multiuse.	Implement the Glenelg Libraries Strategic Plan 2021-2026, through development of annual action plans.	Community consultation for the Heywood Library Revitalisation project was launched as a priority action of the plan. Community input will help determine priorities for the library and support future funding applications for revitalisation or programs.	
Enhance Council's ongoing relationships with the Traditional Owners of the region			
Prepare and implement a framework for project managers to consider opportunities for cultural representation in projects.	Progression of the Asset Project Management Framework and continued engagement with Gunditj Mirring Traditional Owners Aboriginal Corporation (GMTOAC) on all relevant infrastructure projects.	Project management internal audit has been received and will be used to inform the development of the Project Management Framework. This work will continue as a priority action into the 2025-2026 financial year. Continued engagement with GMTOAC occurring via monthly meetings.	

Codesign and implement an Aboriginal Partnership Plan with Aboriginal partners.	Work collaboratively with the Aboriginal Partnership to consult, design, and deliver on actions that align with the Partnership Agreement. Progress the development of the cultural awareness framework.	The artistic elements for the Ceremonial Dance Space have been installed marking the completion of the project. A community opening event is currently being planned to take place in the new financial year. Audio signage with cultural interpretation of the artistic elements is set to be installed in the same timeframe.	
Deliver experiences to enrich community life			
Consider opportunities for nature-based play, outdoor fitness and informal recreation through playgrounds and skate parks across the Glenelg Shire.	Implement the Playground Management Plan. Refinement of the Open Space strategy. Endorse and finalise the Heywood recreation reserve and Island Park masterplans.	Implementation of the Playground Management Plan is ongoing. Supplier selection for the Casterton Railway Precinct Playground is complete, and award of contract is in progress. Playground works are to be scheduled in line with Civils works in the same location. The Heywood Recreation Reserve Master Plan has been adopted and planning for priority projects has commenced with stakeholders. The Island Park Master Plan will undergo further public exhibition prior to Council endorsement.	
Develop a Creative Strategy, linked to the Great South Coast Creative Industries Strategy to inform artistic and cultural projects, programming and activities across the Shire.	Implement Year 2 of the Arts and Culture Strategy Action Plan. Commence development of Year 3 Action Plan.	Year 4 Action was completed in quarter two.	

Embed the Public Art Masterplan into the planning, design and procurement of infrastructure projects and public spaces.	Review and develop public art masterplan. Support finalisation of Project Management Framework. Respond to opportunities for developing creative infrastructure in Glenelg Shire.	The Nyamat Mirring (Sea Country) gallery was officially opened at the Portland Maritime Discovery Centre, funded by the Australian National Maritime Museum. Major upgrades to theatrical lighting and access systems through the Portland Arts Centre, Portland Civic Hall, Heywood Community Hall and Casterton Town Hall, have commenced, funded through Creative Victoria. Opportunities to better use existing Council facilities as a cost-effective approach to develop missing creative infrastructure in the Shire are being scoped and explored.	
Review and deliver key elements of the Civic Precinct Masterplan.	With consideration to budget and capacity the review of the Civic Precinct Masterplan will be moved for consideration in the development of the 2025 – 2029 Council Plan.	Initiative complete.	
Explore funding opportunities to support access to recreational and commercial fishing within the Local Port of Portland Bay and other waterways within the Shire.	Initiative complete.	Initiative complete.	

 Achieved

 Delayed

 In Preparation

 On Track

 Ahead of Schedule

OUR ACCESS, TRANSPORT AND TECHNOLOGY

INITIATIVE	ACTION	UPDATE	STATUS
Increase access, transport availability and transport options			
Continue to investigate improvement to public transport connections into and within Glenelg.	Review active transport solutions and advocate for funding.	Council continues to explore opportunities to advocate for enhancements to the public transport network to better meet community needs.	
Advocate for the reintroduction of a regular passenger service to and from Portland Airport.	Continue to explore opportunities and advocate for a regular air passenger service.	Continue to explore opportunities and advocate for a regular air passenger service.	
Support a passenger services feasibility study (i.e., local bus network, regional services, including express, to and between Adelaide, Geelong, Melbourne).	Continue to explore opportunities and advocate for enhanced connectivity in passenger transport links.	Continue to explore opportunities and advocate for enhanced connectivity in passenger transport links.	
Support a feasibility study for connectivity to rail services from Warrnambool in response to the Grampians and Barwon South West Region Passenger Services Cost Feasibility Study (2017).	Continue to explore opportunities and advocate for enhanced connectivity in passenger transport links.	Continue to explore opportunities and advocate for enhanced connectivity in passenger transport links.	

Increase digital connectivity			
Increased digital connectivity and infill of mobile blackspots throughout the Shire.	Seek funding and/or grant opportunities for improved connectivity both directly and through Great South Coast Regional Partnerships and the South West Victoria Alliance.	No applicable funding opportunities have arisen in this reporting period. Council continues to monitor and review funding opportunities.	
Continue to deliver the Digital Glenelg Implementation Plan and Program Roadmap.	Finalise phase 3 and commence phase 4 of Implementation Plan and Program Roadmap.	Extensive internal consultation has taken place this quarter for the implementation of ERP/Civica. The project is on track for Go Live 27 October 2025, which will complete the Digital Glenelg Roadmap Program.	
Improve the efficiency and safety of moving freight			
Continue to support the Rail Freight Alliance to improve rail upgrades (including Maroona to Portland line).	Funding received for the Maroona to Portland line. Initiative complete.	Initiative complete. Advocacy work continues to ensure the line is delivered on time and on budget.	
Support Glenelg Shire initiatives contained within the State Government - Victorian Freight Plan.	Continue to investigate and implement relevant actions and initiatives within the Victorian Freight Plan.	Continue to investigate and implement relevant actions and initiatives within the Victorian Freight Plan.	

Identify and investigate improvements to the Henty Highway to improve the ability of oversized freight to be transported to and from the Port of Portland.	Continue to advocate for improvements via the Green Triangle Action Plan Monitoring Group, Regional Roads Victoria, and Department of Transport.	Council continues to advocate for improvements via the Green Triangle Action Plan Monitoring Group, Regional Roads Victoria, and Department of Transport.	
Work with all key stakeholders to repair and upgrade key freight routes as detailed in the Green Triangle Freight Action Plan, Roads of Strategic Importance, and the Victorian Freight Plan.	Continue to advocate for repair and upgrades to priority freight routes in partnership with key stakeholders.	Council continues to advocate for the repair and upgrade of priority freight routes in collaboration with key stakeholders to support regional connectivity and economic development.	
Explore funding opportunities for safer roads.	Seek funding and/or grant opportunities and continue to advocate for safer roads.	Local Area Traffic Management funding was received for the Portland Medical precinct. A funding application is being prepared for the Transport Accident Commission (TAC) Safer Local Roads Program.	
Work with key stakeholders to increase road safety and improve driver behaviour within the Shire.	Continue to engage driver mentors and learner drivers into the Glenelg L2P program.	The Glenelg L2P program continues to exceed targets, tracking over 100% with four probationary licenses achieved this quarter. There are seventeen active mentors and thirty-three learners active in the program.	

Increase active transport use

Review and develop Active Transport Plans to identify opportunities for active transport use and connectivity.	Deliver yearly Walk to School programming.	Year 4 Action was completed in quarter two.	
Investigate lighting for leisure tracks and trails in urban areas to increase use.	Continue to Seek funding and/or grant opportunities in alignment with Council Plans and Strategies.	No applicable funding opportunities have arisen in this reporting period. Council continues to monitor and review funding opportunities.	
Seek funding to implement local trails as identified in the Glenelg Tracks and Trails strategy.	Continue to Seek funding and/or grant opportunities in alignment with Council Plans and Strategies.	Civils works for the Casterton Railway Precinct contract has been awarded, with works expected to commence in July 2025. This project aligns with the Glenelg Tracks and Trails strategy actions to improve the trails network within the township.	
Expand the pedestrian footpath and crossing network.	Seek funding opportunities in line with relevant strategies and plans.	A funding request was compiled for submission to the Transport Accident Commission (TAC) for footpath and crossing works in Heywood and Portland under the Safe Local Roads and Streets Program.	

Enhance the use of technology to improve services, infrastructure and facilities provided

Prioritise services, infrastructure, and assets for the investment in smart city technology.	Continue delivery of Smart City technology framework and delivery of projects that enhance the use of technology and improve services and new facilities including the foreshore and multi-purpose building.	Council continues to pursue the use of existing technology drawing on existing public data to consolidate and customise a dashboard to provide an open data system on Council's website. It has potential to support tourism and enable customers to easily access relevant and accurate information.	
Explore options to record visitation data along the Great South West Walk (GSWW) to understand investment required.	Continue to explore data collection methods.	Year 4 Action was marked as completed in the third quarter.	
Invest in Internet of Things infrastructure.	Advocate the utilisation of smart technologies and identify opportunities for the inclusion in projects and infrastructure.	Units across Council continue to collaborate to investigate opportunities to integrate smart technologies into projects.	

 **Achieved**

 **Delayed**

 **In Preparation**

 **On Track**

 **Ahead of Schedule**

YOUR VOICE, OUR SHARED ACTION

INITIATIVE	ACTION	UPDATE	STATUS
Apply good governance and leadership to strategic decision-making			
Implement and monitor the Community Engagement Policy and Framework.	Commence the review of the Community Engagement Policy and Framework and update in alignment with the IAP2 community engagement model.	Officers have commenced the development of the Communications Strategy. The Community Engagement Policy and Framework will be reviewed as part of the project.	
Within budget and funding constraints, implement initiatives identified within the 2040 Community Plan and Vision.	Align annual Council Plan actions to 2040 initiatives.	Initiative complete.	
Implement deliberative engagement programs in line with Council's legislative requirements.	Undertake deliberative engagement for the development of key plans, frameworks, and strategies.	Three Face to face sessions took place across Narrawong, Allestree and Portland seeking feedback on the draft Narrawong, Dutton Way and Allestree Framework Plan. Community engagement was undertaken to help inform the playground equipment in the Casterton Railway precinct. The consultation for the project included an online survey and face to face session in Casterton 38 submissions were received to assist in prioritising the playground equipment for install.	
Explore live streaming and recording functionality of Council Meetings.	Initiative complete.	Initiative complete.	

Create a Data Hub to catalogue, use and reuse data collected through research and consultation programs.	Implementation of data management policies and framework, improve reporting capabilities utilising Power BI.	Power BI is used where relevant across the organisation to display and capture information, provide status reports and monitoring on projects and annual work activities.	
Strengthen our regional reach and understanding of townships			
Continue to work in partnership with peak bodies across the region.	Maintain existing partnerships with peak bodies across the region, ensuring Council maintains a strong presence.	Council continues to prioritise strong engagement with peak bodies across the region, maintaining a visible and influential presence. Ongoing participation in the Economic Development Practitioners Forum has enabled ongoing collaboration with regional partners, fostering alignment on shared priorities.	
Continue to hold Council Meetings across the Shire where possible.	Allocate 2 Council meetings for the financial year in locations outside of Portland.	The April council meeting was held at Town Hall in Casterton.	
Hold Listening Posts across the Shire.	Integrate the annual Listening Posts in to the Council Plan 2025 - 2029 Stakeholder Engagement Plan.	Initiative marked as complete in Quarter 3 following the completion of the Council and Wellbeing Plan and 2025/26 budget community sessions.	
Develop and implement a program to actively promote the type and status of infrastructure projects across the Shire.	Initiative complete.	Initiative complete.	

 **Achieved**

 **Delayed**

 **In Preparation**

 **On Track**

 **Ahead of Schedule**

GLENELG SHIRE

PORTLAND CUSTOMER SERVICE CENTRE
71 Cliff Street, Portland

CASTERTON CUSTOMER SERVICE CENTRE
67 Henty Street, Casterton

HEYWOOD CUSTOMER SERVICE CENTRE
77 Edgar Street, Heywood

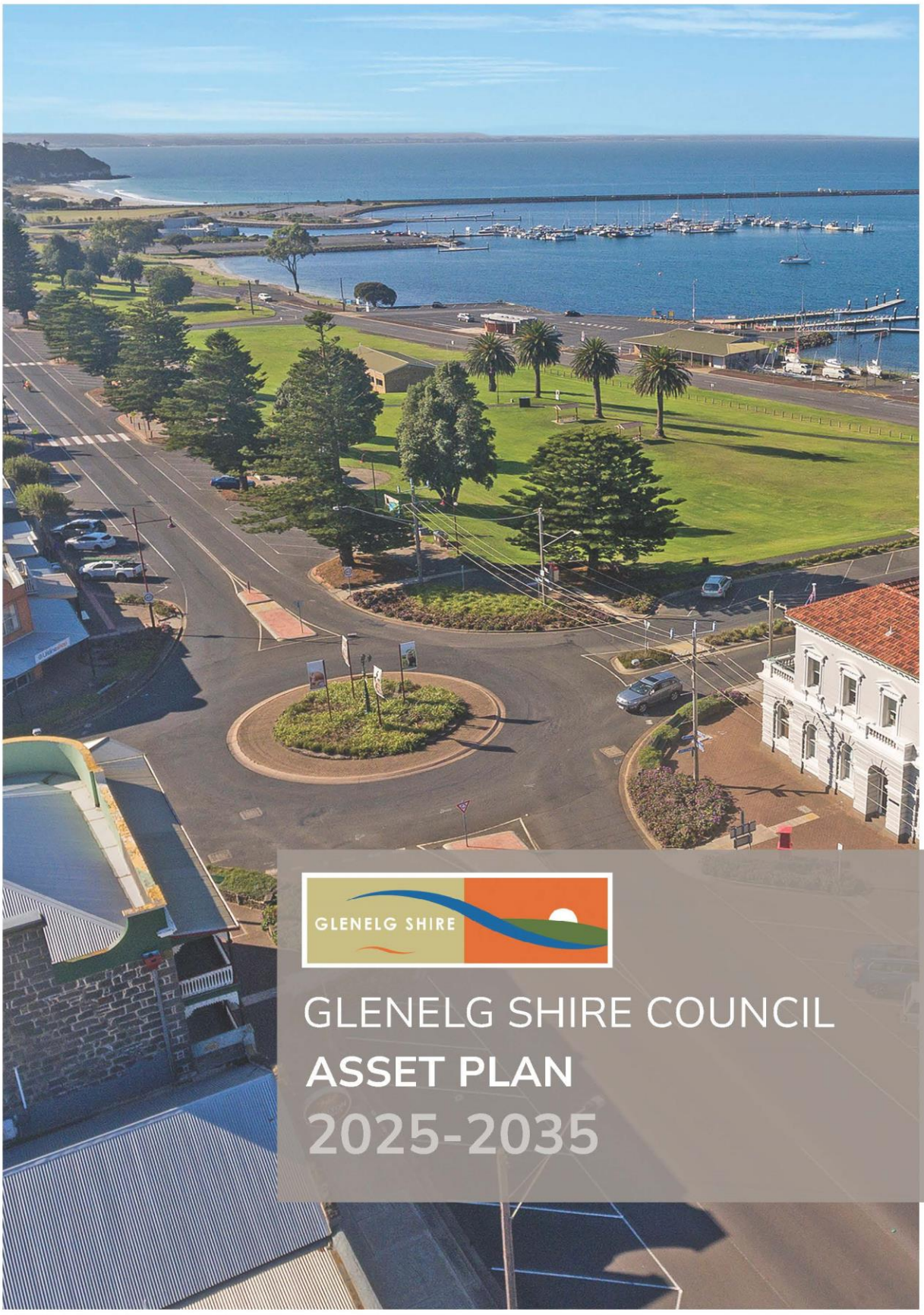
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GLENELG SHIRE COUNCIL
ASSET PLAN
2025-2035

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Executive Summary

Introduction and Legislative Context

Glenelg Shire Council manages a diverse portfolio of infrastructure assets valued at approximately $767 million, spanning roads and bridges to community buildings, parks, and drainage networks across our rural municipality. These assets are fundamental to delivering quality services and maintaining the liveability of our communities.

This Asset Plan is prepared in accordance with Section 92 of the Victorian *Local Government Act 2020*, which mandates all Victorian councils to develop a ten-year strategic plan for infrastructure assets. The Act emphasises principles of deliberative community engagement and sustainable financial management, requiring integration with Council's Financial Plan and Budget processes.

The Plan forms part of Council's Integrated Planning and Reporting Framework, directly connecting high-level community outcomes articulated in the Council and Wellbeing Plan 2025-2029 with practical asset management actions and financial provisions. It also ensures compliance with related legislation including the *Road Management Act 2004* and various safety and accessibility standards.

Community Priorities and Engagement

Community consultation conducted between January and March 2025 identified clear priorities that have helped shaped this Asset Plan. The community emphasised:

Primary Infrastructure Concerns:

- **Safety and basic infrastructure** - residents prioritised core assets including local roads (particularly fixing potholes on school bus routes), footpaths for pedestrian safety, and drainage systems to prevent flooding in townships
- **Road network improvements** - consistently identified as the top priority across all townships
- **Transport connectivity** - including footpaths, trails, and accessible transport options

Equity and Service Delivery:

- **Equitable service across towns** - ensuring smaller townships and rural areas receive fair attention, particularly for gravel road maintenance and bridge repairs
- **Maintaining community facilities** - strong support for preserving recreation assets like pools, sports grounds, and community halls that foster social connection

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Governance Expectations:

- **Transparency in decision-making** - residents requested clearer communication about how Council prioritises asset renewal projects
- **Fiscal responsibility** - community expectations for Council to be transparent and accountable in asset investment decisions

The Heywood Pool and other ageing recreation facilities were specifically highlighted for improvement where financially feasible, reflecting the community's commitment to maintaining social infrastructure that supports families and community connection.

Current State of Assets

Council's asset condition profile reveals a mixed picture requiring strategic intervention:

- **Overall condition** averages around Fair (Condition 3), with road assets performing better at Condition 2.6
- **Heritage assets** present challenges, rating poorly at Condition 4.2 and requiring significant investment
- **Critical infrastructure** including main roads, bridges, and drainage systems is generally maintained in fair condition or better, supporting effective risk management
- Approximately **12% of assets** are in very poor condition, representing a renewal backlog that must be addressed

The asset portfolio faces typical rural municipality pressures: ageing infrastructure-built decades ago, financial constraints from a small ratepayer base supporting an extensive asset network, and evolving community demands influenced by demographic changes and climate impacts.

Financial Strategy and Investment Approach

Council has developed a financially sustainable approach prioritising renewal over expansion in the short-medium term:

Capital Works Program:

- **2025/26**: $13.1 million investment peak addressing urgent renewal needs
- **2026/27-2028/29**: Steady $8.2-8.5 million annually focused entirely on asset renewal
- **Zero new asset acquisition** planned, reflecting a "consolidate and renew" strategy

Funding Sources:

- **External grants**: Expected to contribute $3.7-4.5 million annually (approximately 50% of capital funding)
- **Council resources**: $3.8-6.37 million annually from rates and reserves
- **Strategic borrowing**: $3.0 million of the $7.0 million loan amount identified in 2025/26 only. The need for borrowings to cover asset expenditure (new, upgrade or renewal) will

be managed and assessed in accordance with Council's Borrowings Policy, Long Term Financial Plan and annual budget.

Demand Management: Council employs several strategies to control future financial obligations:

- Prioritising renewal before expansion
- Planning for and investing in multi-use facilities to maximise utilisation
- Service level reviews to consider assets with community needs
- Community engagement in major asset decisions

Improvement Initiatives

Council recognises the need for enhanced asset management maturity and has identified priority improvement areas:

Data and Systems (Short term):

- Establish Asset Management Steering Committee for strategic oversight
- Complete comprehensive condition assessments for all major asset groups
- Implement integrated Civica Altitude asset management system
- Develop detailed 10-year renewal forecasts using predictive modelling

Governance and Planning (Medium term):

- Create Community Asset Reference Group for ongoing engagement
- Develop formalised Level of Service frameworks with community input
- Implement risk analysis for critical assets with contingency planning

Sustainability Goals (Long-term):

- We will endeavour to reduce the -12% backlog to a reasonable target to be established once the existing data improves.
- Depreciation expenses will be better matched by renewal expenditure – a common sustainability indicator – moving toward or achieving the benchmark of 100% renewal vs depreciation ratio (currently, we are working to calculate this precisely as data improves).
- Establish mature asset management practices comparable to best-practice rural councils

Further detail regarding asset management improvements are available in the improvement timeline section at the end of this plan.

Conclusion and Next Steps

This Asset Plan provides a strategic roadmap for Council's sustainable infrastructure management that balances technical requirements with community values and financial

realities. The approach prioritises maintaining existing assets over expansion, ensuring current service levels can be sustained within available resources.

Implementation begins immediately upon adoption of this Asset Plan in the short term, based on available resources, focusing on establishing governance structures and improving condition data and asset management systems. Regular community reporting will ensure transparency and accountability, while the Plan will be reviewed every four (4) years to maintain alignment with evolving community needs and Council strategic directions.

By implementing this framework, Council and the community will work together to ensure our infrastructure continues to support thriving, connected communities across the Shire for generations to come.

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Introduction

Glenelg Shire Council manages a diverse range of infrastructure assets that are essential for delivering quality services and amenities to the community. These assets – from roads and bridges to community buildings, parks, and drainage networks – enable daily life across our towns and rural areas.

Council's asset base is valued at approximately $767 million. Managing such a portfolio is a significant responsibility that Council approaches with a long-term perspective, guided by both community aspirations and statutory requirements.

Why an Asset Plan?

This Asset Plan is a strategic document required under Section 92 of the *Local Government Act 2020*, which mandates councils to prepare a ten-year plan for infrastructure assets. The plan outlines how Glenelg Shire will manage, maintain, and renew its assets to ensure they continue to support services in line with community needs and Council's broader vision.

It is part of an Integrated Planning and Reporting Framework, sitting alongside the Community Vision, Council and Wellbeing Plan, Long Term Financial Plan and other documents. In essence, the Asset Plan connects the high-level community outcomes in the Council and Wellbeing Plan with on-the-ground asset management actions and financial provisions.

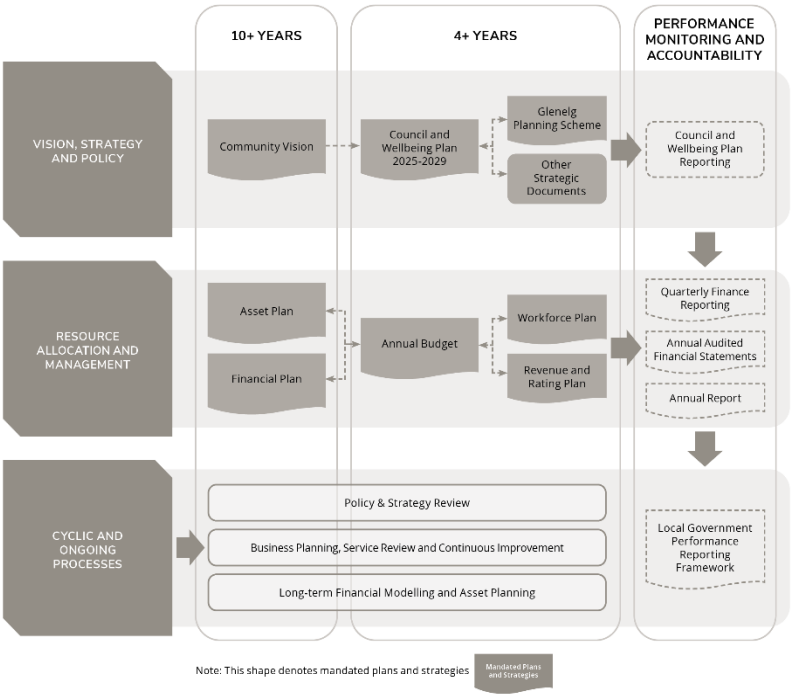
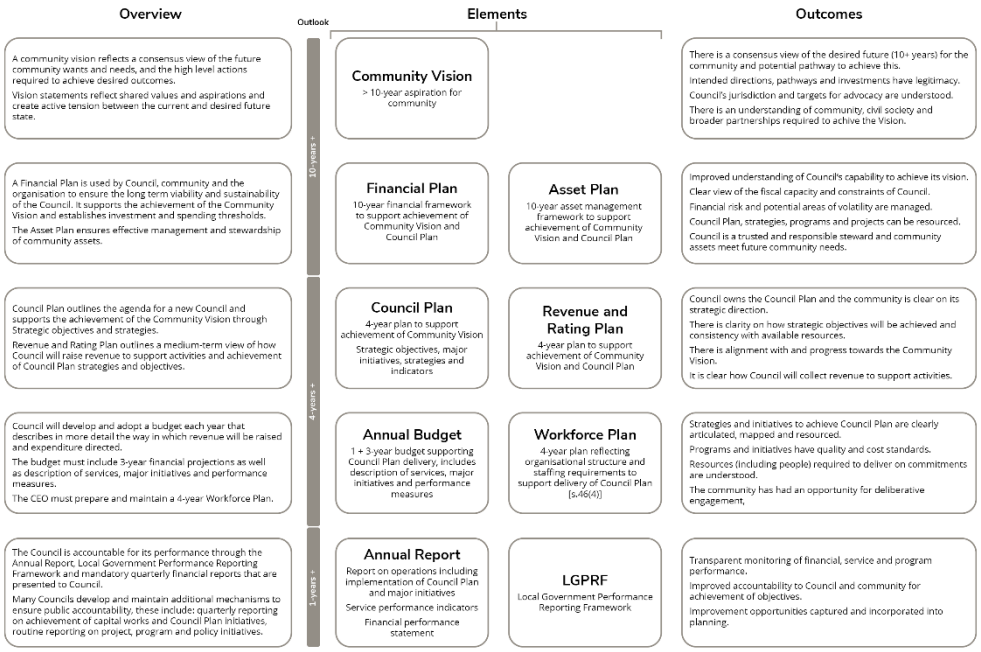


Figure 1: Integrated Planning and Reporting Framework (to update)



Legislative and Strategic Context

The *Local Government Act 2020* emphasises principles of deliberative community engagement and sustainable financial management in asset planning. This plan has been developed to align with those principles – ensuring transparency, community input, and integration with Council's Financial Plan and Budget. It also reflects Council's Asset Management Policy and frameworks.

The Plan considers related legislation such as the *Road Management Act 2004* (for road and footpath responsibilities) and other regulations that affect how we manage infrastructure (e.g. disability access standards, safety regulations). By complying with these requirements, Council aims to practice sound stewardship of public assets, balancing risk, cost, and service outcomes in the community's interest.

Scope of Assets

In this plan, 'assets' refers to the extensive portfolio of public infrastructure for which Council is responsible. Key asset groups covered include:

- **Roads and Carparks e.g.** sealed and unsealed local roads.
- **Bridges and Major Culverts e.g.** bridges and large drainage culverts
- **Pathways and Street Furniture e.g.** footpaths, benches, streetlights and signage.
- **Buildings and Structures e.g.** sports pavilions, community halls, civic halls and public toilets
- **Drainage Infrastructure** e.g. pipes, pits and channels.

- **Parks, Open Spaces and Recreation Assets e.g.** public parks, gardens, playgrounds, and sports fields.
- **Specialised Community Assets: e.g.** Portland's foreshore and marine assets, aerodrome facilities, Casterton Saleyards and waste management facilities.

By consolidating all of the above asset classes into a single high-level plan, Council can take an integrated approach to the management of theses asset.

Challenges and Opportunities

Council's assets, like those in many rural municipalities, face a variety of pressures:

- **Ageing Infrastructure:** Much of Council's asset base (e.g. roads, bridges and older buildings) was built decades ago. As they reach end of life, breakdowns increase, maintenance costs rise, and service can be impacted. Timely renewal and appropriate maintenance is essential to avoid sudden failures.
- **Financial Constraints:** Council has a relatively small ratepayer base and large asset network. Grant funding is competitive and not guaranteed. As a result, Council's budgets are extremely limited. Prioritisation activities and cost-effective maintenance is essential.
- **Changing Demand:** Population and demographic changes can alter how assets are used. For example, an aging population may demand better footpaths and improved accessibility, while economic changes (like growth in agriculture, renewable energy, housing or tourism) can put new pressures on roads and community facilities.
- **Climate Change:** More frequent extreme weather (heavy rains, flooding, bushfire, heatwaves, storm events) can damage infrastructure and shorten asset life. Coastal assets are also exposed to sea level rise and storm surge. We need to build resilience into asset management – e.g. upgrading drainage capacity and using climate-resilient materials and design.
- **Technology Shifts:** New technologies (for example, energy-efficient lighting, smart infrastructure sensors, electric vehicles) present opportunities to reduce costs or improve service but may require upgrades to existing assets.
- **Growth and Development:** While Glenelg's population growth is modest, any new development (residential or industrial) can lead to new assets being handed over to Council (e.g. new streets, drains or vegetation in subdivisions). Each new asset adds to future maintenance liability, so Council should carefully evaluate the long-term impacts before taking on new infrastructure.

This Asset Plan addresses these challenges by setting out strategies for responsible, forward-looking asset management – ensuring that we optimise available funding, prioritise critical needs, and make decisions with the long-term in mind.

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Our Assets on a Page

Delivering Key Services

Health Check

$767m
Total Replacement Value

21,864
Individual assets managed by Council

$13.1 m
2025/26
Capital Investment

45%
Remaining life for our assets

69.8%
Proportion of assets in fair or better condition

Strategic Objectives

Leadership and Engagement

Thriving Towns and Communities

Sustainable Environment

Essential Services and Facilities

Moving around Glenelg

Growing Economy

Our Assets

Bridges & Major Culverts
$57.8M

Buildings & Structures
$127.7M

Recreation and Community
$50.6M

Roads and Carparks
$346.3M

Drainage
$90M

Aerodrome
$18M

Parks, Open Spaces & Streetscapes
$568K

Street Trees
6,878 trees within Glenelg

Waste Management
$4.4M

Ports Facilities
$7.5M

Our Plan For The Assets

- Funding for Long-Term Sustainability
- Managing Asset Risks
- Transparent Decision-Making
- Balancing Community Needs With Infrastructure Spending
- Prioritising Renewal Spending over New and Upgrade
- Align Financial Planning with Infrastructure Needs
- Implement Robust Asset Management Processes

Asset Class by Replacement Value

The following charts represent the breakdown of each class into the asset types by replacement value.

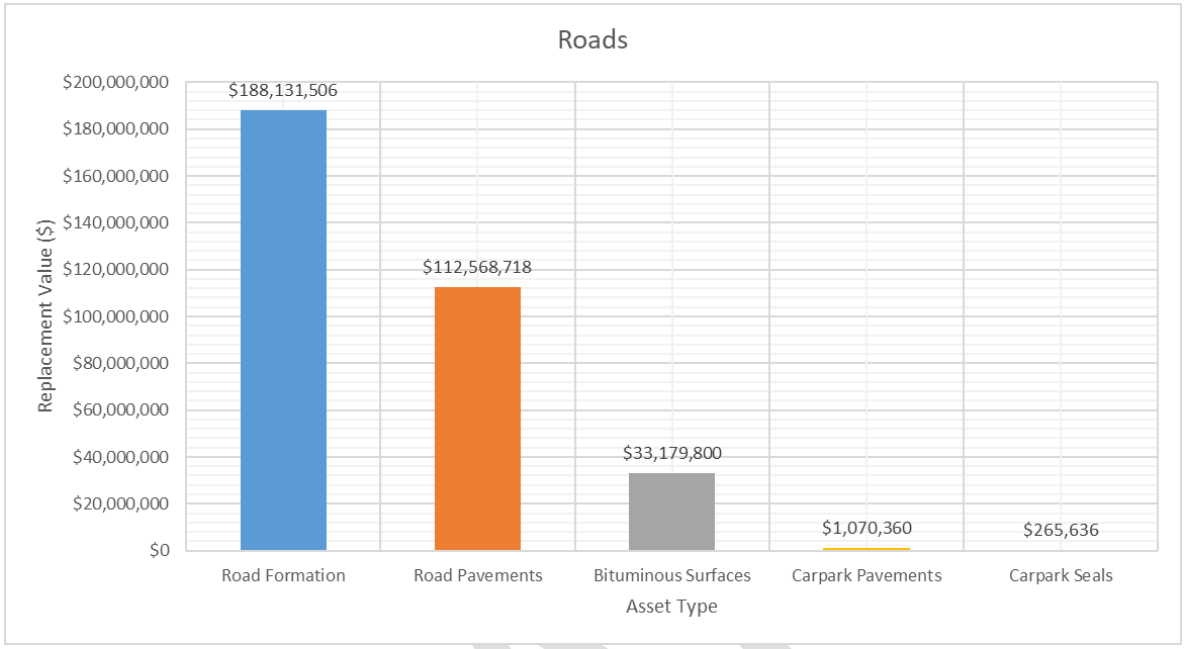


Figure 2: Road Asset Type by Replacement Value

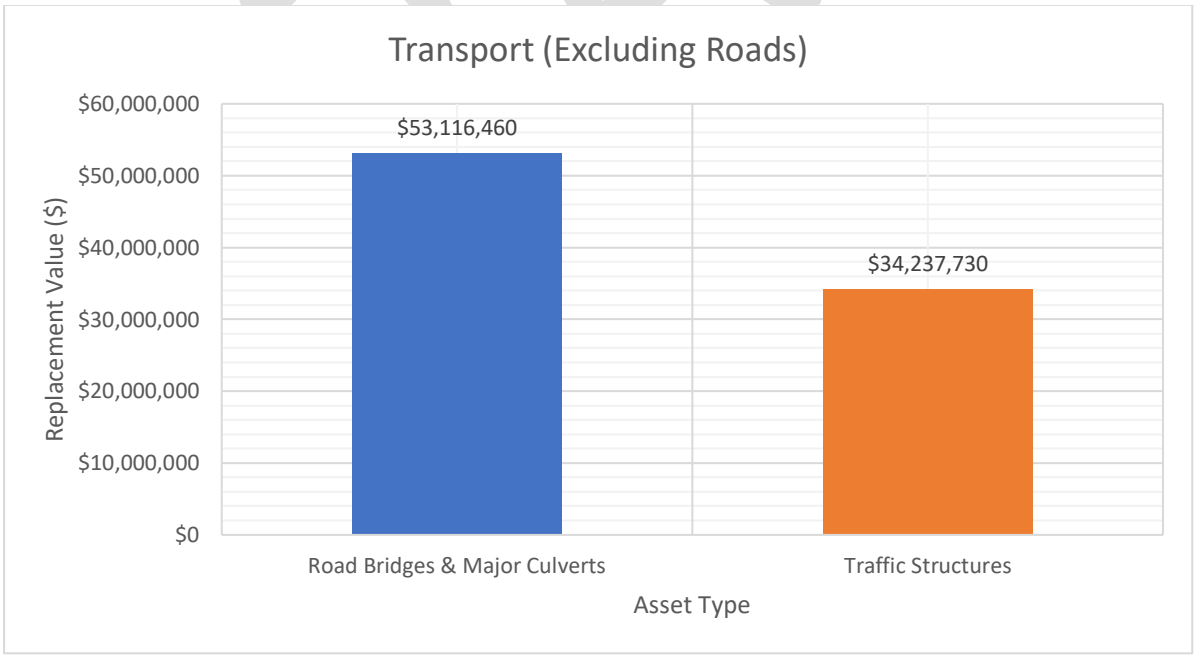


Figure 3: Transport Assets excluding Roads and Carparks

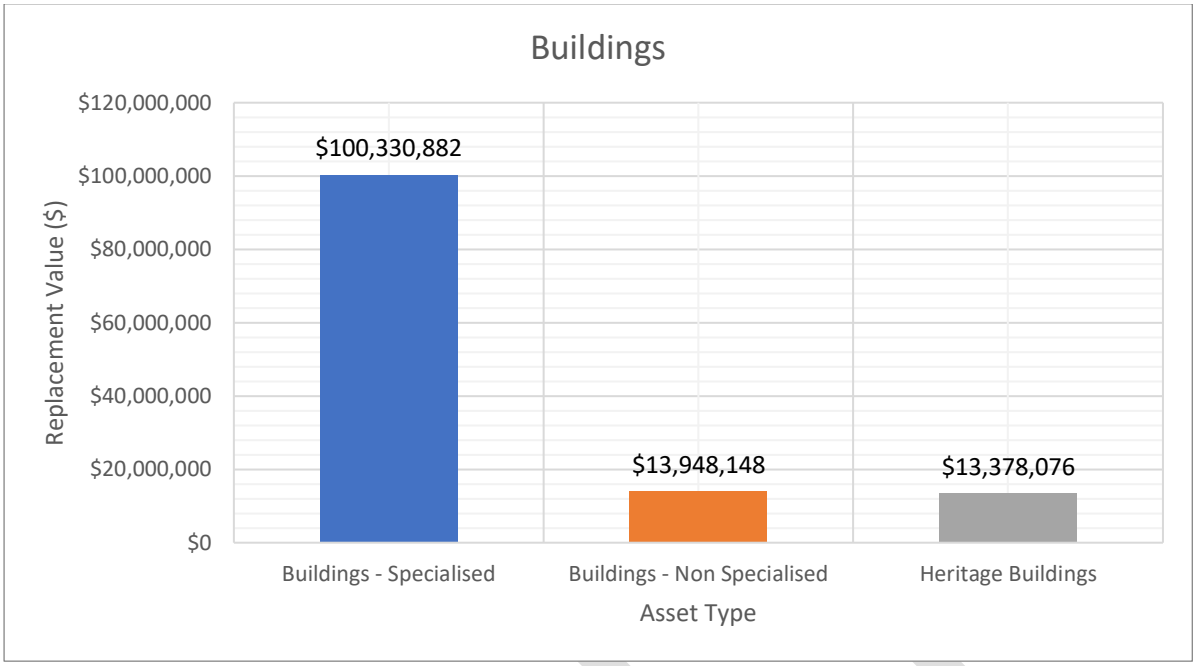


Figure 4: Buildings by Replacement Value

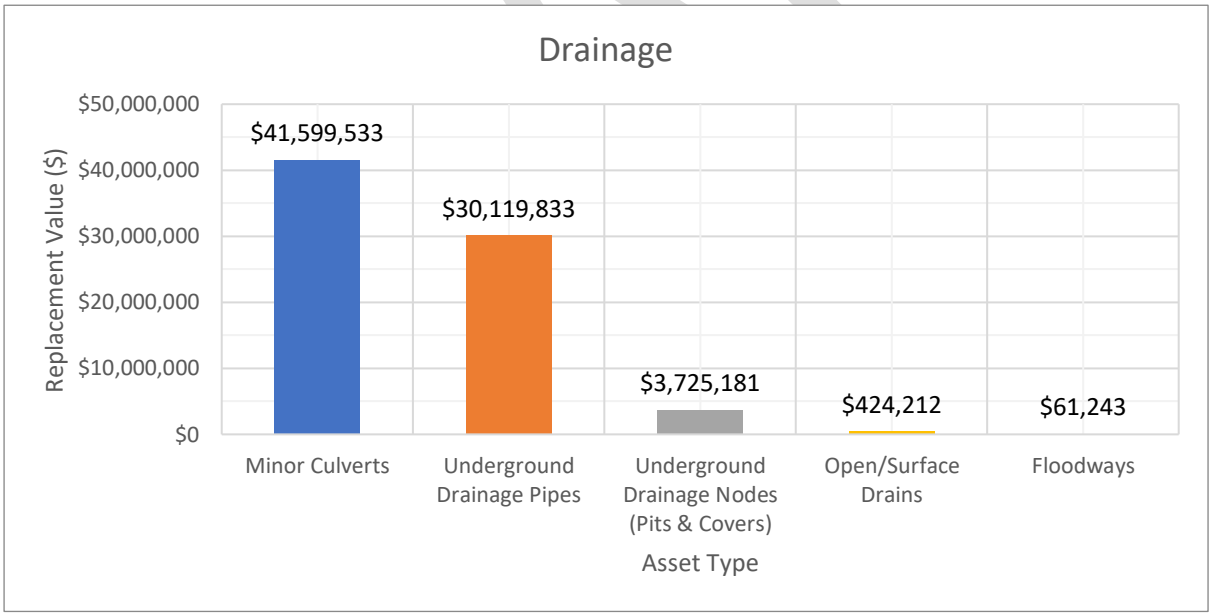


Figure 5: Drainage Assets by Replacement Value

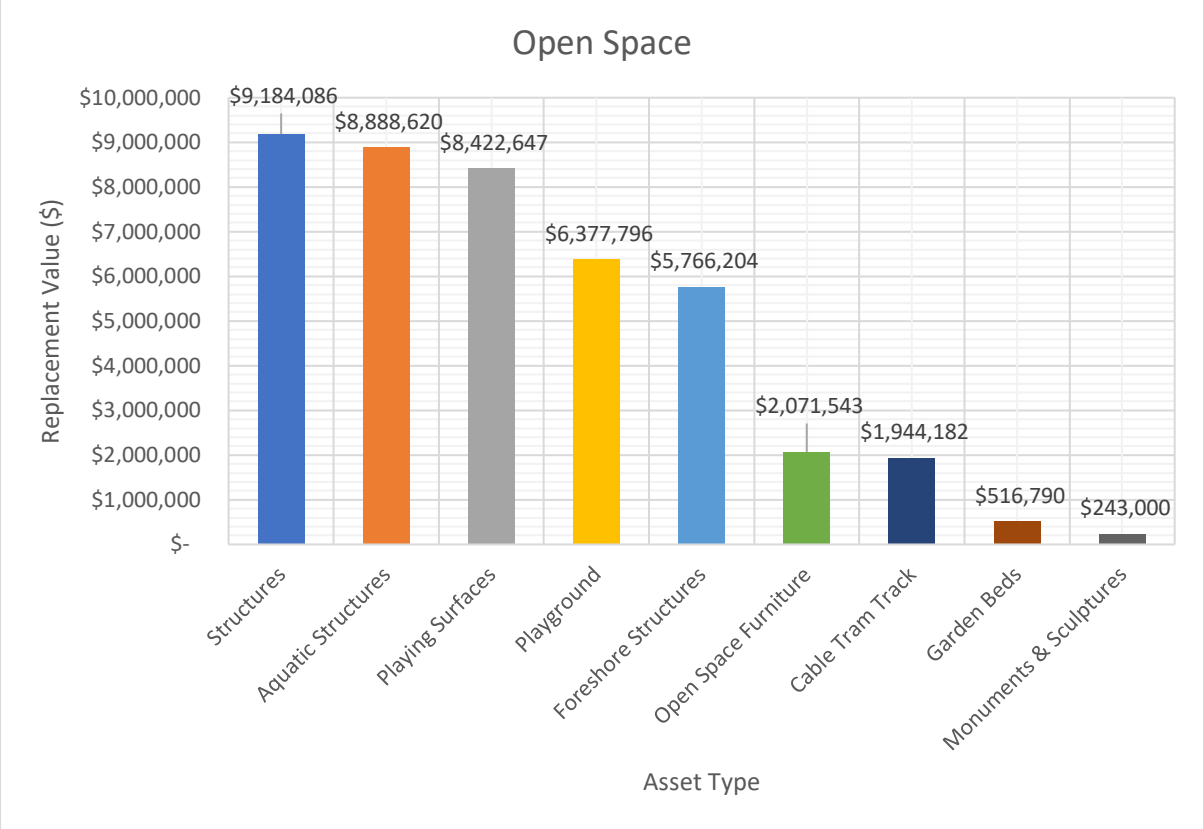


Figure 6: Open Space Assets by Replacement Value

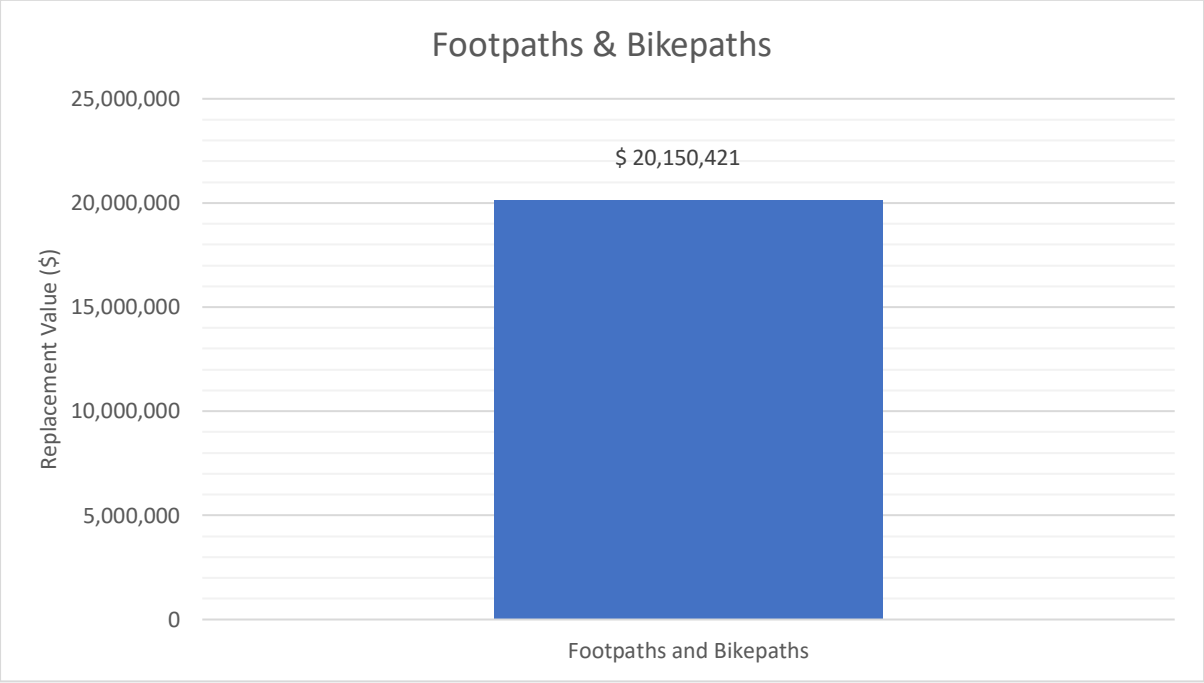


Figure 7: Asset type specific replacement value for Footpaths & Bikepaths

How Our Assets Support Services

Council's assets exist to support service delivery – they are not just bricks and mortar (or asphalt and concrete), but enablers of community services. Understanding the link between assets and services is key to making prudent investment decisions.

Service Impact

Nearly every Council service has a physical asset component:

- The road network allows residents, visitors, emergency services, and businesses to move safely and efficiently around the Shire. Reliable bridges and culverts ensure communities stay connected even over rivers and creeks.
- Footpaths, trails, and street lighting enable people to walk or cycle for leisure or errands, supporting active lifestyles and accessible townships.
- Parks, playgrounds, gardens, and sports facilities provide spaces for recreation, sport, and social connection – contributing to public health and community well-being.
- Community buildings (halls, arts venues, youth centres, senior citizen centres, libraries) host important programs, events, and services that bring people together and foster social inclusion.
- Drainage and stormwater systems protect properties and public spaces from flooding, ensuring that even during heavy rains our towns remain safe and functional.
- Waste management facilities (like transfer stations) underpin public health by enabling responsible disposal and recycling services.
- Unique assets such as the Local Port of Portland Bay infrastructure and foreshore amenities support local tourism and economic activity (fishing, boating), while facilities like saleyards support the agricultural economy and the aerodrome supports tourism and industry.

In short, well-managed assets translate directly into quality of life of Glenelg Shire residents and community. For example, a well-maintained local road means safer travel and less vehicle damage for users. A modern, accessible library or community centre means everyone – including people with disabilities or young families – can participate in community life. By investing in infrastructure, Council is investing in the services and outcomes those assets deliver to the community.

Levels of Service

To ensure assets meet community needs, Council defines Levels of Service (LOS) – essentially the performance standards that assets should achieve in supporting services. Levels of Service consider:

- **Functionality:** Does the asset meet users' needs in terms of capacity, design, and features? (e.g. Is a bridge width adequate for traffic, is a sports field equipped for night use?)

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- **Quality/Condition:** Is the asset in good repair, safe, and presentable? (No potholes in roads, buildings are clean and structurally sound, etc.)
- **Reliability:** Can the asset be relied on to perform when needed without frequent breakdowns or closures?
- **Safety:** Is the asset compliant with safety standards and not posing undue risk to users?
- **Accessibility:** Can all intended users (including those with disabilities or young/old) access and use the asset?

Asset condition ratings are a primary measure used to gauge if service level targets are being achieved. However, condition alone doesn't tell the full story e.g. some assets might be in moderate condition but still not effectively serving the community due to capacity issues or outdated design. Thus, over time Council aims to incorporate more service-based metrics (e.g. usage levels, user satisfaction, capacity utilisation) into asset planning, alongside condition data.

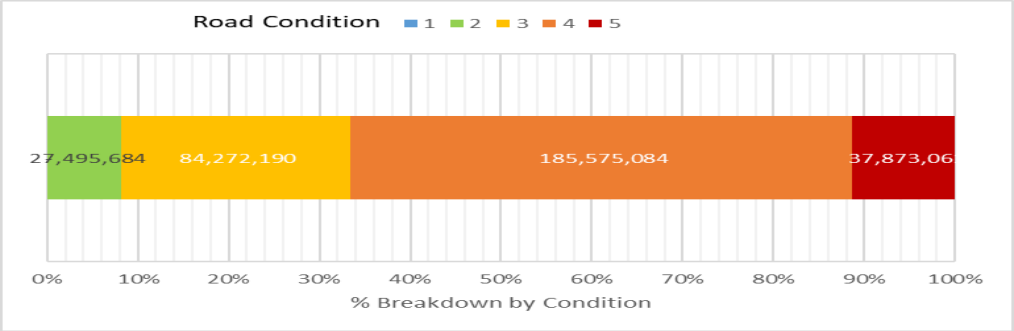


Figure 8: Example Service Level for Condition

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Performance Indicator	Level of Service	Current Service Level	Target Service Level	Result	Action to meet performance Target
Quality	Average Condition	2.6	2.8	✓	-
Quality	% Road Network = condition 5	12%	8%	✗	Add Reconstruction program

Table 1: Sample Level of Service Review

Monitoring and reporting to Council the levels of service every 6 to 12 months will provide a sound basis for quantifying how the assets are performing against the target service level. This will then determine the actions required to meet the target e.g. improve treatments or increase budgets. It may also be that the target service level requires reduction as the target may have been aspirational rather than realistic.

Community Expectations

The community's input is crucial in defining acceptable Levels of Service. Council engages with residents to understand their expectations – for instance, which roads or footpaths they consider priorities for improvement, or what quality of recreation facilities they desire. Community feedback helps balance the technical standards with real-world expectations. This Plan has been informed by community engagement (detailed later), ensuring that our asset management decisions reflect what the community values most.

Service and Asset Planning Integration

Future service plans and asset management plans should be closely linked. If Council plans to introduce a new service or expand an existing service, the asset implications need to be considered. Conversely, if an asset is in poor condition or underutilised, Council may review whether the service it supports can be delivered differently.

In summary, Council views asset management as a service-driven practice. Investment is made in infrastructure not for its own sake, but to enable the services and community outcomes envisioned in our Council and Wellbeing Plan.

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State of Our Assets

Understanding the current state of Council's assets is the foundation of effective asset management. This section provides an overview of our assets' condition, performance, and the challenges we face in maintaining them.

Overall Condition Profile

Every Council asset should be periodically assessed and rated on a condition scale from 1 (Very Good) to 5 (Very Poor), based on physical inspections and estimated remaining life. This is completed for the road assets annually but not for the other asset classes.

Bridges and major culverts are assessed every 2 to 3 years. Other asset classes are either assessed through inspections but not necessarily on a formal basis. It is essential that formal condition assessments are completed and recorded in the asset management system as condition enables the determination of long-term renewals, asset valuations and high-risk assets.

To enable Council to produce the condition profile in Figure 9: , the results of the recent revaluation and the annual road inspection report by consultants were used. The valuation data includes the year constructed, remaining life and expiry year. Using Table 2, which is an industry agreed table, a lookup table has been used to link condition ratings to remaining useful life as a percentage of total life.

Remaining Useful life %	Condition Rating
0%	5
25%	4
50%	3
75%	2
100%	1

Table 2: Calculation of the Condition rating:

This process enables condition ratings to be applied to all assets within the valuation records.

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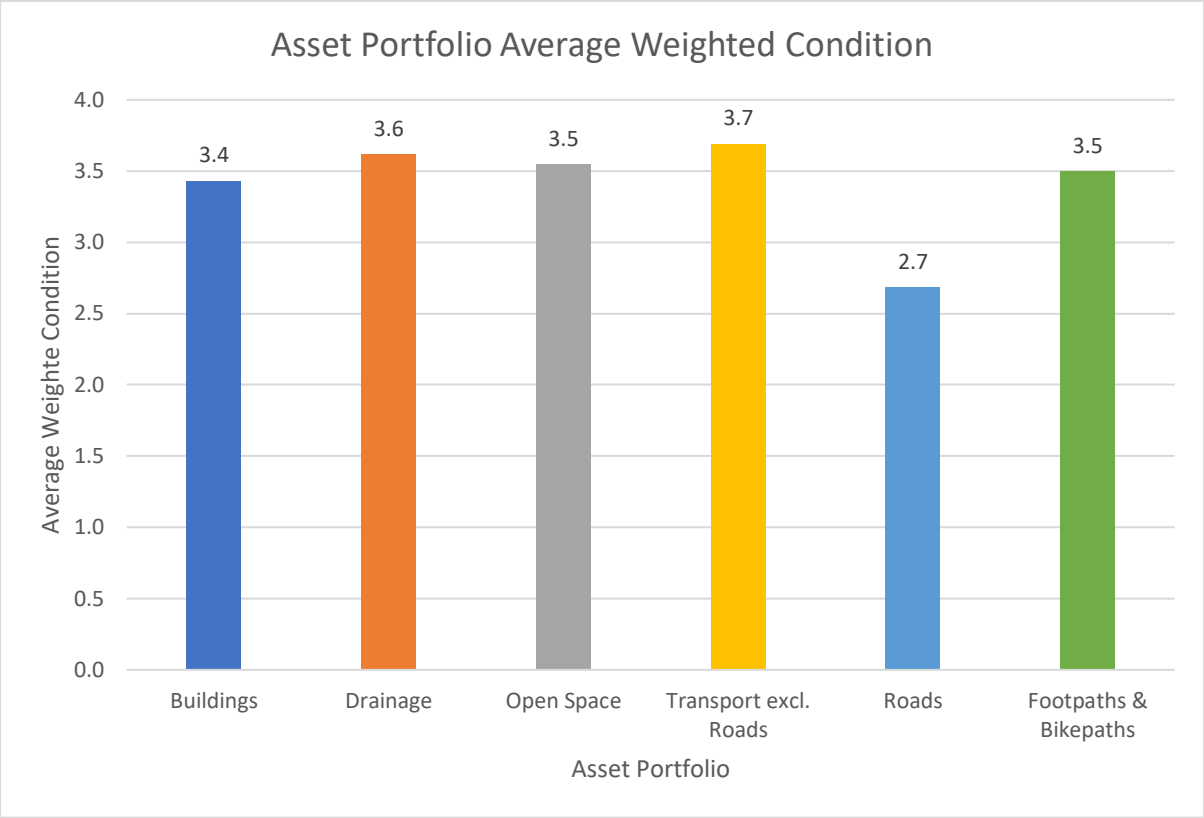


Figure 9: Condition Profile

- Council's Transport assets fall in the range (Condition 3–4), meaning they are in fair to poor condition and generally performing as intended. This excludes the road network consisting of the road wearing surface, pavement and road base, which is mostly rated 2–3, and key infrastructure like major bridges and drainage which are structurally sound.
- Heritage Assets are rated Condition 4.2 (poor). Assets in this category show clear signs of deterioration, are likely approaching end of life, and/or are not meeting service requirements. They are also concentrated in other categories:
    - Some older buildings (particularly historical or heritage structures that have not had recent renewals or upgrades) are in poor condition. They may have issues such as leaking roofs, outdated facilities, or non-compliance with modern standards. Heritage assets can be challenging to maintain due to restrictions on the materials used and the heritage requirements.
- Sections of the footpath network and other paved surfaces in towns that have aged badly or been impacted by tree roots, etc., are in very poor condition and need renewal to ensure safety and accessibility.
- Various open space assets (e.g. playground equipment, sports lighting, park furnishings) fall into the fair category.
- A portion of assets are Condition 1 (excellent) – typically newer infrastructure or recently renewed assets. For example, the Local Port jetties upgraded in the last few years are in very good condition, requiring only routine maintenance.

Overall, the average condition of Council's asset portfolio is around the Fair (3) mark but skewing towards good for high-value assets like roads (2.6), and poor for other asset classes. Notably, our critical infrastructure – main roads, bridges, drainage – is generally being kept in at least fair condition or better, which is important for risk management and safety. However, the presence of poor to very poor assets is a concern.

Lifecycle Planning

A disciplined lifecycle approach ensures Council gets the best value from every asset while safeguarding community safety and amenity. Each phase below builds on the previous one; taking decisions too late or in isolation almost always leads to higher costs or lost service.

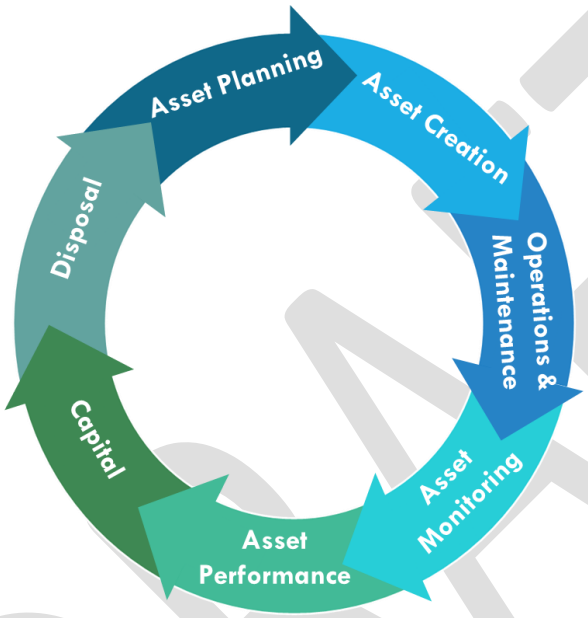


Figure 10: Asset Lifecycle Planning Framework

Planning & Design

Sound asset stewardship starts with clearly defining the service problem. Council works with the community to confirm needs and service gaps, explores all viable options, and selects solutions that strike the right balance between sustainability, equity, accessibility and whole-of-life cost. At this stage options are assessed where a scope and design features are confirmed, and the funding pathway so that downstream decisions remain transparent and affordable. A business case or feasibility assessment is also undertaken at this stage.

Creation & Acquisition

New assets are delivered by building, buying, or partnering with other tiers of government, community groups or the private sector to meet a set service need or requirement. Contracts clearly define performance standards, handover documentation, and ongoing maintenance responsibilities, ensuring transparency and mitigating unforeseen risks. Council also weighs up non-asset options—such as shared-use agreements—to see if the same service can be provided at lower cost and risk.

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Maintenance & Operation

Once in service, assets are regularly inspected, cleaned and serviced to keep them safe, functional and cost-effective. A risk-based maintenance program—combining routine tasks with condition-triggered interventions—reduces whole-of-life costs and prolongs useful life. Operational data gathered during this phase feeds back into the asset register, giving Council a clearer picture of how real-world performance compares with design assumptions.

Day-to-day maintenance plays a vital role in asset condition:

- Council conducts routine maintenance such as road patching, grading of unsealed roads, cleaning of drainage pits, painting and minor repairs on buildings, and servicing of park facilities. This preventive maintenance slows deterioration.
- Reactive maintenance is completed when unexpected issues arise (e.g. fixing potholes reported by the public, replacing a failed footpath segments). We track these to identify recurring problems that may need a larger fix.
- Cyclical programs are in place for activities like playground safety audits. These ensure each asset gets attention at appropriate intervals to keep it within an acceptable condition.

However, once an asset reaches a certain age, renewal or replacement is typically required. This Plan's capital works strategies are therefore focused on scheduling those renewals at the appropriate time: not so early as to waste remaining life, but not so late that the asset fails or service is compromised.

Glenelg's assets are generally holding up, but signs of strain are evident in aging components. The proportion of all asset classes in very poor condition, while currently around 12%, could grow if investment in renewal is insufficient.

Asset Capacity and Performance:

Beyond physical condition, some assets face capacity or performance gaps:

- Certain local roads experience increased heavy vehicle usage (timber/quarry trucks, etc.) beyond their original design, causing faster degradation.
- Some community facilities are not fully fit-for-purpose – e.g. an old hall that is too small or lacks modern amenities for current use, thus not meeting community expectations or standards even if the structure is sound.
- Drainage capacity in some growth areas may be inadequate for new development unless upgraded and provided with new infrastructure (this ties into planning for future demand).

Renewal & Upgrade

When inspections show that an asset can no longer deliver the agreed level of service, Council weighs up renewal and upgrade options. Renewals aim to restore original functionality at the optimal time—before failure but after the asset has delivered maximum value. Upgrades, by contrast, lift capacity, safety or resilience where demand, legislation or technology has evolved.

Both pathways are evaluated against whole-of-life cost, service benefit and economic, social and environmental impacts.

Rationalisation & Disposal

Assets that are at the end of their life, no longer needed, or pose excessive risk are either rationalised or consolidated. Council may decommission, sell or repurpose them—always with a view to optimising value and reducing recurrent costs. Detailed exit plans ensure community, heritage, environmental and safety obligations are met, and that lessons learnt feed into future planning and design activities.

Risk and Critical Assets:

Council identifies "critical assets" by perception – those whose failure would have significant consequences (e.g. a major bridge on a key route, a drainage main under the town centre, or a community hub facility). These critical assets are given priority in inspections and maintenance. For example, Council has 46 bridges under management and while all are important, a subset on main roads carry the bulk of traffic and would be most disruptive if closed. Thus, those are watched closely to ensure any emerging issues are addressed promptly.

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Financial Sustainability and Asset Investment

The expenditure categories used for the lifecycle plans are defined below. The capital budget process allocates capital works proposals into the categories below. These are defined by the Local Government (Reporting and Planning Regulations) 2014.

Expenditure Category	Activity	Funding Type	Description
Recurrent	Maintenance	Non-discretionary	Recurrent expenditure that is continuously required to operate the assets for service delivery.
Capital	Asset Renewal	Non-discretionary	Returns the service potential or the life of the asset up to that which it had originally.
	Asset Upgrade	Discretionary	Enhancements to an existing asset to provide a higher level of service or increase life to beyond its original life.
	Asset Expansion	Discretionary	Extends or expands an existing asset at the same standard as is currently enjoyed by residents, to a new group of users.
	New Assets	Discretionary	Creates a new asset that provides a service that does not currently exist.

Table 3: Maintenance and Capital Works Expenditure

Delivering the desired Levels of Service from our assets must be balanced with financial sustainability. Council operates under tight budget constraints, so careful planning is required to fund asset maintenance and renewal without over-burdening ratepayers or compromising future financial stability. This section describes our approach to asset investment, including projected expenditures, funding sources, and strategies to manage demand and costs.

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Long-Term Financial Alignment

The Asset Plan is developed in alignment with Council's 10-year Financial Plan. This ensures that the capital and maintenance expenditures identified for assets are reflected in long-term budgeting, and conversely that financial forecasts (e.g. revenue, grants, borrowing capacity) inform what is realistic for asset spending. Council's financial principles for asset management, include:

- Prioritising renewal of existing assets over building new assets, to address backlog and make the most of what we have.
- Only undertaking new asset investments when there is a compelling justified need and ideally external funding support (e.g. a significant government grant).
- Maintaining a responsible level of debt – borrowing only for long-lived assets and only when other funding is insufficient, to spread the cost between current and future beneficiaries.
- Planning for the full lifecycle cost of assets, including future maintenance, operations, and eventual disposal, not just the initial capital cost.
- Setting aside reserves when possible (such as a dedicated grant matching reserve, or for major community infrastructure) to leverage external funding opportunities for asset projects.

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Capital Works Projections

Council will have a defined capital works program focused on renewing and upgrading existing assets, with minimal new asset creation once the data improves. Table 4: and Figure 11: below summarise this year's capital budget and the projected capital expenditure in 2026/27 to 2028/29. With further condition and asset data, the capital works programs will evolve. This also highlights an issue in that renewal expenditure isn't increasing and this will have a negative asset impact.

Asset Group	Asset Sub-Class	Budget 2025/26 $'000	Projections 2026/27 $'000	Projections 2027/28 $'000	Projections 2028/29 $'000
Buildings	Building Improvements	5,803	375	375	375
	Total Property	5,803	375	375	375
Plant & Equipment					
	Total Plant & Equipment	**1,980**	**1,755**	**1,650**	**1,840**
Infrastructure	Roads	4,330	4,947	5,152	5,152
	Roads (LRCI)	-	-	-	-
	Bridges	150	171	178	178
	Footpaths and Cycleways	110	126	131	131
	Drainage	150	171	178	178
	Recreational, Leisure and Community facilities	450	200	200	200
	Waste Management	20	20	20	20
	Parks, Open Space and Streetscapes	40	240	240	240
	Aerodromes	50	50	50	50
	Off-Street Car Parks	50	57	59	59

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Asset Group	Asset Sub-Class	Budget 2025/26 $'000	Projections 2026/27 $'000	Projections 2027/28 $'000	Projections 2028/29 $'000
	Other Infrastructure - LRCI	-	-	-	-
	Other Infrastructure	-	50	50	50
	Total Infrastructure	5,350	6,032	6,258	6,258
	Total Capital Works Expenditure	13,133	8,162	8,284	8,474

Table 4: Capital Works Expenditure[1]

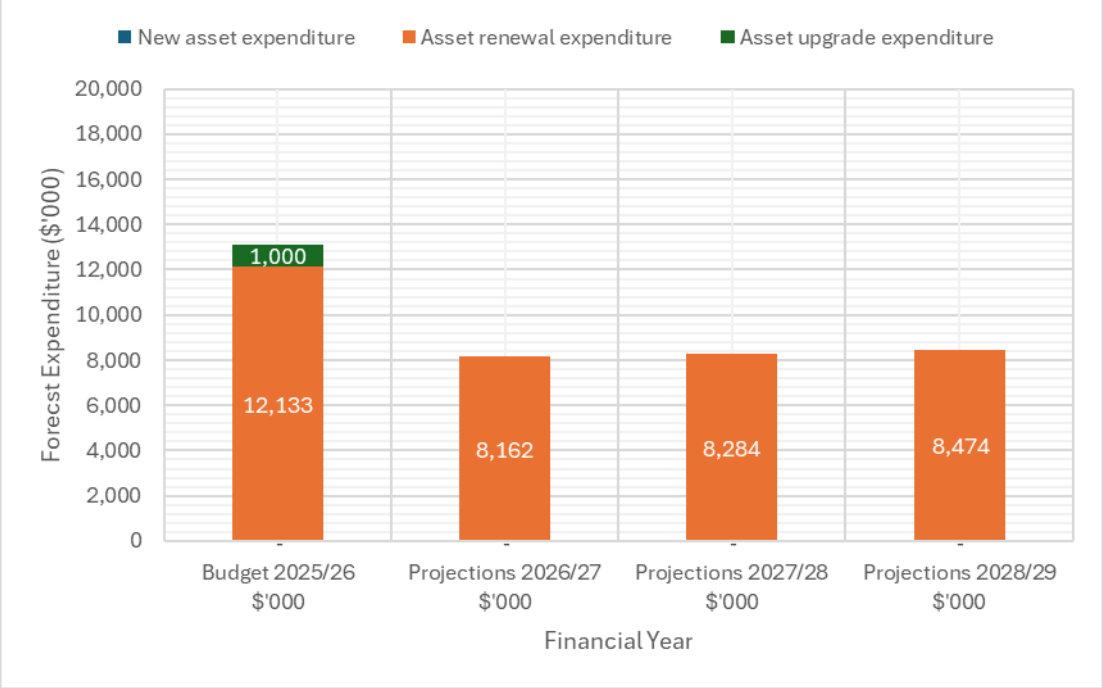


Figure 11: 2025/26 Budget and Forecast Expenditure by Year

Council is emphasising asset renewal, with no new or upgrade asset construction forecast in the near term.

As shown in Figure 11: , renewal works form the bulk of spending each year. In 2025/26, a peak of approximately $13.1 million is planned for capital works, which includes $12.1M in renewals and $1.0M in upgrades (*Note: this includes committed external government funding for capital

[1] Glenelg Annual Budget Report Draft 2025-26, pg. 27

infrastructure projects). This high initial investment addresses some renewal needs (e.g. several building refurbishments and road rehabilitation projects) and includes a one-off upgrade for safety improvements. In the subsequent three years, annual capital spending is around $8.2–8.5 million, almost entirely devoted to renewal of infrastructure (roads, footpaths, drainage, building renovations, etc.). No new asset acquisitions are budgeted in that period, reflecting Council's strategy to "consolidate and renew" rather than upgrade or expand – a prudent choice given limited finances and existing maintenance backlog.

Beyond 2028/29, Council anticipates continuing a steady renewal program. The exact amounts will depend on future budget settings, external funding and asset condition trends, but the intent is to gradually increase renewal funding to meet the long-term required renewal rate (proposed renewal budget for the next 10 years / forecast renewal costs for next 10 years).

This is called the Asset Renewal Funding Ratio which is an important indicator and illustrates that over the next 10 years we expect to have [Asset Renewal Funding Ratio] % of the funds required for the optimal renewal of assets. The expected ratio required by the State Government is 100% demonstrating that Council is funding its renewal requirements. This will be a target but is not achievable in the short-term.

Detailed modelling of 10-year renewal needs is being considered as asset data improves. Early indications are that maintaining roughly the current level of renewal investment (around $8–9M per year, indexed for inflation) will keep most asset classes at stable condition, although some categories with backlog (e.g. community facilities, open space and other asset types.) may require periodic higher injections.

Funding Sources

Funding for capital works will come from a mix of sources, balancing external and internal contributions:

- **Grants:** State and Federal infrastructure grants are a critical funding source, especially for roads and community facility projects. Glenelg Shire has had success in securing grants (e.g. Roads to Recovery, Local Roads and Community Infrastructure fund). Over the next four years, grants are expected to contribute between $3.7M and $4.5M annually, making up roughly half of our capital funding in some years.
- **Council Cash (Rates/Reserves):** Council allocates a portion of annual rates revenue to capital works and may use accumulated asset renewal reserves. This funds the remainder of works not covered by grants. In 2025/26, Council plans to directly fund about $6.37M of capital works; in later years around $3.8–3.9M per year comes from Council's own cash resources.
- **Borrowings:** Council will use debt selectively. For 2025/26, the final $3.0M of the $7.0M loan amount will be accessed to help fund major projects. Borrowing is considered appropriate for large-scale works with long lifespans, distributing the cost. No borrowings are currently forecast in 2026/27–2028/29, meaning debt will not increase beyond the 2025/26 amount. The need for borrowings to cover asset expenditure (new,

upgrade or renewal) will be managed and assessed in accordance with Council's Borrowings Policy, Long Term Financial Plan and annual budget.

The stacked chart below illustrates the proportion of each funding source for the capital works program:

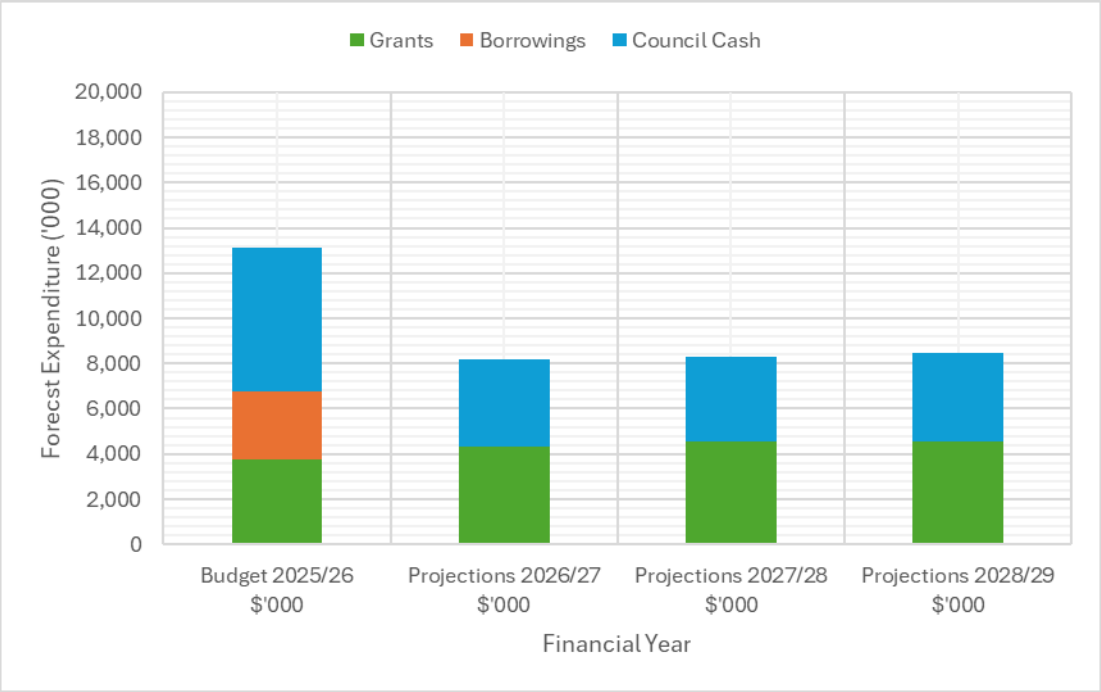


Figure 12: Funding Source Forecast Expenditure by Year

Capital works funding sources by year – showing the reliance on external grants (green) and Council cash (blue), with borrowings (orange) only used in 2025/26.

Council included $3 million in borrowings within the 2025/26 budget. This short-term loan will be current as opposed to non-current to take advantage of the receipt of Local Grants funding expected to be received in 2025. Capital works are sustained by a roughly 50:50 mix of grants and Council funds. This funding strategy demonstrates Council's commitment to financial sustainability – tackling critical renewals early (even if it means some debt), then living within its means in subsequent years.

By focusing on renewal (which often has grants available) and avoiding new assets that would increase future maintenance costs, Council is containing its long-term liabilities.

Operations and Maintenance Funding

In addition to capital works expenditure, Council's annual budget allocates funds for ongoing maintenance and operations of assets (e.g. road grading, drainage maintenance, building cleaning, building maintenance, park maintenance crews). These recurrent costs – roughly $10–12 million per year across all asset categories (as per recent budgets) – are built into the Long-Term Financial Plan and are just as important as capital investments.

Adequate maintenance funding helps extend asset life and reduce lifecycle costs, a point reinforced by this Plan's strategy. Cutting maintenance to save money is counterproductive, as it leads to faster deterioration and bigger costs later. Thus, even under rate capping, Council strives to protect and increase maintenance budgets for essential infrastructure.

Demand Management

A key aspect of financial sustainability is managing the *demand* for new or expanded assets so that Council doesn't take on obligations it cannot afford long-term. Glenelg Shire employs several demand management approaches:

- **Renewal Before Expansion:** Priority is given to renewing or upgrading existing assets rather than building new ones, unless a clear service gap or demonstrated community need exists. This is reflected in zero new asset budget in coming years.
- **Multi-use Facilities:** Where possible, Council invests in multi-purpose facilities that serve many groups (e.g. a combined community or recreational facility rather than separate buildings). This maximises usage and reduces the number of assets to maintain.
- **Service Level Reviews:** Council will continue to review whether the current assets truly match community needs. If an asset is underutilised or not providing value relative to its upkeep cost, options include repurposing it, disposing of it (if appropriate), or finding a less costly way to meet that community need. Conversely, if a service need can be met without a new asset (for example, contracting a service or sharing a facility with a neighbouring shire), we will consider those alternatives.
- **Community Engagement in Demand Decisions:** We involve the community in consultation to gauge support and willingness to pay. This helps ensure we only embark on projects that have strong community backing, and even then, we explore external funding so that community expectations are balanced with realistic funding.

By curbing unnecessary asset expansion and focusing on efficient use of what we have, Council aims to reduce future financial pressures. This demand management, combined with the targeted renewal program and funding strategy described, puts Council on a path to maintain infrastructure within the available resources.

Forecast Outlook

Once the strategies in this Asset Plan are implemented, the gap between required renewal and actual renewal funding should gradually narrow. Over 10 years, we anticipate:

- Most asset classes will be maintained at current condition levels or improved slightly, as renewals catch up on the worst-condition items (e.g. replacing very poor assets will eliminate the condition 5 outliers).
- We will endeavour to reduce the ~12% backlog to a reasonable target to be established once the existing data improves.
- Depreciation expenses will be better matched by renewal expenditure – a common sustainability indicator – moving toward or achieving the benchmark of 100% renewal vs depreciation ratio (currently, we are working to calculate this precisely as data improves).

Financial sustainability is an ongoing journey. This Asset Plan will be reviewed regularly (at least every 4 years, in line with the Council and Wellbeing Plan cycle) to adjust the investment strategy as needed – whether that means ramping up spending if new issues emerge or finding efficiency gains if innovations allow us to do more with less.

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Community Engagement in Asset Planning

The development and implementation of the Asset Plan involves active community engagement, recognising that the community are both the users of assets and key stakeholders in funding them. Council is committed to transparency and inclusion in how we plan for and manage our infrastructure.

Legislative Engagement Requirements

The *Local Government Act 2020* requires councils to use deliberative engagement practices in preparing their Asset Plans. In accordance with this:

- Council has sought community input while formulating this draft Asset Plan and will continue to do so before final adoption. An initial consultation and engagement campaign (aligned with the Council and Wellbeing Plan engagement) ran between January and March 2025 to raise public awareness and invite ideas regarding asset management priorities. This included community workshops, surveys (both online and via mailed forms), and discussions at township meetings. Residents shared their perspectives on which assets needed attention, the acceptable level of service, and how they'd like to be kept informed.
- The Draft Asset Plan (this document) will be released for public feedback, anticipated in September 2025. The draft will be made available on Council's website via Your Say Glenelg, on social media and hard copy, and community members will be invited to complete a survey and provide comments. Council will consider all feedback and refine the plan accordingly before final adoption by the Council.

Community Priorities Identified

Through engagement to date, the community has signalled a few clear priorities:

- **Safety and basic infrastructure:** Many residents emphasise that core assets like local roads (especially fixing potholes on school bus routes), footpaths (for pedestrian safety), and drainage (to prevent flooding in town streets) should be Council's focus. They want existing infrastructure to be safe and functional rather than seeing money spent on new "nice to have" projects.
- **Equitable service across towns:** Feedback highlighted that smaller towns and rural areas want to ensure they aren't left behind. For example, people in outlying districts voiced that unsealed road maintenance and bridge repairs are crucial for them, even if these areas are less populated.
- **Recreation and community facilities:** There is strong community interest in maintaining facilities that support social connection – such as pools, sports grounds, stadiums and halls. In particular, the community is keen to see the Heywood Pool and

other aging recreation assets improved (where financially feasible) so they can continue to be used safely by families.

- **Transparency in decisions:** Residents have asked for clearer communication on how Council prioritises which assets get renewed first. This plan addresses that by articulating our criteria (safety, service impact, cost, etc.) and will be accompanied by outreach (e.g. infographics, community presentations) to explain the asset management approach in plain language.

With regards to Council's assets, the Council and Wellbeing Plan Consultation Report for 2025-2029 identifies the key priorities for the community are:

	Improving the road network.
	Transport availability and connectivity including public transport, tracks, trails and footpaths.
	Maintaining and improving community facilities and spaces including the upgrade and renewal of recreation and sporting facilities including an indoor multipurpose stadium.
	An engaged and connected community including supporting volunteering, increased community engagement, looking out for all in our community, building connections between people, groups, services and businesses.
	Growing the economy including supporting local industries and businesses, attracting new industries, promoting and encouraging tourism.
	Protecting the natural environment, green waste and food waste services, and responding to the impacts of climate change.
	Increasing understanding of health and wellbeing issues and needs and focusing on prevention initiatives and using existing levers to drive change.
	Being an inclusive community including opportunities for all ages and abilities, respecting the opinions of the elderly, supporting people in need, supporting people from all backgrounds and experiences.

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	Improving access to services including healthcare, aged care, childcare, education, hospital and medical services, youth services, digital connectivity.
	Community activities and events to bring people together, celebrate our communities and attract visitors to spend time in Glenelg.
	Equity for smaller towns and communities including equal attention, and equal access to services and facilities.
	The appearance of towns and communities.
	Council being fiscally responsible, transparent, and clear about its role. Engaging more effectively with the community is a key priority.
	Housing availability, affordability and diversity.
	Young people including increasing year 12 attainment rates, providing opportunities and activities for young people and developing a youth hub in Portland.
	Sustainable growth and development including protecting small communities, supporting residential development and attracting a new demographic.

Ongoing Engagement and Reporting

Council recognises that community engagement is not a one-off. We will continue to involve and inform the community throughout the life of this Asset Plan:

- **Regular Reporting:** We will publish an annual State of the Assets report to the community (either as part of the Annual Report or a standalone update). This plain-language report card will show key metrics – like what % of assets are in each condition

band, which major projects were completed, and whether we are on track with our financial and service targets. By doing so, we keep the community informed on progress and accountable for results.

- **Customer Requests:** Council's customer request system and community interface on the website will continue to gather day-to-day feedback. If residents report asset issues (e.g. dangerous footpath, broken playground equipment), those are logged, inspected, and fed into our maintenance and works planning, in accordance with applicable asset management plans. Recurrent issues from the public can indicate where we need to invest more.
- **Deliberative Panels or Focus Groups:** For significant asset decisions, such as contemplating a major new project or a disposal of an asset, Council may convene community panels or focus groups. For example, if a proposal emerged to build a new multi-purpose community hub, we might establish a community or project reference group to co-develop the concept, ensuring it meets needs and has community buy-in.
- **Transparency:** The asset register, and associated data (within practical limits) will be made accessible via the GIS. Council has begun providing maps on its website showing asset information on a variety of layers so residents can see what works are planned in their area. This could be significantly enhanced to include data on the assets, proposed 5-year rolling works programs and works currently in progress. Budget documents also outline capital works and are open for public comment each year.
- **Education and Collaboration:** We also view engagement as a chance to educate the community about the realities of asset management – such as the costs involved and trade-offs required. This would be achieved through infographics illustrating where each $100 of rates goes (a portion to roads, etc.), and through community budgeting workshops. The better the public understands the constraints and rationale, the more we can work together on solutions (like advocating for government funding or adjusting service expectations).

Council's overarching engagement commitment is to be open, accountable and responsive. In asset management, this means we won't plan major changes that affect the community's assets without consultation, and we will clearly communicate why certain projects are priorities. By involving community members as partners in stewardship of public assets, we build mutual trust and ensure that the Asset Plan ultimately reflects community values as well as sound engineering and financial practice.

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Figure 13: Engagement Commitment

Figure 13: illustrates that Council working with the community is more likely to address the community needs through the maintenance and capital works planning and achieve a common goal.

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Improving Asset Management Practices

Continuous improvement in asset management is essential for Council to meet future challenges. Glenelg Shire Council is focused on enhancing its asset management maturity – through better data collection, systems, processes, and skills – to support informed decision-making. This section outlines the key improvement initiatives and a timeline of next steps to strengthen asset management over the life of this plan.

Council has identified several priority improvement areas:

- **Data and Condition Knowledge:** We will expand and refine our asset condition assessments across all asset classes. Currently, some assets (e.g. bridges, roads) are well-inspected, but others (like buildings, open space and drainage assets) need more comprehensive condition surveys.

  We aim to complete updated condition assessments for asset classes such as buildings and open space, using specialists. We'll also incorporate condition rating as a standard part of routine inspections (e.g. when contractors or staff inspect an asset, they record a simple condition score). Improved data will enable more precise renewal planning and risk management.

- **Integrated Asset Management System:** Council is implementing a new Enterprise Resource Platform (ERP) and asset management software system (Civica Altitude) to centralise asset data and improve integration with finance and GIS.

  We plan to have all asset registers and maintenance schedules migrated to this modern management system. Staff will be trained to use the software for tracking work orders, updating asset conditions in real time, and generating lifecycle cost forecasts. This will break down data silos and ensure everyone is working off the same reliable information.

  We also aim to produce a detailed works program for the next decade, highlighting when key renewals (like a major bridge, road rehabilitation or facility replacement) will likely be due. This will allow early budgeting and possibly staging of works to smooth out spikes. Additionally, we'll enhance risk analysis – identifying assets that pose the highest risk of failure or high consequences and ensuring mitigation plans are in place. For example, critical buildings will be monitored and have contingency plans.

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- **Strategic Long-Term Planning:** We will strengthen how asset management feeds into long-term financial and service planning. One improvement action is developing 10-year renewal forecasts for each asset category, using updated condition data and predictive modelling.

  Our goal is that every significant capital project is evaluated for climate resilience options**.** We'll also explore sustainable practices, like using recycled materials in road base or energy-efficient lighting in buildings, which can reduce long-term costs and environmental impact.

- **Community Engagement & Service Levels:** We intend to formalise how community input is used in asset management decisions. One improvement is to create a Community Asset Reference Group – a panel of community representatives to review and provide feedback on asset planning priorities annually. We'll also establish clearer Level of Service targets (with community consultation) and report against them.

- **Governance and Skills:** Internally, Council will be establishing an Asset Management Steering Committee comprising key staff across various departments. This committee will oversee implementation of the Asset Plan and ensure alignment between departments (engineering, finance, parks, community services). We will also invest in staff training – building asset management capability through courses and knowledge sharing, so that we maintain a skilled workforce to manage our complex asset base.

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Improvement timeline – Key Actions

To implement these improvements, a phased timeline with prioritised steps has been developed. Prioritising improvement actions enables Council to strategically invest in assets that deliver the greatest community value, enhance service performance, reduce risk, and support long-term financial and organisational sustainability. Dependant on available resources and prioritisation, some improvement actions may be varied.

No.	Asset Management Improvement Action	Success Criteria	Responsible Lead
	Short Term (0 – 2 years)		
S1	Council to endorse the draft Asset Plan for public consultation.	Preparation for community response.	I.S.
S2	Release the draft Asset Plan for community feedback.	Sufficient community feedback to get acceptance from the community.	I.S.
S3	Review the draft Asset Plan based on customer feedback, adopt and publish the final Asset Plan.	Adopted Asset Plan.	I.S.
S4	Establish an internal Asset Management Steering Committee and Working Group to drive Plan actions.	AM Steering Committee and Working Group dedicated to drive the actions from this plan.	I.S., C.S., Com S.
S5	Review and document the Asset Hierarchy for all asset classes (in progress as part of data review for input into the new asset management system)	A sound robust asset hierarchy that will assist in the management of the assets.	I.S., CIO

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No.	Asset Management Improvement Action	Success Criteria	Responsible Lead
S6	Review the required data for migration into Civica Altitude and document the Data Framework for each asset class	A data framework that articulates the data fields to be applied to assist council to achieve its end goal.	I.S.
S7	Produce a condition manual for all asset classes • Buildings • Open Space • Drainage • Roads	A condition manual that is consistent across asset classes and asset groups and can be readily applied.	I.S., TLDA
S8	Initiate a Shire-wide building condition audit (engage experts to assess all major buildings).	Quality data captured for buildings at the system level that can be readily analysed and incorporated into the asset register.	I.S., TLDA
S9	Initiate a Shire-wide open space condition audit (engage experts to assess all major open space assets).	Quality data captured for open space at the asset level that can be readily analysed and incorporated into the asset register.	I.S., TLDA, Com W

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No.	Asset Management Improvement Action	Success Criteria	Responsible Lead
S10	Review collected asset condition data to establish ten-year renewal programs.	Using lifecycle analysis on the data to produce ten-year renewal programs and establish long-term capital programs.	Pro&Eng
S11	Complete a review of Council's overall asset planning and management framework, including gap-analysis.	Gap analysis identifies processes, data and systems to be improved allowing the improvement plan to be precise.	I.S.
S12	Review and update the AM Policy and procedures.	Updated and approved AM policy with procedures which relates to the policy.	I.S.
S13	Prepare a schedule for future Asset Management Plan reviews.	A schedule that will enable AM plans to be completed in an order required by Council.	I.S.
S14	Complete Asset Management Plans for all outstanding asset classes. 1. Buildings 2. Roads 3. Open Space 4. Drainage 5. Transport Consider an asset management plan for Bridges and Major Culverts.	Completed AM plans that will provide the information needed to produce the required information to a high degree of certainty after future upgrades.	I.S.

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No.	Asset Management Improvement Action	Success Criteria	Responsible Lead
S15	Develop an annual 'State of the Assets' report to the Executive and Council covering asset condition, asset performance, levels of service monitoring and future financial sustainability options and consequences.	A document that will continually update and demonstrate improvements over time for the community and the Council.	I.S.
S16	Use a section of the intranet or within Civica Altitude ERP to provide progress reports on the asset management improvements and condition (internal marketing).	The people who have an interest or a responsibility to enhance asset management are fully aware of the status of the improvement plan.	I.T. Gov. I.S.
S17	Document agreed asset lives for each asset class. • Buildings • Open Space • Drainage • Roads	Documented asset lives to be agreed and used in all asset management functions e.g. valuations, asset planning, risk management etc.	TLDA
S18	Define a criticality framework and identify critical assets. • Buildings • Open Space • Drainage • Roads	A sound understanding of the critical assets in the asset portfolio to focus on during planning functions, maintenance, capital works etc.	I.S.

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No.	Asset Management Improvement Action	Success Criteria	Responsible Lead
S19	Develop an asset risk framework and identify high risk assets within each core asset class. • Buildings • Open Space • Drainage • Roads	Develop a sound understanding of high-risk assets, how to manage them and to monitor them as they age and the risk increases.	I.S., C.S., Com S
S20	Via lifecycle planning, develop detailed 10-year renewal programs for critical roads, bridges, buildings and drainage, based on updated condition data. Identify any funding shortfalls early for Long Term Financial Plan consideration and budget planning.	Using risk and criticality and condition to complete long term renewal planning.	Pro&Eng, CFO
S21	Complete integration of the new asset management system (Civica Altitude) – migrate all asset data and train relevant staff. Begin using the system for maintenance scheduling and reporting (separate activity).	A working Civica with data migrated to the system and being used for maintenance, valuations.	I.T. C.S.
S22	Review and adopt an Asset Disposal policy for Council's infrastructure with established criteria.	A policy that articulates the desire to dispose of assets while seeking approval to apply asset disposal on redundant assets.	I.S.
S23	Establish an asset disposal register.	A generated list of assets to be earmarked for potential disposal.	TLDA

Table 5: Short-term Improvements

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No.	Asset Management Improvement Action	Success Criteria	Responsible Service Unit
	Medium Term (3 – 5 years)		
M1	Complete a review of the asset management requirements for Council's Geographical Information System (GIS).	A roadmap to utilise the GIS to a high level to benefit from the GIS and its use.	TLDA
M2	Commence with the creation of condition and criticality layers on the GIS.	Graphical visualisation of the assets	TLDA, I.T.
M3	Develop heat maps for high-risk assets identifying areas where high risk assets group together.	Obtain a thorough understanding of hotspots around Shire to inform renewal strategies.	TLDA, I.T.
M4	Prioritise GIS improvements for Asset Management.	Develop a prioritised list of improvements to the function of the GIS and maximise decision making.	I.S.
M5	Document Council's services requiring service plans.	A list of services that will have service plans.	I.S, Com. S.
M6	Review maintenance practices for each asset class and produce maintenance plans based on asset criticality.	Produce a consolidated list of maintenance activities against assets of various criticality.	TLDA
M7	Complete Asset Handover process improvements and add clauses into capital delivery contracts and Project Management Framework.	Data capture will be part of the asset handover provided by	Pro&Eng

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No.	Asset Management Improvement Action	Success Criteria	Responsible Service Unit
		contractors and within the Project Management Framework.	
M8	Implement formal Level of Service frameworks: define specific performance targets for each asset class (with community input) and establish annual monitoring (e.g. road roughness index targets, building user satisfaction surveys).	A knowledge of how assets are performing against defined levels of service	I.S., C.S. & Com S.
M9	Launch the Community Asset Reference Group and hold the first workshop to discuss service level expectations.	Community involvement in planning and decision making while obtaining an understanding of how the assets are performing and how you make decisions regarding the assets.	I.S.
M10	Perform a mid-term review of the Asset Plan. Using the improved data, update the asset renewal forecasts and re-prioritise projects if needed. Publish a State of Assets Report with 3-year trend data to Council and community.	A completed Asset Plan with far more confidence in the information and data Council has obtained.	I.S.
M11	Adopt a policy to address climate change impacts within Asset planning and design.	A developed policy that articulates how to best apply planning and design to offset the impacts of climate change.	I.S., Env&Fac

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No.	Asset Management Improvement Action	Success Criteria	Responsible Service Unit
M12	Review design standards and amend for climate change resilience. Develop and implement asset planning and design processes to address climate change.	The development of design standards that will address the impacts of climate change.	Pro&Eng

Table 6: Medium-term improvements

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No.	Asset Management Improvement Action	Success Criteria	Responsible Service Unit
	Long Term (5+ years)		
L1	Develop management plans using the Road Management Plan as a guide for the critical assets in each asset class.	Produce documents for assets other than roads for response times.	I.S.
L2	Complete random CCTV inspections of a sample of the drainage pipes and pits (every 4 years in line with the drainage AM Plan update).	Expand knowledge of underground assets to understand the condition of the assets.	TLDA
L3	Complete regular service level reviews to ensure value for money	A thorough understanding of how the assets are performing to deliver services.	I.S., C.S. & Com S.
L4	Initiate a critical asset failure impact study – scenario planning for failure of top 10 high risk assets (e.g. what if Bridge X fails – plan alternative routes, estimated cost, etc.) and integrate results into the Corporate Risk Register. The deliverable will be a contingency plan	Begin to address response to potential failures via contingency plans and emergency response plans.	I.S.
L5	Complete trend analysis for assets based on condition, service levels, risk to identify asset profile improvements, benefits to council, community satisfaction.	Sound understanding of your assets and how they are performing over time, and the benefits Council receives through the response.	I.S.

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No.	Asset Management Improvement Action	Success Criteria	Responsible Service Unit
L6	Plan for the next Asset Plan (2035-2045) by evaluating successes and gaps of the current plan. Engage with the community on future asset priorities (this would tie into the next Community Plan and Vision refresh).	Preparation of a sound plan for the future in preparation for the next asset plan.	I.S.

Table 7: Long-term Improvements

Note:

B.M. – Building Maintenance

C.S. - Corporate Services

Com S. - Community Services

Com W – Community Wellbeing

CFO – Chief Financial Officer

CIO – Chief Information Officer

Env&Fac – Environment & Facilities

Gov - Governance

I.S. - Infrastructure Services

I.T. - Information Technology

Pro&Eng – Projects & Engineering

TLDA – Team Leader Design and Assets

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By 2030, Council aims to have mature asset management practices comparable to best-practice rural councils. This means up-to-date asset data, fully integrated planning, a clear line of sight from community aspirations to on-ground works, and a robust financial strategy that underpins asset renewal. The next iteration of the Asset Plan will build on this foundation, with the goal of delivering infrastructure services that are reliable, affordable, and resilient for generations to come.

Next Steps

This Asset Plan provides a strategic roadmap for Council's sustainable infrastructure management that balances technical requirements with community values and financial realities. The approach prioritises maintaining existing assets over expansion, ensuring current service levels can be sustained within available resources.

Implementation begins immediately upon adoption of this Asset Plan in the short term, based on available resources, focusing on establishing governance structures and improving condition data and asset management systems. Regular community reporting will ensure transparency and accountability, while the Plan will be reviewed every four (4) years to maintain alignment with evolving community needs and Council strategic directions.

By implementing this framework, Council and the community will work together to ensure our infrastructure continues to support thriving, connected communities across the Shire for generations to come.

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GLENELG SHIRE

GLENELG SHIRE COUNCIL
ROAD MANAGEMENT PLAN
2025

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VERSION	NAME	DATE ADOPTED
1	Local Road Management Plan 2005	25 January 2005
2	Road Management Plan – June 2009	25 June 2009
3	Road Management Plan – September 2013	26 November 2013
4	Road Management Plan - 2017	23 January 2018
5	Road Management Plan - 2021	26 October 2021
6	Road Management Plan - 2025	

1. Background

1.1 Purpose and Scope of the Road Management Plan

This Road Management Plan (hereinafter referred to as "this Plan") for Local Roads has been prepared to meet the following objectives:

- To meet the requirements of the *Road Management Act 2004*.
- To provide a safe and functional local road network.
- To minimise Council's exposure to risk related to the management and control of local road assets.

This Plan applies to all roads identified in Council's adopted Road Hierarchy document and listed in Council's Register of Public Roads (refer Section 2.1).

It establishes a management framework for all works and services that are undertaken and provided on Council's road network. This Plan demonstrates the steps to be taken by Glenelg Shire to inspect and maintain the condition of its road related assets within the resource capacity of the municipality.

This Plan has been prepared in accordance with Part 3 of the Road Management (General) Regulations 2016 and the Code of Practice for Road Management Plans 2004.

The following assets are encompassed by this Plan:

All Sealed and Unsealed Roads listed in Council's Register of Public Roads including:

- Road infrastructure such as:
  - road pavements,
  - sealed surfaces,
  - road shoulders within the limits identified in Figure 1.
- Road related infrastructure such as:
  - kerb and channel,
  - traffic islands,
  - line marking,
  - road furniture including regulatory and advisory signs, guideposts, guard rail and barrier fences,
  - above and below ground drainage systems including catch drains.

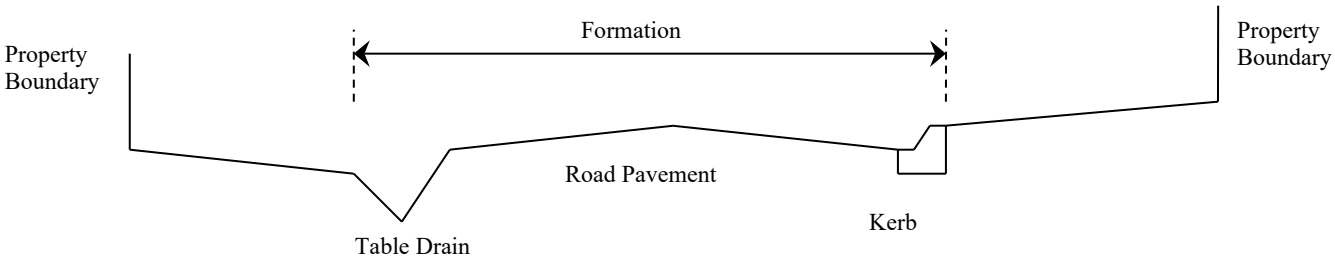
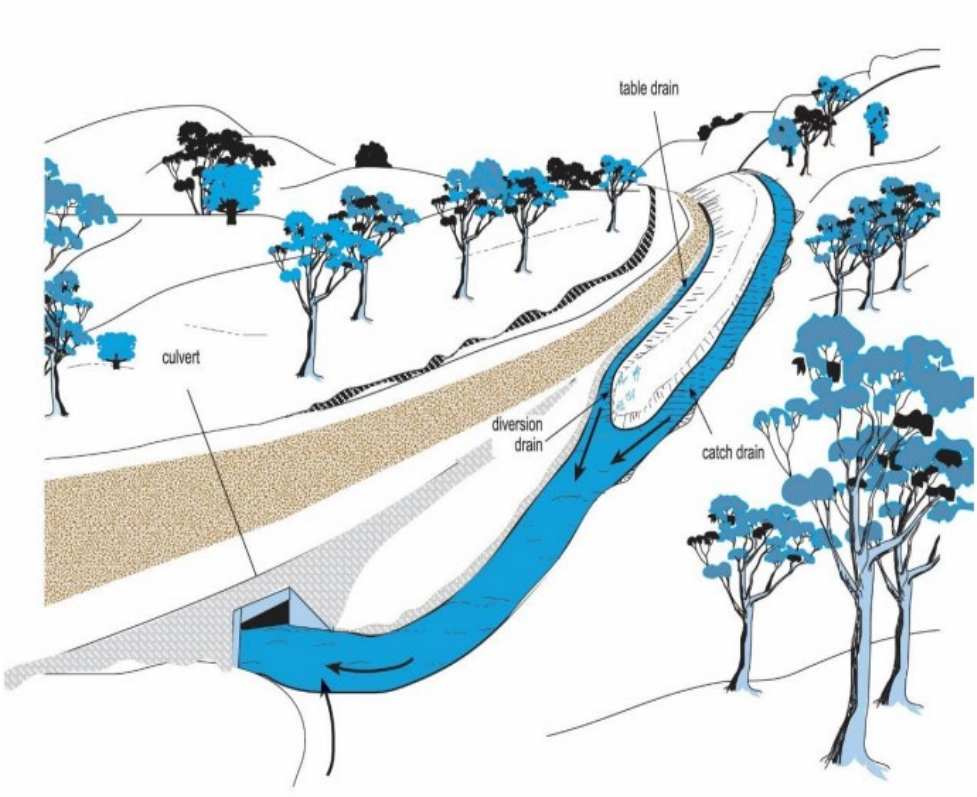


Figure 1. Road Formations

- Ancillary Areas to Roads (On road indented car parks, bus stops and rest areas) including:
  - Formation, pavement, sealed surfaces, kerb and channel and drainage.
- Road Structures including:
  - Road bridges, major culverts, roundabouts, median strips and guard rail.
- Off Road Urban Carparks that are owned or managed by Council and recorded on the Register of Public Roads. *Note: Carparks that are not described in the Register of Public Roads are excluded from the provisions of this Plan.*
- Surface and Subsurface Drainage including:
  - Table drains, catch drains, subsurface drains, diversion and cutoff drains such as displayed in figure 2.



Source: ARRB (2009).

Figure 2. Typical rural road surface drainage components

- Footpaths and within a road reserve including
  - On-road and off-road footpaths
  - Footbridges
  - Paved Surfaces (both sealed and unsealed)

Registered Assets that are adjacent to arterial roads, such as service roads, cemetery roads, ancillary areas, stack sites, internal access roads and footpaths, for which Council is the responsible authority, are also encompassed by this Plan.

1.2 Assets Not Encompassed by this Plan

The following road and access related assets are not encompassed by this Plan:

- Roads on freehold land (including common property) except where such land is owned and managed by Glenelg Shire Council.
- Unconstructed urban streets, unformed roads, unused road reserves, urban laneways, grassy lanes, driveways and informal tracks.
  Note: Council is not obliged to undertake any maintenance activities on any such roads, and they shall not be placed on Council's Register of Public Roads or if identified to no longer be "reasonably required for general public use", then such road shall be removed from the Register of Public Roads and the date that it was removed noted.
- Rail and cable tram structures.
- Vehicle crossings (driveways) - the portion of a vehicle crossing located between the carriageway and the property boundary is the responsibility of the adjoining property owner to maintain such as displayed in figure 3. & 4.



Figure 3. Urban Roadside Responsibility

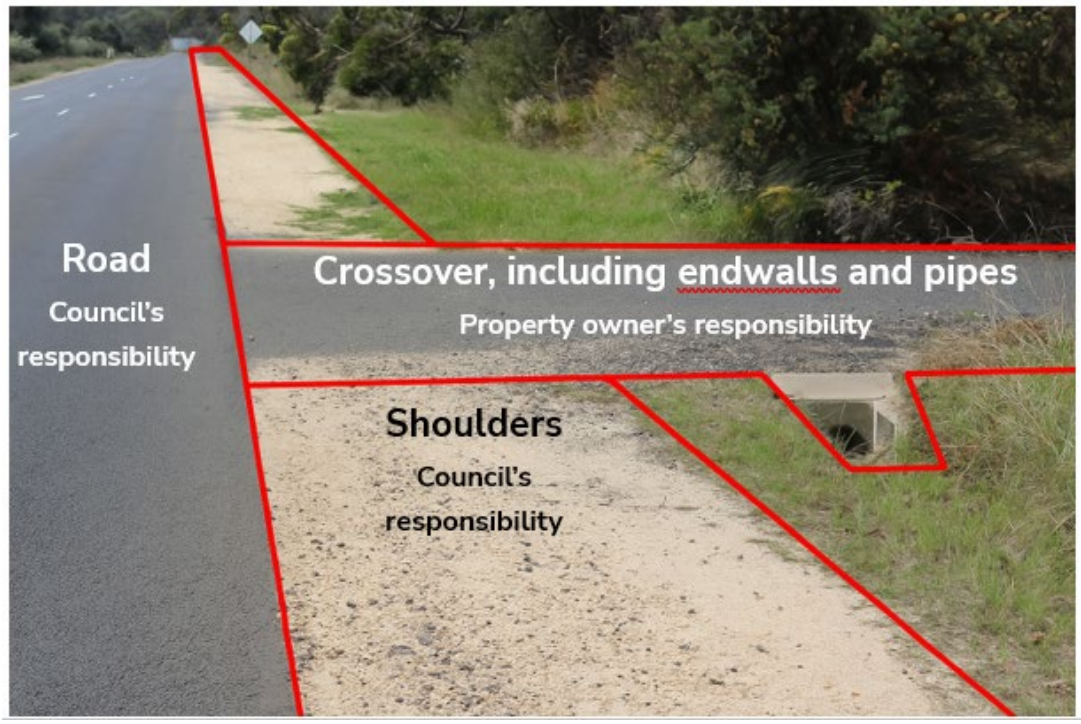


Figure 4. Rural Roadside Responsibility

- Roadside – as per Section 107 of the Road Management Act, Council has no "statutory duty or a common law duty to perform road management functions in respect of a public highway which is not a public road or to maintain, inspect or repair the roadside", described as "any land that is within the boundaries of the road (other than shoulders) which is not a roadway or pathway". This includes landscaped tree plots within the footpath/pathway where the surface of the tree plot is not constructed with the intention of providing a trafficable pedestrian surface.
- Roads under the control of other Road Authorities, inclusive of The Department of Transport and Planning (DTP), the Department of Energy, Environment and Climate Action (DEECA).
- Nature strips and infill areas - those residual areas between the road formation and the property boundary not occupied by the footpath and private road crossings. Nature Strips are normally sown to grass but may also receive alternative approved treatments as identified in Council's Nature strip Landscaping Guidelines[1] with responsibility for maintenance of the nature strip generally being allocated to the property owner.
- Street trees are managed in accordance with Urban Tree Policy[2] and not under the provisions of this Plan.
- Property stormwater drains – these drains carry stormwater from a property to a discharge point in the kerb or drain or underground drainage pipe. They are there to benefit the property and as such are the responsibility of the owner of the property being served to maintain.
- Cattle underpass structures – these are box culvert type structures built for the purpose of providing safe crossing for cattle under a road. The culvert is installed and owned by the property owner and owner responsibility for the

[1] Nature Strip Landscaping Guidelines ECM 2346446
[2] Urban Tree Policy ECM 2575569

maintenance of these structures is established through a Section 173 (Local Government Act 1989) Agreement with the adjacent landowner. After the initial 12-month construction defect liability period, Council assumes responsibility for the road pavement, seal, markings, and guideposts only. Responsibility for the structure, including attachments such as guardrail, farm access approaches, fencing and underpass drainage remains with the owner for the duration of the agreement.

- Minor street furniture – assets which have no impact on the ability to maintain a road or road infrastructure including bollards, seats, bicycle racks and waste receptacles.
- Streetlights – are an asset owned by the Shire but maintained by Powercor through an agreement. Powercor retains maintenance responsibility.

1.3 Force Majeure

Glenelg Shire Council will make every effort to meet its commitments under this Road Management Plan; however, there may be situations or circumstances that affect Council's business activities to the extent that it cannot deliver on the service levels described in this Plan.

Glenelg Shire Council shall not be liable for failure to observe or perform in accordance with any provision of this plan for any reason or cause which could not with reasonable diligence be controlled or prevented by it, including without limitation, war, insurrection, riot, civil commotion, strikes, lock-outs, labour or industrial disputes, natural disasters such as fires, floods or storms, power shortages or power failure, inability to obtain sufficient labour, raw materials, fuel or utilities.

In the event that the Chief Executive Officer (CEO) of Council has considered the impact of such an event on the limited financial resources of Council and its other conflicting priorities, and determined that the Road Management Plan cannot be met, then pursuant to Section 83 of the *Wrongs Act*, the CEO will send a "Request to Suspend"[3] notification to Council's Officer in charge of adhering to this Plan and inform them that some, or all of the timeframes and responses in Council's Road Management Plan are to be suspended.

Once the scope of the event/s have been determined and the resources committed to the event response have been identified, then there will be ongoing consultation between Council's CEO and Council's Officer responsible for adhering to this Plan, to determine which parts of this Plan are to be reactivated and when and a "Request to Reactivate"[4] will be sent when required.

1.4 Key Road Assets Statistics

Council is the responsible authority for approximately 976 km of sealed rural local roads, 1442 km of rural gravel or limestone surfaced roads, 164 km of sealed and 47 km of unsealed urban roads. 46 bridges and 165 major culverts on these local roads are also maintained by Council.

[3] Road Management Plan CEO Request to Suspend ECM 2801956
[4] Road Management Plan CEO Request to Reactivate ECM 2801954

As well as the road assets, Council also maintains an extensive network of concrete, paved and asphalted footpaths in its townships. The length of registered paths (excluding paths surrounding buildings) totals 140 km.

Actual numbers, lengths and areas of assets vary annually due to ongoing subdivisional activity and Council works programs.

1.5 Key Stakeholders

Key stakeholders in the Road Management Plan are road users, the general public, adjoining owners/occupiers to the road, utilities, Council and other Road Authorities.

1.6 Obligations of Road Users

The *Road Safety Act 1986*, Section 17A now sets out the obligations of road users as follows:

(1) A person who drives a motor vehicle on a highway must drive in a safe manner, having regard to all relevant factors, including (without limiting their generality) the: -

(a) Physical characteristics of the road;
(b) Prevailing weather conditions;
(c) Level of visibility;
(d) Condition of the motor vehicle;
(e) Prevailing traffic conditions;
(f) Relevant road laws and advisory signs; and
(g) Physical and mental condition of the driver;

The *Road Safety Act 1986* also requires other road users (other than those driving a motor vehicle) to use a road in a safe manner, having regard to all the relevant factors.

Other obligations of road users are also set out in the *Road Safety Act 1986* in regard to relationships with other road users, and damage to road infrastructure.

1.7 Other Road Management Agencies

There are several other road authorities responsible for parts of the overall road network in Glenelg Shire. These are fully described in the Local Road Hierarchy and are summarised briefly as follows.

1.8 Department of Transport and Planning (DTP)

DTP is the responsible authority for managing the Arterial Road network in the Shire which includes all roads previously classified as Highways and Main Roads. These roads include:

Arterial Highways

- Princes Highway from Moyne SC Boundary to SA Border
- Glenelg Highway from Southern Grampians SC Boundary to SA Border
- Henty Highway from Southern Grampians SC Boundary to Heywood and from Princes Highway to the Port of Portland

Arterial Main Roads

- Portland Nelson Road from 0.0 Km to 69.42 Km
- Henty Highway from 0.0 Km to 6.13 Km;
- Woolsthorpe Heywood Road from 55.46 Km to 76.21 Km
- Bridgewater Road from 0.0 Km to 17.47 Km
- Casterton Edenhope Road from 0.0 to 24.49 Km
- Casterton Apsley Road from 0.0 Km to 27.04 Km
- Casterton Penola Road from 0.0 Km to 41.16 Km
- Dartmoor Hamilton Road from 0.0 Km to 46.96 Km
- Condah Coleraine Road from 0.0 to 34.52 Km
- Tyrendarra-Ettrick Road from 0.0 Km to 7.47 Km
- Madeira Packet Road from 0.0 Km to 9.94 Km
- Myamyn Macarthur Road from 0.0 Km to 10.30 Km
- Portland Casterton Road from 0.0 Km to 63.91 Km

1.9 Adjoining Municipalities

Council shares responsibility for managing roads on the boundaries of Glenelg Shire with the following abutting municipalities:

- Moyne Shire[5]
- Southern Grampians Shire[6]
- West Wimmera Shire[7]
- Wattle Ranges Shire[8] (SA)
- District Council of Grant[9] (SA)

Joint Boundary Road Agreements are in place to clarify maintenance responsibility for these roads.

Where roads are listed in Glenelg Shire's Register of Public Roads and are being inspected and maintained by an adjoining municipality under a Joint Agreement, Glenelg Shire's responsibilities under the Road Management Act are the same as Glenelg Shire contracting out the inspection and maintenance works. The reverse is for the cases where Glenelg Shire is inspecting and maintaining roads on behalf of the adjoining municipalities.

1.10 Department of Energy, Environment and Climate action (DEECA)

Many roads exist on Crown Land other than road reserves, for which DEECA have management responsibility (e.g. declared unused roads, forest and national park roads).

These roads are not included in Council's Road Hierarchy or in this plan.

[5] Joint Boundary Road Agreement ECM 1354644
[6] Joint Boundary Road Agreement ECM 1354646
[7] Joint Boundary Road Agreement ECM 1395055
[8] Joint Boundary Road Agreement ECM 748790
[9] Joint Boundary Road Agreement ECM 1354624

1.11 V/Line/Victrack/ARTC

ARTC is responsible for maintaining active railway level crossings in Glenelg Shire in the immediate vicinity (within 3.00m) of the railway line.

Council is responsible for maintaining the road approaches to the rail line (beyond 3.00m) and approach signage and markings on the local road network.

Respective responsibilities for railway level crossings and grade separated interchanges are described in the Safety Interface Agreement between Glenelg Shire Council, V/Line, VicTrack, DTP, Southern Grampians Shire Council and ARTC.

1.12 Portland Cable Trams Inc

Portland Cable Trams Inc. is responsible for maintaining Cable Tram level crossings in Portland in the immediate vicinity (within 3.00m) of the tram line.

Council is responsible for maintaining the road approaches to the tram line (up to 3.00m from the rail) and approach signage and markings on the local road network.

Respective responsibilities for road and tramway level crossings are described in the Safety Interface Agreement between Glenelg Shire Council and Portland Cable Trams Inc.

1.13 Coordination of Road Responsbilities

Most road reserves will contain assets that are managed by a number of different authorities and utility companies (e.g. roads, electricity supplies, and telecommunications).

For any road or section of road, there is only one nominated Coordinating Road Authority, even if more than one road authority has assets on this section of road. The Coordinating Road Authority for any situation is described in Section 36 of the *Road Management Act 2004* as follows:

Subject to sections 15 and 16 of the *Road Management Act 2004*, the coordinating road authority is as follows:

a) if the road is a freeway or arterial road, DTP;
b) if the road is a non-arterial State road, the relevant responsible authority under section 37(1)(c) or 37(1)(d); and
c) if the road is a municipal road, the municipal council of the municipal district in which the road or part of the road is situated.

For example, in a situation where an arterial highway passes through a town that also has service roads and many other assets and utilities, DTP will be the coordinating road authority.

Management responsibility for the various assets and utilities still lies with the owner of the particular asset (e.g. service road – Council, water – water authority etc.), however the

coordination of all works within the overall road reserve is the responsibility of the coordinating road authority.

2. Local Road Assets

2.1 Register of Public Roads

All asset data is housed in Glenelg Shire's electronic Asset Management System.

A comprehensive register of local roads and the core attributes that relate to these roads is contained within this system.

The asset management system also contains detailed data relating to the road elements (each are assets in their own right) such as formations, pavements and bitumen seals, culverts, signs etc.

The Register of Public Roads, as required under Section 19 of the *Road Management Act 2004*, is an electronic register which can be printed to hardcopy at any time.

Information which forms Glenelg Shire Council's Register of Public Roads, is housed in the data fields under each "Road Name" within the Asset Management System.

The roads within the register are grouped into categories that are fully described in the Local Road Hierarchy[10].

The Register of Public Roads identifies only the sections of roads that Glenelg Shire Council has maintenance responsibilities for, or those roads or bridges where Council has a shared responsibility for capital rehabilitation or renewal when these works are required.

The Register of Public Roads is reviewed on an 'as required' basis but not less than annually to ensure that it is accurate and up to date. As per S.17(4) of the *Road Management Act 2004*, a road authority must remove a road from its register of public roads if the road authority has made a decision that the road is no longer reasonably required for general public use.

Internal procedures have been developed that will ensure that new subdivision roads and other roads are added to the Register at the time when responsibility for such roads is determined to be Council's.

2.2 Footpath Hierarchy

All footpaths in the Glenelg Shire are sorted into a hierarchy that considers the pedestrian traffic that may be generated in an area. Categories are: -

[10] Local Road Hierarchy Vol 1 ECM 936620

Commercial Paths (High Use)	Footpaths that are in the vicinity of shopping precincts and higher use community centres and transport hubs.

Neighbourhood Link Paths (Medium Use)	Footpaths along arterial roads in urban areas, as well as urban link and urban collector roads. Typically linking one or more of the following: • Shopping Precincts • Community Facilities, Schools or Churches • Tourist Attractions • Transport Hubs; or • Commercial Parking Areas with >100 vehicle capacity.

Residential Paths (Low Use)	Footpaths in local road reservation that primarily service residential or industrial areas and connect to Neighbourhood Link footpaths.

Figure 5. Footpath Hierarchy

Footpath assets are described within Council's Asset Management System and are also shown in a spatial format in Council's live Geographic Information System (GIS).

For risk management purposes, commercial footpaths will be offered a higher service level than neighbourhood links, which in turn will be offered a higher level of service than residential paths.

Footpath inspection frequencies are detailed in Figure 3 in Section 3.2.2 of this document and service intervention levels are described in Appendix 1.

3. Inspection Routines

3.1 Standards for Inspections

Glenelg Shire Council undertakes a variety of inspections in accordance with this Plan.
Road and Footpath assets that are inspected shall have individual defects rated as being:
Above Intervention – The defect is worse than the predetermined intervention level that is established in Appendix 1. These defects are entered in Council's Defect Logging System.
Below Intervention – Condition is satisfactory or better than the predetermined intervention level that is established in Appendix 1. No work action is required at this time and will continue to be monitored.

3.2 Inspections types & Frequency

For local roads, there are routine proactive levels of inspections that are used. These are as follows:

3.2.1 Condition Inspection of Sealed Road Network

This work is typically done by an external service provider who can provide consistency of evaluation and some ability to evaluate relativities across the state.

This inspection provides data from which pavement rehabilitation and resealing programs can be drawn. The intention of this type of inspection is to assist with long term asset management planning and is a general assessment of the network. As such, individual defects are not measured against the intervention levels stated in Appendix 1 as part of these inspections.

3.2.2 Routine Proactive Road Safety Inspections

These inspections are conducted on a regular basis by road inspection staff and are aimed at identifying defects in the road infrastructure or road related infrastructure which may exceed the predetermined intervention level.

Routine road safety inspections shall be conducted in accordance with the following schedule. The frequency of inspections varies with road classification in the road hierarchy. Typical road inspection frequencies are shown in Figure 6.

Asset Type	Patrol Inspection Frequency
Rural Link Roads	4 inspections per calendar year
Rural Collector Roads	4 inspections per calendar year
Rural General Access Roads	2 inspections per calendar year (approx. once every 6 months)
Urban Link Roads	4 inspections per calendar year
Urban Collector Roads	4 inspections per calendar year
Urban General Access Roads	2 inspections per calendar year (approx. once every 6 months)
Urban/Rural Minor Access Roads	1 inspection per calendar year
Bridges & Major Culverts (level 1 Inspection)	1 inspection per calendar year
Bridges & Major Culverts (level 2 Inspection)	1 inspection per 2 to 5 calendar years in accordance with (DoT) Road Structures Inspection Manual
Commercial Footpaths (high use)	1 inspection per calendar year
Neighbourhood Link paths (medium use)	1 inspection per calendar year
Residential paths (low use)	1 inspection per 2 calendar years
Carparks	1 inspection per calendar year

Sealed Road Network	1 Condition inspection every 4 years (approx.)
Urban Underground Drainage Network	1 CCTV inspection per 5 calendar years

Figure 6. Routine Inspection Frequencies

3.2.3 Response Inspections

These inspections shall be carried out in response to service requests, reports of defects and complaints which are received in Council's Customer Request System.

Inspections of an asset shall be conducted by a responsible officer and are conducted within the designated action response time as defined in the following sections.

The inspecting officer will then arrange any required response action/s (work) in accordance with the severity of the situation and in compliance with the action responses specified in Appendix 1.

3.2.4 Night Inspections (Link and Collector Roads only)

Nighttime inspections of Link and Collector category roads shall be undertaken once every 2 years to review the effectiveness of lighting areas and to identify defective or missing signage, guideposts and pavement/guardrail delineators that offer road alignment and other guidance to drivers whilst driving at night.

4. Maintenance Targets

Road maintenance is the regular day-to-day work necessary to keep road assets operating including instances where portions of the asset fail and need immediate repair to make the asset operational again.

There are three categories of road maintenance that are carried out:
- Routine maintenance: Routine maintenance and repair work.
- Scheduled maintenance: Work carried out to pre-determined schedules.
- Response maintenance: Work carried out in response to reported problems or defects.

4.1 Routine and Scheduled Maintenance

Routine and scheduled maintenance works have a more predetermined and structured approach to them as distinct from response maintenance which can be unpredictable in nature.

Most routine and scheduled maintenance work programs result from the formal road and bridge condition inspections that are detailed in the previous sections.

Condition assessments that are conducted during the formal inspections are used to identify sections of road where routine or scheduled maintenance work is required.

Appendix 1 shows the condition intervention levels that are applied to determine whether maintenance work is required.

4.2 All Unsealed Roads – Programmed Grading

Grading of unsealed roads may be conducted on a regular programmed basis; however, roads that are in good trafficable condition will be excluded from the grading cycle. The frequency of programmed road grading is based upon the road classification within the hierarchy and is described in Figure 7.

Road Category	Patrol Grading Frequency
Rural Link Roads	Not applicable
Rural Collector Roads	Twice per calendar year
Rural General Access Road	Once per calendar year
Rural Minor Access Road	Once per calendar year
Urban General Access Road	Once per calendar year
Urban Minor Access Road	Once per calendar year

Figure 7. Road Grading Frequency

4.2.1 Programmed Grading

Road Grading is generally not conducted in response to customer requests but may be initiated in response to emergency situations or situations presenting unacceptable safety risks.

4.2.2 All Unsealed Roads – Programmed Grading

Fire access tracks maintenance shall be carried out, upon request from CFA. This will generally allow dry weather access by firefighting trucks.

5. Information Systems & Management

This section details the systems and processes for handling information about roads that is received from either road asset inspections or from reporting by road users and the general public.

5.1 Information Receival and Recording

Customer requests relating to roads or footpaths are entered into Council's Customer Request System (CRS). These requests are assigned to the appropriate unit/officer and, after an inspection (as with other routine inspections), any defects are logged in Council's Defect Logging System (DLS).

5.2 Resulting Works

Patrol maintenance teams, specific action teams or specialist contractors are issued with specific works instructions that contain the information from the defect action.

When the resulting work action has been completed, the works team shall advise the works officer that the work is completed, and the work instruction shall be signed off as completed. These works can be closed off in the field using the DLS which is updated in the AMS.

5.3 Completion of Process

The works officer then shall ensure that the original defect action is completed within the AMS, if not already completed by work crews in the field.

Council will monitor the response times and resulting actions from service requests to ensure that the required service delivery is maintained.

6. Road Management Plan Review

The Glenelg Shire Council Road Management Plan should be reviewed on a four-yearly basis in line with Council elections and changes adopted once approved by Council.

To ensure the relevance of service levels, future reviews should consider community expectations developed through technical evaluation, best value reviews, community forums and other customer feedback systems.

6.1 Changes Incorporated into Review – 2025

- *Reclassified High Use Carparks and Low Use Carparks to umbrella title Carparks and changed inspection frequency to 1 inspection per calendar year in Figure 3 – Routine Inspection Frequencies*
- *Removed FDA footpath defect from Appendix 1, section 9.1, as no response date required and DDA is used as a guideline and rectification is type and funding dependant.*
- *Added level 2 Bridge & Culvert Inspections to Figure 3, section 3.2.2.*
- *Defect SAP – Sapling added to Appendix 1, section 9.1.*
- *Included Roadside image and description in section 1.2 for further clarification.*

7. Records Management

All Council records created and managed as a result of implementing this policy will be managed in accordance with the Council's Records Management Policy.

The Records Management Policy assigns responsibilities for records management to employees, supervisors, volunteers and other specific positions.

No Council records are to be destroyed without consideration of the requirements of the Act(s) that govern the functions relevant to this policy. Prior to destruction, advice must be sought from the Records Management Unit, with consideration to the requirements of the appropriate Retention and Disposal Authority (RDA).

8. References

Legislation, Standards Codes of Practice, Guidelines, Council Strategies, Policies, Quality Plans and Procedures that are relevant to this Road Management Plan include:

- *Local Government Act 1989, 2020*
- *Road Management Act 2004*
- *Road Management (General) Regulations 2016*
- *Transport Act 1983*
- *Road Safety Act 1986*
- *Wrongs Act 1958*
- *Subdivisions Act 1988*
- International Infrastructure Management Manual 2020
- Code of Practice for Management of Infrastructure in Road Reserves
- Road Management (Works and Infrastructure) Regulations 2015
- Code of Practice for Operational Responsibility for Public Roads ECM 3143224
- Glenelg Shire Council Plan ECM 3001483
- Glenelg Shire Council Asset Management Policy ECM 1273164
- Glenelg Shire Council Register of Public Roads ECM 2784892
- Glenelg Shire Council Local Road Hierarchy Vol 1 ECM 936620
- Glenelg Shire Council Local Road Hierarchy Vol 2 ECM 936621
- Glenelg Shire Council Access to Rural Properties Policy ECM 940994
- Glenelg Shire Council Road Safety Strategy ECM 1025365
- Glenelg Shire Council Roadside Management Guidelines ECM 1014624
- Glenelg Shire Council Tracks & Trails Strategy ECM 2582227
- Glenelg Shire Council Transport Asset Management Plan ECM 1894900
- Glenelg Shire Council Urban Tree Policy ECM 3200734
- Glenelg Shire Council Works within Road Reserves (Minor Works) – Non-Utilities ECM 2430568
- Glenelg Shire Council Stormwater Discharge Point and Drainage Information Application. ECM 550894
- Glenelg Shire Council Road Hazard Defect Inspection Manual ECM 1466403
- Infrastructure Design Manual (IDM)
- Rail Safety Interface Agreement - Glenelg Shire Council and Portland Cable Trams Inc. ECM 1137989
- Rail Safety Interface Agreement between Glenelg Shire Council, VicTrack, and ARTC. ECM 1004308

9. Appendices

9.1 Appendix 1

Note #

Where, because of the nature of the repair required, level of resources required or workload, it is not possible to rectify within the time shown in tables below appropriate warning of the hazard is to be provided until the repair can be completed.

CARRIAGEWAY DEFECTS

Defect Code	Description of Defect (Intervention Level)	Response Code by Road Maintenance Category							
		RL	RC	RG	RM	UL	UC	UG	UM
	Obstructions and Substances in Traffic Lane								
OCC	Occasional issue on road requiring response - ponding of water >300mm deep, fallen trees, oil spills, stray livestock, debris.	7 days	7 days	7 days	14 days	7 days	7 days	7 days	14 days
	Pavement or surface defects								
POT	Potholes in traffic lane of a sealed pavement greater than 300mm in diameter and greater than 100mm deep or in the traffic lane of an unsealed pavement greater than 500mm diameter and 150mm deep.	7 days	7 days	14 days	1 month	7 days	7 days	14 days	14 days
COR	Corrugations in the traffic lane of a sealed pavement. Maximum depth under a 1.2m straightedge exceeds 50mm or on an unsealed pavement 100mm.	7 days	7 days	14 days	1 month	7 days	7 days	14 days	14 days
DEP	Depressions in the traffic lane of a sealed pavement. Maximum depth under a 1.2m straightedge exceeds 100mm or on an unsealed pavement 150mm.	7 days	7 days	14 days	1 month	7 days	7 days	14 days	14 days
RUT	Extended sections of longitudinal wheel rutting in a sealed pavement. Maximum depth under a 1.2m straightedge exceeds 100mm or on unsealed pavements 150mm.	1 month	3 months	N/a	N/a	1 month	3 months	N/a	N/a
SCO	Steep, irregular sided eroded channels on road surface, generally in the direction of maximum slope. Maximum depth under a 1.2m straightedge exceeds 100mm or on unsealed pavements 150mm.	7 days	7 days	7 days	3 months	7 days	7 days	7 days	1 month
SHO	Shoving of the surface in the traffic lane. Maximum depth under a 1.2m straightedge exceeds 100mm.	7 days	7 days	14 days	1 month	7 days	7 days	14 days	14 days

EDG	Edge breaks where width of seal is reduced by 150mm or more from general edge of seal.	1 month	1 month	3 months	N/a	1 month	1 month	3 months	N/a
SHG	Unsealed shoulder grading to correct pavement drop off 100mm, build-up or rutting.	7 days	14 days	1 month	N/a	7 days	14 days	1 month	N/a
DRO	Edge drops onto unsealed shoulder greater than 100mm.	1 month	1 month	3 months	N/a	1 month	1 month	3 months	N/a
DEL	Delamination of the upper bitumen surface layer where the affected area > .5m^2 or more than 3 delaminated areas in close proximity (< 10m apart)	7 days	7 days	14 days	1 month	7 days	7 days	14 days	14 days
SOF	Any incidence of soft or un-trafficable shoulders on Link or Collector Roads.	7 days	7 days	N/a	N/a	7 days	7 days	N/a	N/a
	Pavement markings								
MAR	Missing, illegible or confusing at a critical location [11]	1 month	1 month	3 months	N/a	1 month	1 month	3 months	N/a
	Drainage								
PIT	Damaged so as to obviously undermine its structural integrity or missing drainage pit lids, surrounds, grates, in pedestrian areas or traffic lanes.	7 days	7 days	7 days	14 days	7 days	7 days	7 days	14 days
BLO	Subsurface drains dirt/debris removal from outlets and pits, check rodent and flood flaps.	3 months	3 months	3 months	N/a	3 months	3 months	3 months	N/a
	Vegetation (trees, shrubs and grassed areas)								
VEG	Trees, shrubs or grasses that have grown to restrict design sight distance to intersections or restrict viewing of safety signs or long dry grass on a road shoulder where a vehicle is required to leave the paved surface of the road to overtake another vehicle.	6 months	6 months	6 months	6 months	6 months	6 months	6 months	6 months

[11] A critical location is a location where the road alignment and/or pavement width and/or geometry are identified by additional markings or furniture to guide the travelling public. E.g. on curves, at intersections, road narrowing's etc. Standard culvert crossings that do not cause a narrowing of the road are not considered to be critical locations.

SAP	Vegetation growing within the maintained road verge (shoulder to back of table drain) or within 2m of a road structure	12 months	12 months	12 months	12 months	12 months	12 months	12 months	12 months
INT	Vegetation intruding within an envelope over roadways from the back of shoulder and/or kerb and a minimum of 5m height clearance over pavement and the trafficable portion of shoulders or within 2m of a road structure.	6 months	6 months	6 months	6 months	6 months	6 months	6 months	6 months
	Safety signs [1]								
SSI	Safety signs missing, illegible or damaged making them substantially ineffective.	14 days	14 days	14 days	1 month	14 days	14 days	14 days	1 month
	Guideposts								
GUI	Missing or damaged at a critical location[11]making them substantially ineffective.	14 days	1 month	1 month	3 months	14 days	1 month	1 month	3 months
	Safety barriers and fencing								
BAR	Missing or damaged at a critical location [11]making them substantially ineffective.	1 month	3 months	3 months	N/a	1 month	3 months	3 months	N/a
	Structures (including bridges)								
STR	Damage affecting structural performance.	7 days	7 days	7 days	7 days	7 days	7 days	7 days	7 days

Footpath Defects

Defect Code	Description of Defect (Intervention Level)	Rectification Response Time by Footpath Category		
		Commercial (High Use)	Neighbourhood Link (Medium Use)	Residential (Low Use)
FOA	Defective pedestrian areas with a step greater than 20mm.	3 Months	6 Months	6 Months
OCC	Occasional issue on footpath requiring response - ponding of water >300mm deep, fallen trees, oil spills, debris.	7 Days	14 Days	14 Days
FOV	Vegetation over pedestrian, intruding into a clearance envelope between the edge of path and a minimum of 2.5m height clearance over path.	6 Months	6 Months	6 Months
FOP	Potholes in an unsealed path surface that are greater than 300mm diameter and 50mm deep	Not Applicable	12 Months	12 Months

VENANT SOLUTIONS

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BMT

Dartmoor and Nelson Flood Study

Summary Report

Report Reference: R.M00398.005.01_Summary.docx
Date: December 2024
Prepared for: Glenelg Shire Council

Australian Government

GLENELG SHIRE

Glenelg Hopkins CMA

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Executive summary

Despite the flood risk being relatively well known for the upper and middle reaches of the Glenelg River catchment, with several detailed flood studies completed in the last decade, little information currently exists defining the flood risk in Dartmoor and Nelson. Dartmoor was identified in the Glenelg Hopkins Regional Floodplain Management Strategy (GHCMA 2017) as requiring improved flood information to be able to accurately assess risk. This is represented by Action 33 of the Regional Work Plan presented in Table 8 of the strategy to "*Investigate funding opportunities to undertake flood investigations for Dartmoor and Nelson, and subsequent planning controls*".

Grant funding from the Australian Government through the Australian Government Preparing Australian Communities - Local Stream Program was received allowing for the Glenelg Shire Council in partnership with Glenelg Hopkins Catchment Management Authority have engaged Venant Solutions to undertake the Dartmoor and Nelson Flood Study to utilise contemporary flood modelling methods to produce high reliability, "climate change ready" riverine and storm tide flood risk data that can be used for land use and development planning and to inform flood emergency response, planning and education improvement.

The flood study has been undertaken in accordance with the latest guidance and parameters provided in the 2019 release of Australian Rainfall and Runoff (ARR 2019) (Ball, et al. 2019) and the Victorian Guideline for Modelling the Interaction of Catchment & Coastal Flooding (Streamology 2022a). The climate change guidance provided by Australian Rainfall and Runoff (DCCEEW 2023), which accounts for the effect of increased and increasing rainfall intensity on flood risk, has also been accounted for. The hydrology and hydraulic model elements of the project including all adopted parameters and assumptions have been independently peer reviewed.

The reliability of the flood model developed to underpin the assessment of flood risk was confirmed through its ability to accurately represent actual flood extents and depths for both riverine and storm tide events that have occurred in the past. For riverine events, facilitated by the availability of good stream gauge records throughout the catchment three events were able to be replicated as calibration and validation events. Data existed for only one past storm tide event for calibration. A good calibration to this event was achieved.

A suite of riverine and storm tide design flood event mapping and flood intelligence information has been produced covering the 20%, 10%, 5%, 2%, 1%, 1 in 200, 1 in 500 Annual Exceedance Probability (AEP) events, in addition to an estimates of the probable maximum flood -including a tsunami at Nelson.

The flood mapping and intelligence information produced for the Study includes the flood depth, level, velocity and hazard mapping, identification of inundated properties, buildings and roads, estimation of expected flood travel times and the estimation of monetary flood damages. Current climate (present day at the time of writing this study) 1% AEP flood depth mapping for riverine and storm tide events is presented in Figure 1, Figure 2 and Figure 3. A 1% AEP riverine event is expected to result in the inundation of 121 properties, one building (the Nelson Kiosk at the lower ground level) and 13 roads while a 1% AEP storm tide is expected to result in the inundation of 26 properties, five roads and no buildings.

The current climate AAD estimate is $261,000, comprised of an AAD estimate of $238,000 for riverine events and $23,000 for storm tide events. Aside from large building and property damages occurring in the riverine PMF event, the primary source of flood damage in the Study Area is to roads and other infrastructure.

The study has also allowed for context to be provided around the level of risk flooding has posed across the study area in the past, in comparison to what can be expected to occur in the present day and into the future as the climate changes.

The March 1946 event is by far the largest riverine flood recorded in the lower Glenelg River since records began in the mid to late 1800s with an estimated magnitude of approximately a 1% AEP. Other significant events occurred in August 1955, September 1960 and September 1983 all with a similar magnitude of approximately a 6-7% AEP (or 1 in 14 to 1 in 17 AEP). The September 2016 event is the largest flood to occur in recent times, with an estimated magnitude of approximately 15% AEP. As mentioned above, a relatively limited historical storm tide event dataset was available to identify and quantify the magnitude of storm tides impacting on Nelson but in present day terms, the June 2014 storm tide magnitude is estimated to be in the vicinity of a 20% to 10% AEP event.

Two climate scenarios for the year 2100 have been assessed. These are referred to as Climate Change Scenarios 1 and 2 which represent potential global warming levels (GWLs) of 3.6°C and 4.5°C respectively relative to the baseline period between 1961 to 1990. These scenarios are based on global mean surface temperature projections that stem from the worlds potential greenhouse gas emissions trajectory pathways, as described by the Intergovernmental Panel on Climate Change (IPCC) Shared Socioeconomic Pathway (SSP) modelling. The SSP descriptors for emission trajectory scenarios are conveyed by the IPCC's Sixth Assessment Report. 3.6°C of global warming above the baseline period, occurring between the years 2081 and 2100, is the best estimate (50th percentile) of the SSP3-7.0 high greenhouse gas emissions scenario and the upper limit estimate (95th percentile) of the SSP2-4.5 intermediate greenhouse gas emissions scenario. 4.5°C of global warming above the baseline period is representative of the best estimate (50th percentile) of the SSP5-8.5 very high greenhouse gas emissions scenario. At the time of writing, strong evidence, including the 2024 United Nations Emissions Gap Report (UNEP 2024), indicates that the worlds emissions are continuing to track on the trajectory of upper estimates of greenhouse gas emissions representative of SSP5-8.5 scenario.

Climate change is expected to increase both the intensity of storm rainfalls and mean sea level beyond already observed change in both of these key determinants of flood risk. Increased rainfall intensity will increase the amount of inland catchment rainfall runoff, which affects the magnitude of flood flows in the Glenelg River. Sea level rise will make storm tide events more severe and will also back water further up the Glenelg River estuary, progressively increasing the height of riverine flood levels in comparison to flood events of the past.

Climate Change Scenario 1 (accounting for GWL of 3.6°C) represents a 32% increase in rainfall intensity and 0.8 m of sea level rise. This results in increases of the 1% AEP riverine dominated flood level, above the likely present day 1% AEP level (under current climate conditions) by approximately 1.4 m and 0.5 m at Dartmoor and Nelson respectively. In present day terms, flood levels at these heights would equate to a 1 in 150 AEP event under current climate conditions or an event which is currently expected only to have a 40% chance of occurring in an 80 year lifespan increasing to a 55% chance of occurring.

Climate Change Scenario 2 represents a 41% increase in rainfall intensity and 1.2 m of sea level rise. This results in 1% AEP riverine water levels approximately 2.1 m and 0.7 m higher than current climate conditions at Dartmoor and Nelson respectively. This is the equivalent of a 1 in 200 AEP event under current climate conditions or an event which is currently expected only to have a 35% chance of occurring in an 80 year lifespan increasing to a 55% chance of occurring.

Increases in flood level for storm tide events for the climate change scenarios are consistent with the amount of sea level rise.

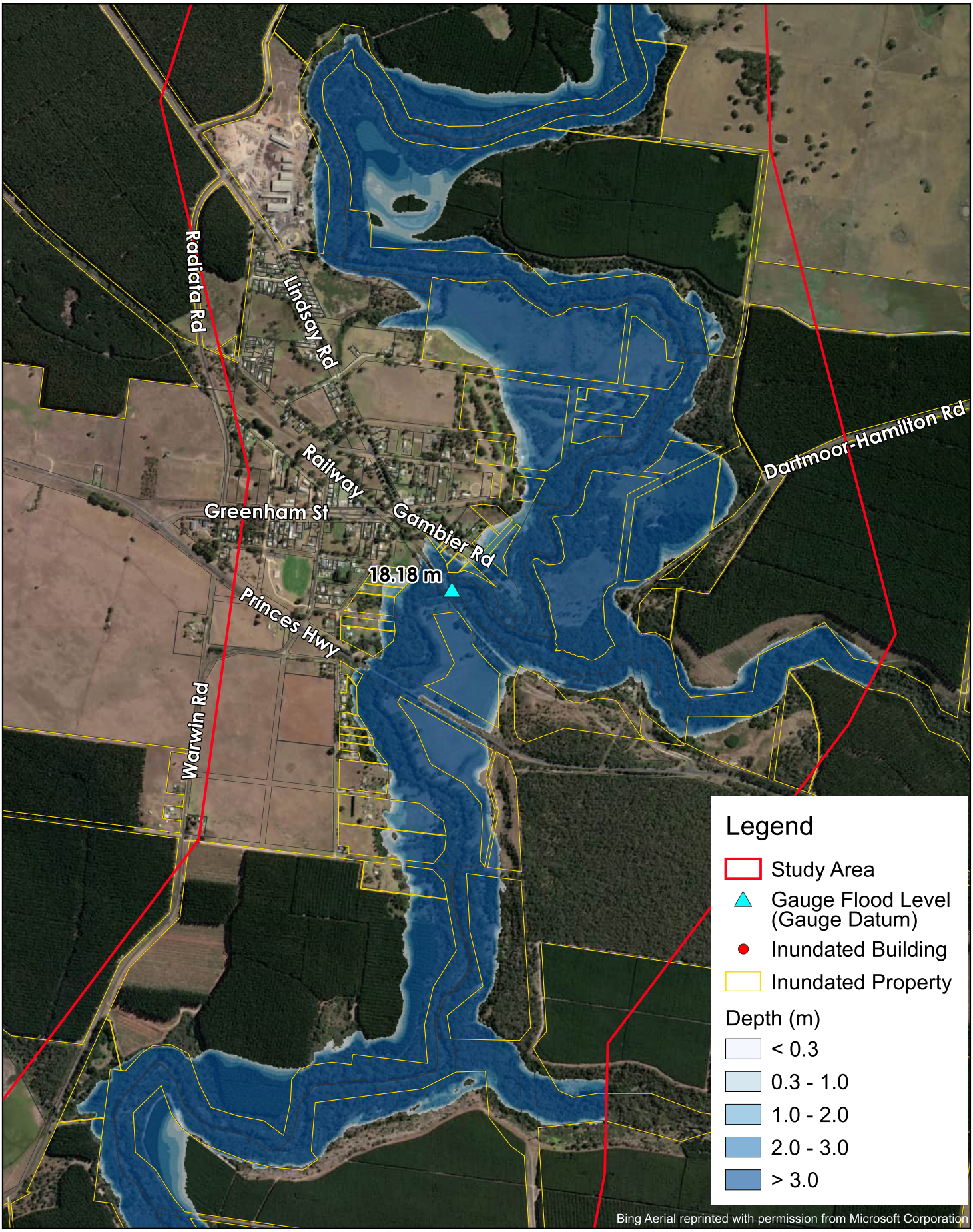
Currently, there are no flood risk related planning controls for Dartmoor and Nelson. The flood risk mapping produced by this Study provides the foundation for addressing this gap in the Glenelg Planning Scheme. For Dartmoor and Nelson this will be achieved through application of the Land Subject to Inundation (LSIO) and Floodway (FO) overlay to the flood prone land in and around both townships and will represent the best available climate science at the time of the Study.

The study has involved assessment of the feasibility of improving flood forecasting and warning arrangements for Dartmoor and Nelson.

The outputs of this Study can also be used to improve the communities' and emergency response agencies' abilities to plan for and respond to flood events. This mainly involves updating the Glenelg Shire Flood Emergency Plan (MFEP) to include flood intelligence or warning information for Dartmoor or Nelson along with improving interpretation and communication of flood risk to the community.

In light of the outcomes of the Study summarised above, the key outcomes of the Study are:

- Thorough documentation of the history of flooding across the Study Area based on the historical information discovered during the study
- Hydrologic (RORB) and hydraulic (TUFLOW) models that are well calibrated to the available historic flood event data providing confidence that the flood risk mapping and flood emergency response planning (flood intelligence) outputs reflect the likely real world extent, depth and velocity of the modelled flood risk scenarios. he calibrated models have enabled:
    - Provision of knowledge and data around the expected effects of climate change (primarily increase in rainfall intensity and rising mean sea level) on flood risk into the foreseeable future
    - Delineation of appropriate extents for land use and development planning controls for incorporation into the Glenelg Shire planning scheme and mitigation of flood risk via the planning system
    - Development of a range of reliable products to support improvement of flood emergency response procedures and actions, including updating of the Municipal Flood Emergency Plan (MFEP)
- Average annual damage (AAD), which represent the average flood damage in present day monetary terms per year that would occur over a long period of time, estimates of $238,000 for riverine events and $23,000 for storm tide events bringing the total AAD estimate up to $261,000
- Improvement of flood forecasting and warning arrangements for the communities of Dartmoor and Nelson is feasible, however the scale of investment should be informed by careful consideration of costs (including long term maintenance) versus benefits



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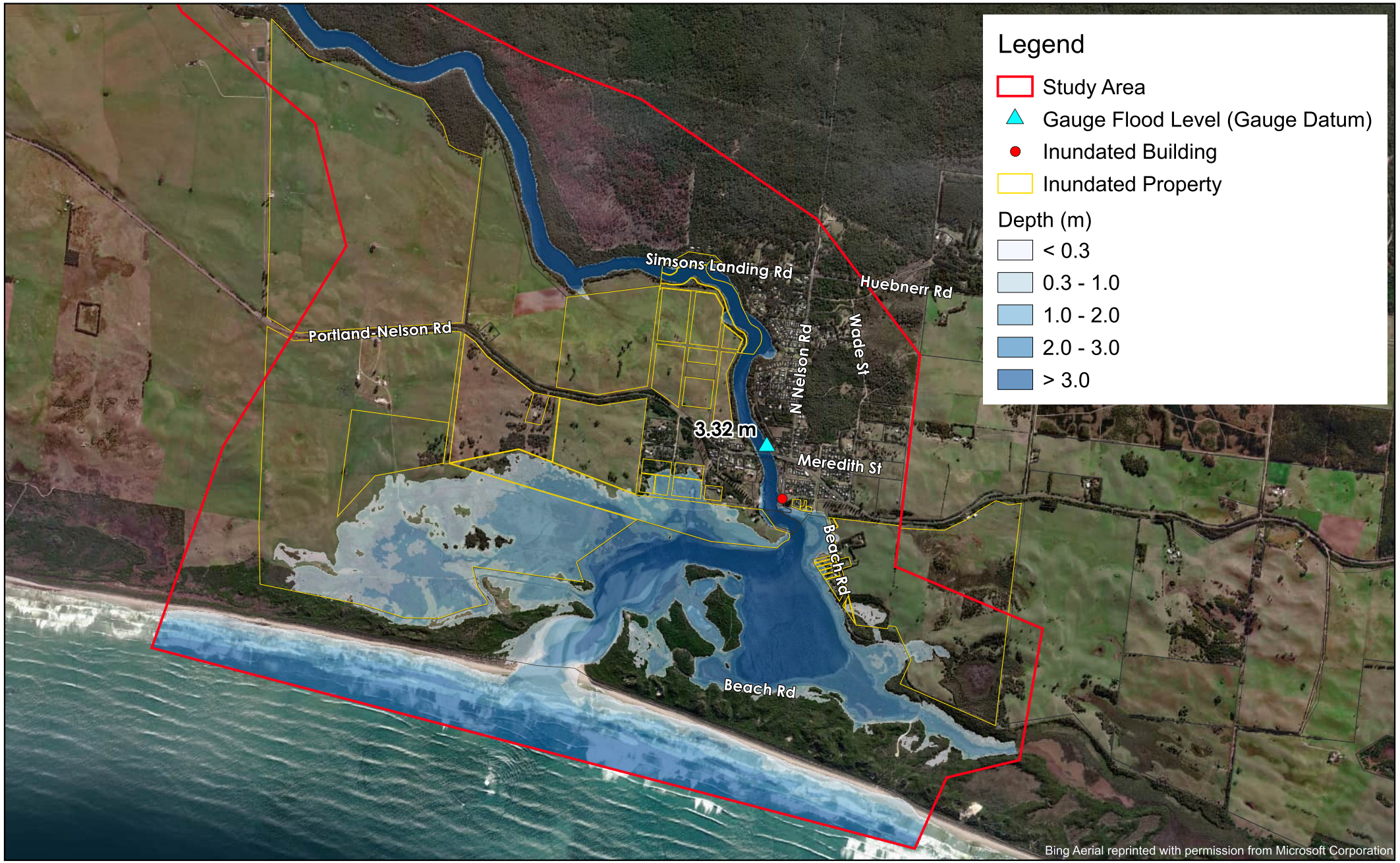
Dartmoor Nelson Flood Study - Current Climate
1% AEP Riverine Peak Flood Depth - Dartmoor

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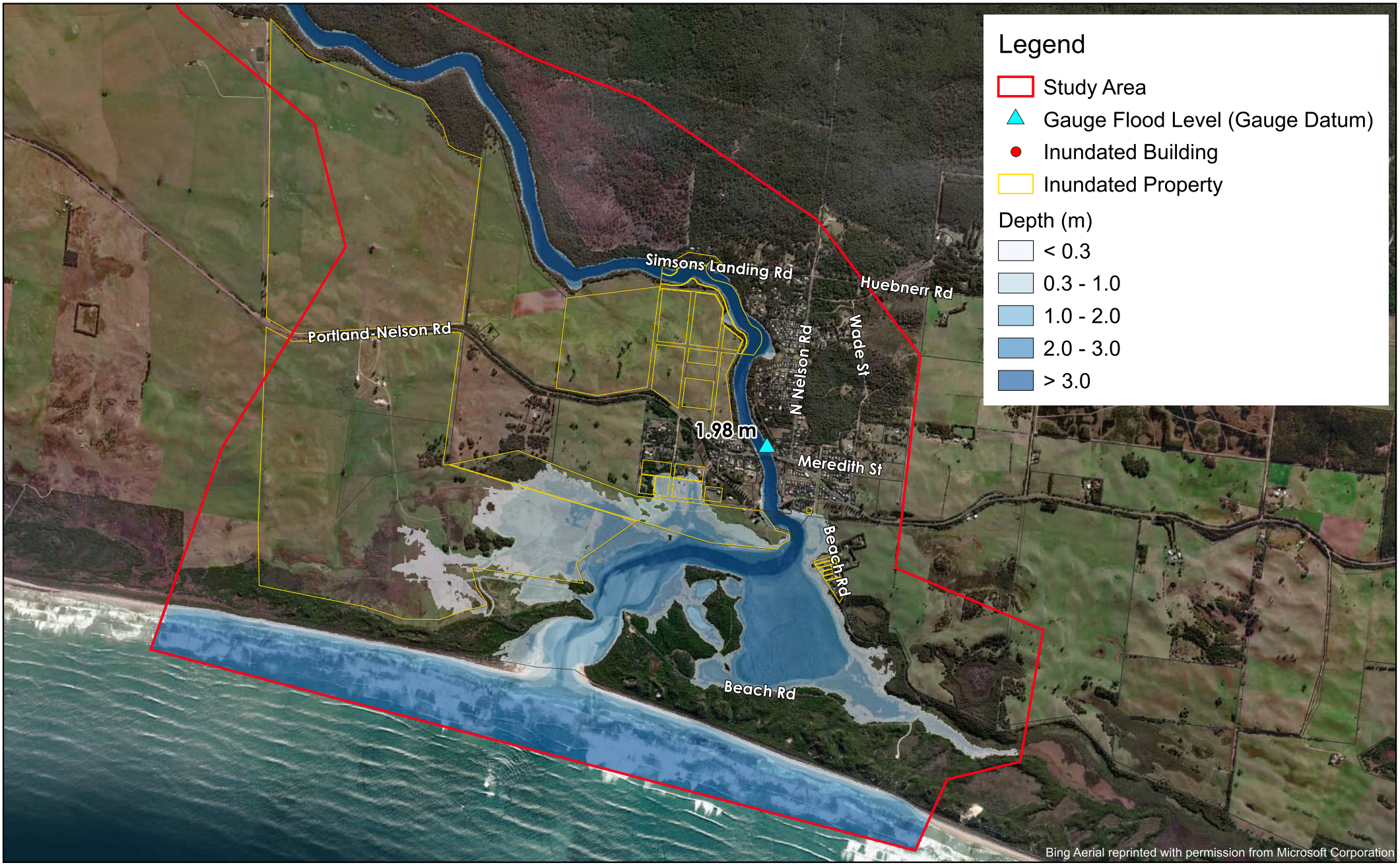
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Title: Dartmoor Nelson Flood Study - Current Climate 1% AEP Storm Tide Peak Flood Depth - Nelson	Figure: 3	Rev: A	0 0.5 1 km	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.venantsolutions.com.au
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Definitions

Annual Exceedance Probability (AEP)

The chance of a flood of a given size (or larger) occurring in any one year, usually expressed as a percentage. For example, if a peak flood level of 8 m has an AEP of 10%, it means that there is a 10% chance (i.e. a 1 in 10 chance) of a peak flood level of 8 m been equalled or exceeded in any one year (also see average recurrence interval).

This investigation has produced flood risk mapping covering the following chances of occurrence in any one year.

AEP (%)	AEP (1 in X)
20%	1 in 5
10%	1 in 10
5%	1 in 20
2%	1 in 50
1%	1 in 100
0.5%	1 in 200
0.2%	1 in 500

Australian Height Datum (AHD)

National survey datum corresponding to about mean sea level.

Average Annual Damages (AAD)

The average flood damage in monetary terms per year that would occur over a long period of time.

Baseflow

The portion of the streamflow that is sustained between precipitation events.

Catchment

The area of land that drains to a particular point.

Design flood

A theoretical flood representing a specific likelihood of occurrence (for example the 1% AEP flood).

Estuary

The lower sections of rivers where they meet the sea and the fresh river water mixes with the salt water of the ocean.

Flood behaviour

The pattern / characteristics / nature of a flood.

Flood depth

The height or elevation of floodwaters above ground level.

Flood level

The height or elevation of floodwaters relative to a datum (typically the Australian Height Datum).

Flood model

The model developed for this Study inclusive of both the RORB hydrologic and TUFLOW hydraulic models.

Highest Astronomical Tide	The highest level of water which can be predicted to occur under any combination of astronomical conditions.
Hydraulics	The study of water flow in rivers, estuaries and coastal systems.
Hydrograph	A graph showing how a river or creek's discharge changes with time.
Hydrology	The study of the rainfall-runoff process in catchments.
Intermittently closed and open estuary	A distinct type of estuary with a tendency for the ocean entrance to close during periods of low freshwater inflow. Also known as intermittently closed and open lakes and lagoons (ICOLLs).
LiDAR	Remote (aerial) sensing method that uses light in the form of a pulsed laser to measure distance to the Earth. This is used to generate detailed 3D topographical information across an area.
Mean Higher High Water	The mean of the higher of the two daily high waters over a period of time.
Probable Maximum Flood	The largest flood that could conceivably be expected to occur at a particular location.
RORB	Rainfall-runoff routing computer model for hydrologic analysis of catchment runoff.
TUFLOW	Fully two-dimensional and one-dimensional unsteady flow hydraulic computer modelling software.
Velocity	The speed at which the floodwaters are moving.

Abbreviations

AAD	Average Annual Damages
AHD	Australian Height Datum
BoM	Bureau of Meteorology
CC1 and CC2	Climate Change Scenarios 1 and 2
Council	Glenelg Shire Council
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEECA	Department of Energy, Environment and Climate Action
DEM	Digital Elevation Model
DTP	Department of Transport and Planning
GHCMA	Glenelg Hopkins Catchment Management Authority
EEMSS	Estuary Entrance Management Support System
HAT	Highest Astronomical Tide
ICE	Intermittently closed and open estuary
IRI	Increased Rainfall Intensity
LFG	Local Flood Guide
MFEP	Glenelg Shire Flood Emergency Plan
MHHW	Mean Higher High Water
SLR	Sea Level Rise
SSP	Shared Socioeconomic Pathway
TFWS	Total Flood Warning System
The Study	Dartmoor and Nelson Flood Study
The Catchment	The Glenelg River catchment to the estuary mouth at Nelson
VicSES	Victoria State Emergency Service
WMIS	Water Management Information System

1 Introduction

This report provides a summary of the Dartmoor and Nelson Flood Study (the Study). This information summarised in this report is detailed in the supporting technical reports:

- Data Review Report (Venant Solutions 2023)
- Flood Modelling Report (Venant Solutions 2024a)
- Flood Damages Report (Venant Solutions 2024b)
- Flood Warning Feasibility Assessment Report (Venant Solutions 2024c)

The reporting is supported by Study deliverables including:

- Calibrated and validated RORB hydrologic and TUFLOW hydraulic models and results
- GIS flood mapping and Spatial Data Specification outputs
- Flood animations
- Draft planning scheme overlay mapping
- Municipal Flood Emergency Plan updates

1.1 Background

The townships of Dartmoor and Nelson are located on the banks of the Glenelg River with populations of 299 and 191 as of the 2021 Census respectively. However, the population of Nelson significantly increases in the summer months due to tourist visitors.

Despite the flood risk being relatively well known for the upper and middle reaches of the Glenelg River catchment, with several detailed flood studies completed in the last decade, little information existed prior to this Study to provide a thorough understanding of flood risk in Dartmoor and Nelson. Dartmoor was identified in the Glenelg Hopkins Regional Floodplain Management Strategy (GHCMA 2017) as requiring improved flood information to be able to accurately assess risk. This is represented by Action 33 in the regional work plan to "*Investigate funding opportunities to undertake flood investigations for Dartmoor and Nelson, and subsequent planning controls*".

This project received grant funding from the Australian Government through the Australian Government Preparing Australian Communities - Local Stream. The Glenelg Shire Council (Council) in partnership with Glenelg Hopkins Catchment Management Authority (GHCMA) have engaged Venant Solutions to undertake the Dartmoor and Nelson Flood Study.

The purpose of this Study has been to utilise contemporary flood modelling methods to produce high reliability data that can be used for flood response, planning and education by achieving the following objectives:

- Updating knowledge and data around impacts of climate change induced increase in frequency of extreme events, sea level rise and storm tide flooding to enable more effective planning for a worsening flood risk profile for Dartmoor and Nelson
- Inserting flood related land use and development controls in the Glenelg Planning Scheme
- Assessing the feasibility for establishing flood alerting/warning arrangements (including for significant storm tide events)
- The provision of flood mapping and intelligence products for the entire project area to inform and develop emergency response planning and heightened community flood resilience
- The provision of reliable flood risk information for insurance purposes

It is recognised that high water levels in the lower Glenelg River resulting from estuary mouth closures impacts on the community at Nelson. However, the focus of this flood study has been to assess flood risk along the lower Glenelg River associated with riverine or storm tide flooding.

1.2 Study Area and catchment description

The Study Area encompasses the townships of Dartmoor and Nelson in the southwest of Victoria, and the 85 km reach of the Glenelg River in between that flows through the Lower Glenelg National Park as shown in (Figure 1-1). The township of Donovans is also located on the Glenelg River approximately 6.5 km upstream of Nelson on the other side of the South Australian. Donovans was therefore included in the Study Area as modelling of this reach of the Glenelg River is required but the production of Study outputs for Donovans is out of the scope of this Study given management arrangements for this area are the responsibility of the District Shire of Grant and the South Australian Government.

The Dartmoor township is located on the Princes Hwy at the junction of the Glenelg River and Crawford River. The town is located on the western bank of the Glenelg River with the majority of the town raised well above the river. However, there are lower areas along Gambier Road and Wattle Avenue. There are two significant bridges crossing the Glenelg River in Dartmoor, the Princes Hwy road bridge and the unused railway bridge at the end of the rail trail. There is also a bridge over the Crawford River on the Dartmoor – Hamilton Road.

The Nelson township is located at the mouth of the Glenelg River with most of the town located on the eastern side of the river, with some residences on the western side of the river Figure 1-1). Generally, the town is located above the river channel which is constrained by high banks but there are jetties, boat ramps, and boat sheds on the waters edge. The Nelson Bridge is located in the middle of town on the Portland – Nelson Road which provides a connection between Mt Gambier and Portland.

The Glenelg River, known as the Bochara, is an important place to the Gunditjmara people who are the traditional owners of the land in the Study Area. The river was a permanent source of food and resources through the seasons, as well as an important travel and trade route with resources such as fish, eels, textiles and bush medicines still collected today (GHCMA 2023).

For the majority of the river reach between Dartmoor and Nelson the Glenelg River flows through the Lower Glenelg National Park in which there are several camping sites including; Pines Landing, Wild Dog Bend, Pritchards, Red Gum Landing, Forest Camp North, Forest Camp South, Wilson Hall, Bowds, McLennans Punt, Patterson Canoe Camp, Paterson Walkers Camp, Hutchinson, Lasletts and Princess Margaret Rose Cave Campground along with several other picnic areas. Through this area the river channel is confined by gorges or steep banks for most of its length.

The Glenelg River estuary is the longest in Victoria, extending up to 75 km from its mouth at Nelson to just below Dartmoor (Water Technology 2016). At the river mouth on the eastern side of the channel is the Oxbow Lake which is a wide and shallow tidal bay that is almost cut off from the estuary at low tides by exposed sand shoals. The Glenelg River is an Intermittently Closed and open Estuary (ICE) as sand deposition forms a berm across the estuary mouth, periodically closing off the estuary from the ocean. The estuary mouth is sometimes artificially opened as recorded in the Estuary Entrance Management Support System.

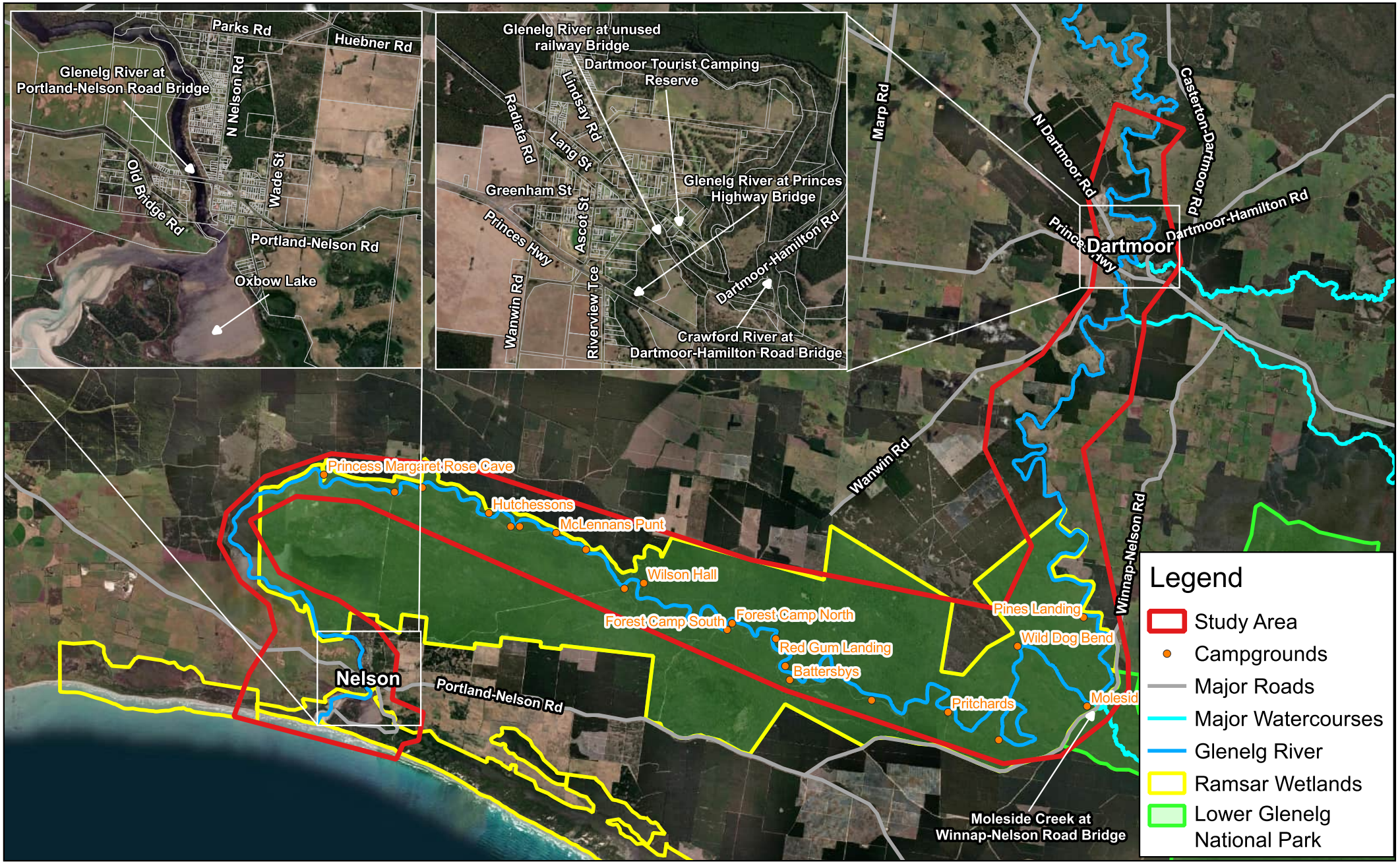
In 2018 the Glenelg River estuary was recognised as a Wetland of International Significance as part of Glenelg Estuary and Discovery Bay Ramsar Site covering the estuary, Oxbow Lake and streamside reserve in Nelson along with the Lower Glenelg National Park west of Nelson – Winnap Road as shown in Figure 1-1.

The Glenelg River catchment (the Catchment) (Figure 1-2) extends from the coast at the Glenelg River mouth up to the Grampians in the northeast covering an area of approximately 12,700 km^2. There are several major tributaries of the Glenelg River including:

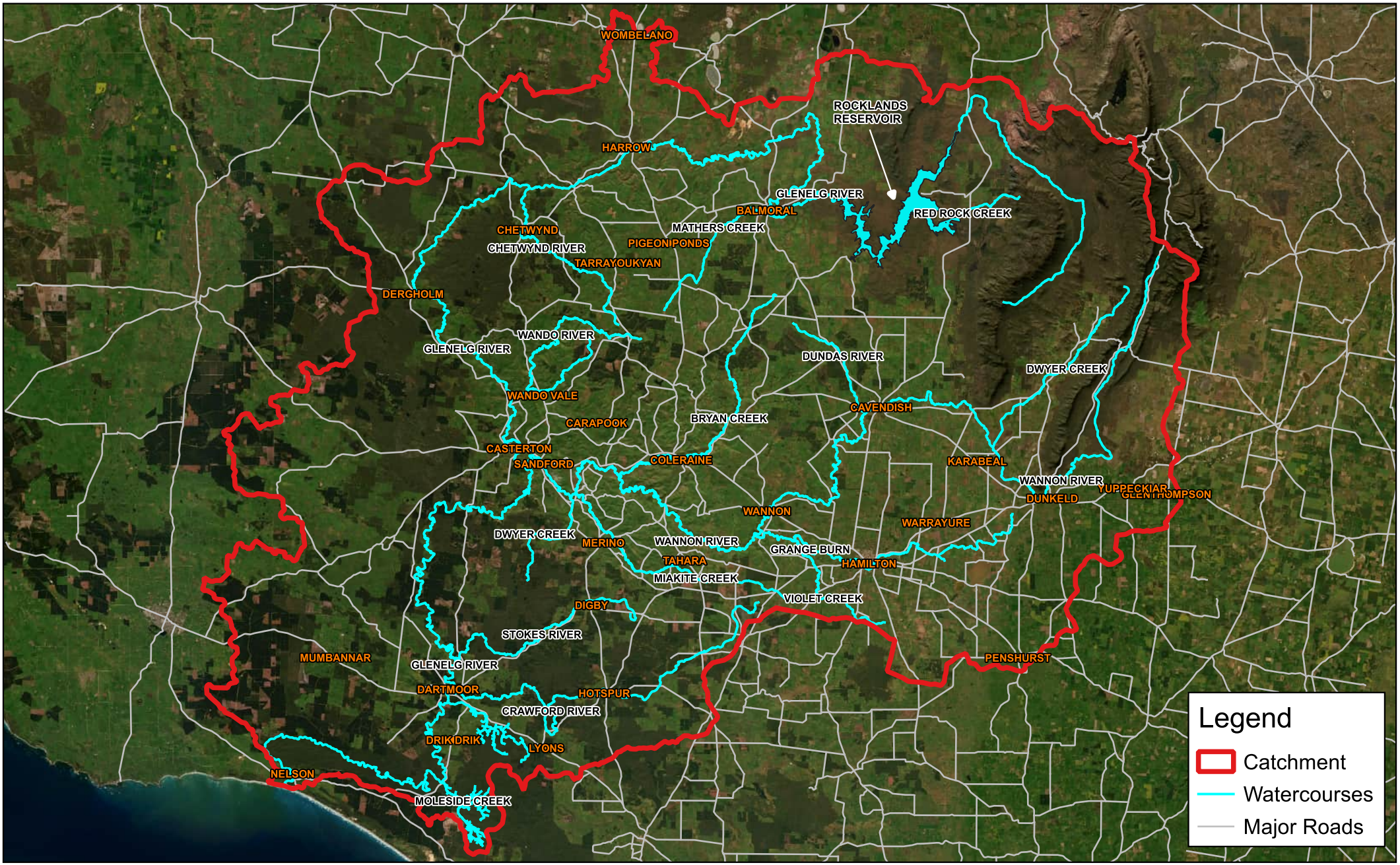
- Red Rock Creek
- Mathers Creek
- Chetwynd River
- Wando River (including tributary Robertson Creek)
- Wannon River (including tributaries Dwyer Creek, Dundas River, Grange Burn, Violet Creek, Bryan Creek, Miatike Creek)
- Stokes River
- Crawford River

The primary landuse within the Catchment beyond the township areas is agriculture (pasture and cropping) though it includes significant areas of National and State Parks and conservation reserves and large areas of plantation, in particular in the lower areas of the catchment around Dartmoor.

There are a number of water supplies in the catchment operated by Wannon Water and GWMWater. This includes the Rocklands Reservoir which has a full supply volume of 296,000 ML. Other smaller storages include Moora Moora Reservoir, Hayes, Hamilton 1 & 2, Hartwichs, Cruckoor, Glenthompson, Glenthompson Railway, Konongwootong and Dunkeld 1, 2 & 3.



Title: Dartmoor & Nelson Flood Study Study Area Layout	Figure: 1-1	Rev: A	0 2.5 5 km	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.VenantSolutions.com.au
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Title: Dartmoor & Nelson Flood Study Catchment Layout	Figure: 1-2	Rev: A	0 12.5 25 km	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.VenantSolutions.com.au
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1.3 History of flooding in Dartmoor and Nelson

While the history of flooding is well documented in the upper Glenelg River catchment, particularly around townships such as Casterton that are known to have a high flood risk, there is limited information on the impact of flooding in the lower catchment including the township areas of Dartmoor and Nelson. This is representative of the nature of the floodplain where the Glenelg River channel and the immediately adjacent low-lying floodplain areas being able to convey flood flows with minimal impact on the community. Except for the river structures in Nelson such as river shed, jetties and boat ramps, the town areas have also been developed mostly on higher ground with the low-lying areas left undeveloped.

However, dating back to 1883 there are several newspaper articles reporting on flooding overtopping the railway, Princes Highway and Dartmoor – Hamilton Road (crossing the Crawford River) bridges in Dartmoor in 1883, 1894, 1906 and 1939. No information on the impact of these events in Nelson could be found.

In March of 1946 the most significant flood event in south-west region of Victoria since European settlement occurred. Following this event the State Rivers and Water Supply Commission prepared a report on the magnitude and impacts of the flood (SRWSC 1946). During this event within a 48 hour period between the 15th and 17th of March up to 250 mm of rainfall fell on the south-western parts of the catchment between Heywood and Hamilton. This resulted in high discharges in the westward flowing tributaries including the Wannon, Stokes and Crawford Rivers ultimately resulting in flood levels at Dartmoor that were approximately 9 feet above the road bridge and 3-4 feet above the rails on the railway bridge. This has been assessed as flood event with an estimated magnitude of ultimately led to a flood event of approximately a 1% AEP event at Dartmoor and Nelson when compared to current climate conditions.

In 1948 water levels and flows in the Glenelg River at Dartmoor started to be recorded allowing for a riverine event flood magnitude history at Dartmoor which would also be representative of the history at Nelson to be developed. Figure 1-3 shows the history of flooding at Dartmoor including an estimate of the 1946 event with the magnitude of design events is shown as a point of comparison. The magnitude of significant events to occur since 1946 in relation to current climate conditions are:

- 1955 – 7% or 1 in 14 AEP
- 1960 – 6% or 1 in 17 AEP
- 1983 – 6.5% or 1 in 15 AEP
- 2016 (largest event since the mid-1990s) – 15% or 1 in 6 AEP

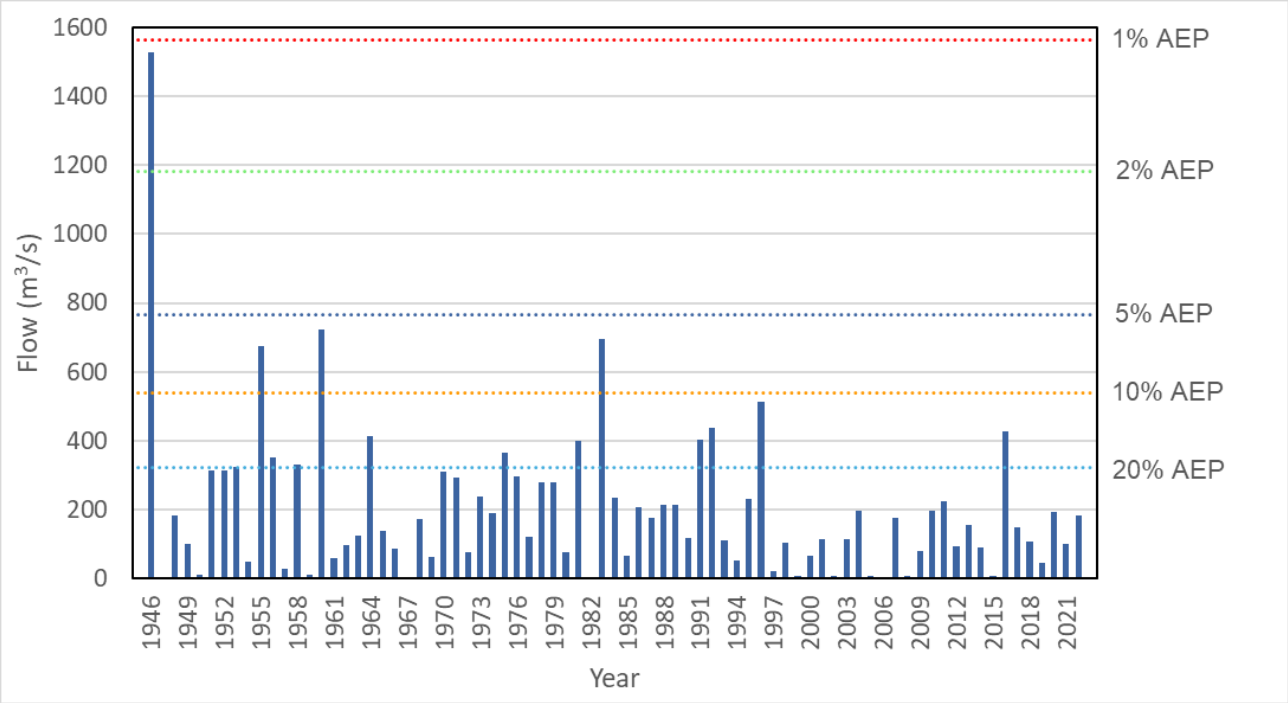


Figure 1-3 History of flooding for Glenelg River at Dartmoor

The history of storm tide flooding in Nelson and further up the Glenelg River estuary is even harder to define with offshore ocean height records not always correlating to levels in the Glenelg River estuary because they do not take into account near shore wave setup (the increase in the mean water level towards the shoreline caused by wave action) or whether the estuary mouth is opened or closed. In 2009 a stream level gauge at Nelson was installed and since then one significant storm tide event in June 2014 was recorded with an estimated magnitude of 20% to 10% AEP. It is worth noting that other significant storm tide events may have occurred while the estuary mouth was closed which would not result in high water levels been observed in the estuary.

It is also important to differentiate between storm tide flooding at Nelson, and high estuary water levels resulting from ponding behind a high estuary mouth berm height when the river mouth is closed which is not included in the scope of this Study.

1.4 Study design event climate scenarios

For this Study flood modelling was undertaken to produce mapping and flood intelligence outputs for the 20%, 10%, 5%, 2%, 1%, 1 in 200 and 1 in 500 Annual Exceedance Probability (AEP) along with the Probable Maximum Flood (PMF) and a Tsunami as presented in Table 1-1 which include scenarios for future climate conditions. The future climate conditions scenarios allow for both assessment of the expected future increases in frequency and severity of storms (termed Increased Rainfall Intensity (IRI) and Sea Level Rise (SLR).

Two climate scenarios for the year 2100 have been assessed, referred to as Climate Change Scenarios 1 (CC1) and 2 (CC2) which represent an estimated 3.6°C and 4.5°C of global warming respectively from the baseline period between 1961 to 1990. These scenarios are based on global mean surface temperature projections from the Sixth Assessment Report of the United Nations Intergovernmental Panel on Climate Change Shared Socioeconomic Pathways (SSPs) as accessed via the Interactive Atlas. 3.6°C of global warming between 2081 and 2100 from 1961 to 1990 temperatures is representative of the best estimate (50th percentile) of the SSP3-7.0 high greenhouse gas emissions scenario and the upper limit estimate (95th percentile) of the SSP2-4.5 intermediate greenhouse gas emissions scenario. 4.5°C of global warming

between 2081 and 2100 from 1961 to 1990 temperatures is representative of the best estimate (50th percentile) of the SSP5-8.5 very high greenhouse gas emissions scenario.

IRI has been defined in accordance with the guidance provided in the Draft Update to Climate Change Considerations Chapter in Australian Rainfall and Runoff: A guide to Flood Estimation (DCCEEW 2023). This results in 32% and 41% IRI from the 1961 to 1990 baseline for Climate Change Scenarios 1 and 2 respectively for storm duration greater than 24 hours.

SLR has been defined in accordance with the guidance provided in the Tide Gauge Trigger Levels for Sea Level Rise Adaptation Pathways (Streamology 2022b). In accordance with current Victorian planning policy SLR of not less than 0.8 metres by 2100 must be planned for so has been adopted for Climate Change Scenario 1. Under Action 3.9 of the Marine and Coastal Strategy (DELWP 2022) the 0.8 m SLR benchmark is currently being reviewed and in the absence of the outcomes of the review Climate Change Scenario 2 uses 1.2 m of SLR representing the upper limit estimate (95th percentile) of the SSP5-8.5 very high greenhouse gas emissions scenario for 2100.

Table 1-1 Design event scenarios

Riverine Flooding				Storm Tide Flooding		
Climate Scenario	**Riverine Flood**	**Coastal Condition**		**Climate Scenario**	**Storm Tide**	**Riverine Flow**
Current Climate **(12% IRI + 0 m SLR)**	20% AEP	MHHW		**Current Climate** **(0 m SLR)**	20% AEP	Median flow (May to September)
	10% AEP				10% AEP	
	5% AEP				5% AEP	
	2% AEP				2% AEP	
	1% AEP				1% AEP	
	0.5% AEP				0.5% AEP	
	0.2% AEP				0.2% AEP	
	PMF				Tsunami	NA
Climate Change 1 (CC 1) **(32% IRI + 0.8 m SLR)**	20% AEP	MHHW		**Climate Change 1 (CC 1)** **(0.8 m SLR)**	20% AEP	Median flow (May to September)
	10% AEP				10% AEP	
	5% AEP				5% AEP	
	2% AEP				2% AEP	
	1% AEP				1% AEP	
	0.5% AEP				0.5% AEP	
	0.2% AEP				0.2% AEP	
Climate Change 2 (CC 2) **(41% IRI + 1.2 m SLR)**	20% AEP	MHHW		**Climate Change 2 (CC 2)** **(1.2 m SLR)**	20% AEP	Median flow (May to September)
	10% AEP				10% AEP	
	5% AEP				5% AEP	
	2% AEP				2% AEP	
	1% AEP				1% AEP	
	0.5% AEP				0.5% AEP	
	0.2% AEP				0.2% AEP	

2 Data review

A comprehensive set of data was collected and reviewed for the Study from a broad range of resources including Council, GHCMA, DEECA, DoT, BoM and publicly available datasets such the Water Measurement Information System (WMIS), Victorian spatial data online portal and the National Library of Australia's Trove newspaper online library. This data was supplemented by information captured during the site visits and field survey.

2.1 Community information

Venant Solutions contacted several members of the Nelson community and the following information was provided:

- 1946 was the last major flood event observed at Nelson
- In September 2016 the water level was 6 - 8 m high at the Moleside landing and the camp ground was under water
- In September 2016 the Nelson boat ramp jetty was 300 mm under water
- In September 2016 at the Wild Dog Bend camping ground the water level was up to the 2nd or 3rd stair from the top of the bank (estimate of 4 – 5 m above normal water level)
- There are concerns regarding rising water levels in the Glenelg River estuary when the river mouth is blocked
- In the future, waterway structures (jetties and boat sheds) should be put on pontoons to minimise damage during floods

2.2 Previous Studies

No detailed flood studies of the lower Glenelg River covering Dartmoor and Nelson have previously been undertaken, however the following key relevant previous studies were identified, reviewed and used in the Study:

- **Casterton Flood Investigations: Floodplain Management Report (Cardno 2011)** and **Glenelg River Regional Flood Mapping (Water Technology 2014)** – The RORB hydrological model parameters derived for these studies which both covered the upper Glenelg River (upstream of Casterton) were used in the RORB model calibration and validation process
- **Understanding Glenelg River Estuary Responses to Freshwater Flows (Water Technology 2016)** - A report on the response to the Glenelg River estuary to freshwater flows which included monitoring of the estuary mouth conditions and was used as input into determine appropriate mouth opening conditions for flood modelling

2.3 Historic flood data

The following historic flood information has been collected and reviewed in addition to the information provided by the community:

- A flood level for the March 1946 event from Victorian Flood Database (VFD) between the Dartmoor railway bridge and Princes Highway bridge with a level of 18.65 m AHD
- During the Site Visit what appears to be a flood level from the September 2016 flood event was found painted on the piers of the Princes Hwy bridge in Dartmoor (Figure 2-1)
- Report on Western District Floods of March 1946 prepared by the State Rivers and Water Supply Commission (SRWSC 1946). Included in the report is the following relevant information:
    - A summary of the meteorological conditions including rainfall records

- A summary of the flood behaviour throughout the Glenelg River catchment, most notably:
  - Flooding in Glenelg River was primarily due high discharges in the westward flowing tributaries including the Wannon, Stokes and Crawford Rivers
  - At Dartmoor peak flood levels were recorded when flow from the Wannon River arrived rising to levels of approximately 9 feet above the road bridge and 3-4 feet above the rails on the railway bridge including an estimated discharge
  - At the Moleside river camp the water rose just over 30 feet
- The National Library of Australia's Trove newspaper online library (https://trove.nla.gov.au/newspaper/) was searched along with the Google News Archive (https://news.google.com/newspapers) and other media websites and reports of flooding in Dartmoor and Nelson were found dating back to 1883



Figure 2-1 Photo of mark believed to be from September 2016 event

2.4 Topographical data

The following digital elevation models (DEM) datasets were used in the Study:

- **VicMap Elevation DEM 10m** – 10 m grid with a stated accuracy of +/- 5 m covering the whole Catchment. This DEM is too course for accurate hydraulic modelling. This dataset was for determining catchment and sub-area boundaries and slopes in the hydrologic model
- **2009-10 ISC Rivers LiDAR** - Captured in 2009/10 with a stated vertical accuracy of +/- 0.2 m at 68% confidence provided as 1 m DEM. This dataset was used in the hydraulic model to represent the banks and floodplain of the Glenelg River from the upstream limit of the Study Area to approximately Donovans. Following a review of the vertical accuracy of this dataset it was lowered by 300 mm

- **VicMap Elevation Coastal 1m DEM** - Captured in 2007/09 with a stated vertical accuracy of +/- 0.1 m at 68% confidence provided as 1 m DEM. This dataset was used in the hydraulic model to represent the banks and floodplain of the Glenelg River from north the Nelson township to the coast
- **National 5m DEM** - DEM covering the entire Study Area created from LiDAR datasets with at least vertical accuracy of +/- 0.3 m at 95% confidence at a 5 m resolution. This dataset was used in the hydraulic model to infill the gap in 2009-10 ISC Rivers LiDAR and VicMap Elevation Coastal DEM between Donovans and Nelson. This dataset was also used in the hydraulic model represent the outer floodplain limits
- **The Victorian Bathymetric 2.5 m DEM** - Captured in 2007 with a stated vertical accuracy of +/- 0.5 m at 95% confidence provided as 2.5 m DEM. This dataset was used in the hydraulic model to represent the coastal bathymetry
- **Gippsland Ports Bathy 2 m DEM** - Gippsland Ports bathymetric survey of the estuary between 27 July 2015 and 31 July 2015 extending from Oxbow Lake to the northern Lower Glenelg National Park provided at a 2 m resolution. This dataset was used in the hydraulic model to represent the Glenelg River channel

2.5 Stream, reservoir, tide, estuary and rainfall data

The following stream, reservoir, tide, estuary and rainfall datasets were collected to inform the development and calibration of the flood model:

- Stream gauge level and flow data was sourced for 45 active and closed sites in throughout the catchment
- Head gauge records were obtained for the Rocklands Reservoir and was supplemented by details of the spillway configuration and the reservoir level – storage relationship provided by GWMWater. GWMWater also provided advice on the storage management rules
- Hourly tide level, including weather data, records were obtained for the Portland (61410) (Figure 2 5) tide gauge data from the BoM for the period from 1991 to current. 2022 tide level predictions for Portland and Port Fairy (61390) were also provided
- Glenelg River Estuary Entrance Management Support System (EEMSS) records between 2007 and 2022 detailing estuary water levels and mouth opening conditions
- Daily (77 stations) and sub-daily rainfall (25 stations) data was sourced for active and closed stations in and near the Catchment. This data was sourced from several locations:

2.5.1 Glenelg River at Dartmoor stream gauge Rating curve review

The rating curve for the Glenelg River at Dartmoor (238206) stream gauge was most recently updated on 9 August 2021. This rating curve is extrapolated from a gauge level of 8.28 m as shown in Figure 2-2. In total 624 physical flow gaugings have been taken at this gauge since it was opened in 1948, with the highest flow gauging taken at a level of 13.37 m on 11 September 2001.

To verify the published rating curve the TUFLOW model was used to output a water level-flow series at the gauge location. A comparison of the published rating curve to the model rating curve is shown in Figure 2-2 with the modelled level-flow series providing a close match to the published rating curve up to a gauge level of approximately 8.4 m. Above this level the model indicates that for a given gauge level there is significantly more flow. This is often found when comparing published rating curves to hydraulic model results due to difficulties in obtaining physical flow gaugings during flood events. However at this location it is believed to be more of a result of historic high flow gaugings not been used to derive the current published rating curve.

Based on the above assessment the rating curve was revised for gauge levels above 8.4 m AHD for use in the in the at-Site Flood Frequency Analysis (FFA) and model calibration.

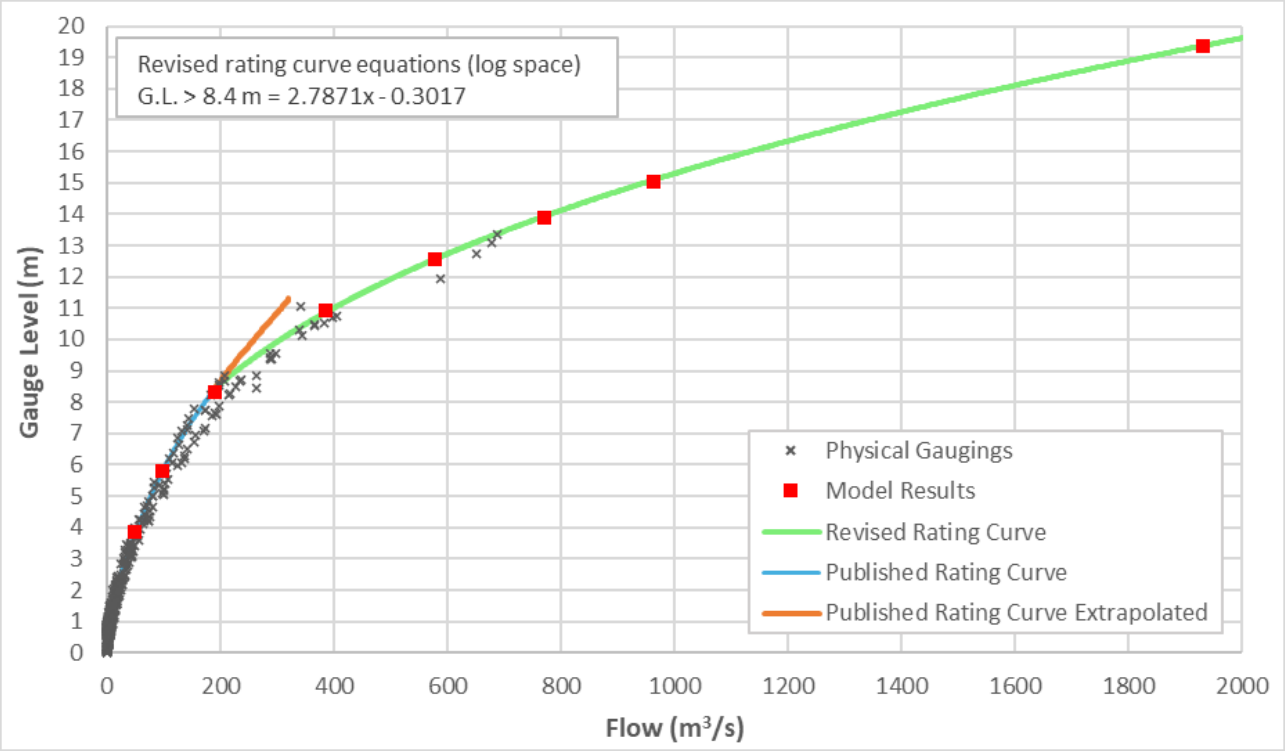


Figure 2-2 Glenelg River at Dartmoor revised rating curve

2.6 Hydraulic structures

There are five bridges located on river and creek crossings throughout the Study Area. Information on these structures was obtained from the Department of Transport and Planning (DTP) and where additional information was required field survey was captured. Refer to Section 2.9 for further details of the field survey and Section 3.3.1 for a description of which bridges are represented in the hydraulic model.

2.7 GIS data

GIS data was provided by Council and sourced from the Victorian Spatial Datamart online portal. The GIS data sourced includes:

- **Administrative Boundaries**
- **Features of Interest** – Used to identify critical infrastructure for developing flood intelligence outputs
- **Major Bridge and Culverts** – Used to identify major bridges and culverts in the Study Area
- **Planning Zones and Overlays** - Used to define catchment landuse to aid in determining catchment fraction imperviousness and surface roughness
- **Property Parcels** - Used to populate flood intelligence outputs and undertake economic flood damages assessment
- **Watercourse** - Used to identify and present waterways for mapping products

2.8 Site visit

Venant Solutions, accompanied by Council undertook a site visit on 12 August 2022. Areas of interest were visited including the key hydraulic structures. These site visits allowed Venant Solutions to gain an understanding of the Study Area, identify flood marks, identify and measure structures and obtain a photographic record.

2.9 Field survey

Field survey was captured to fill the identified data gaps including:

- Confirmation of the Glenelg River at Dartmoor gauge zero level in m AHD
- Survey of the 2016 flood level mark under the Princes Highway bridge in Dartmoor
- Details of four bridges where appropriate details were not available in the information provided by the DTP (Section 2.6)
- Road centreline levels at seven locations to confirm the vertical accuracy of the available LiDAR data

3 Flood modelling

A calibrated and validated flood model has been developed for this Study using the RORB hydrologic and TUFLOW hydraulic flood modelling packages. The purpose of the RORB model is to convert rainfall to runoff for a given probability to provide catchment flow rates and timing. The purpose of the TUFLOW model is to represent the physical characteristics of the flow and ocean levels such as flood extent, level and velocity across the Study Area. The flood model has been developed in accordance with the guidance and parameters provided in the 2019 release of Australian Rainfall and Runoff (ARR 2019) (Ball, et al. 2019) and the Victorian Guideline for Modelling the Interaction of Catchment & Coastal Flooding (Streamology 2022a).

The RORB and TUFLOW models have been calibrated and validated to historical riverine and storm tide events and a good match between the historic information and the model outputs was achieved providing confidence that flood modelling can produce reliable flood risk and mapping outputs. Further details are provided in Section 3.1.3 and Section 3.3.2.

Design event modelling has been defined by validating Monte Carlo flood frequency analysis results to the at-Site Flood Frequency Analysis (FFA) results. This allows for higher reliance on the at-site FFA for more frequent events (i.e. 2% AEP and more frequent) where the uncertainty bounds are smaller, while using a probabilistic method for rarer events.

The storm tide design events were derived from using extreme value analysis of the residuals at the Portland tide gauge. A 12% factor of offshore wave heights was used to represent wave setup. The underlying lunar tide levels are those from Port Macdonnell.

3.1 Hydrologic modelling

3.1.1 Glenelg River at Dartmoor flood frequency analysis

The at-Site FFA for the Glenelg River at Dartmoor gauge was undertaken in the Flike software package. Streamflow records are available at the gauge from 1948 to the present day allowing for an annual maximum flow series of the available annual maximum flow series of 75 years. Data availability was generally complete with the exception of the summer and autumn months of 1963 and 1964. From 1948 to 1973 only mean daily flow was available so a linear regression was used to scale up the mean daily flows to peak flows. It was confirmed that calendar year provides a good representation of water year.

The 1946 flood event was the largest flow event at Dartmoor since records of flooding were first identified in 1883 with a flow estimate derived from TUFLOW validation of 1,526 m^3/s. The 1946 event was included in annual maximum flow series. Censored information was also included in Flike representing the assumption that there were no events larger than the 1946 event between in the 63 year period from 1883 to 1946.

As recommend in ARR 2019, low flows were censored from the dataset to ensure that these did not unduly affect the fit of the flood frequency curve. The Log Pearson Type III parameters derived from a Regional Flood Frequency Estimate (RFFE) were used as prior information to the Bayesian framework in Flike.

The results of the FFA are shown in Table 3-1 and Figure 3-1 with the best fit achieved using the log Pearson Type III with prior parameter information probability model.

Table 3-1 FFA results for Glenelg River at Dartmoor

AEP	Expected Flow (m^3/s)	Lower 90% Confidence Limit Flow (m^3/s)	Upper 90% Confidence Limit Flow (m^3/s)
20%	296	244	365
10%	457	366	587
5%	659	510	883
2%	1,000	741	1,415
1%	1,325	952	1,947
1 in 200	1,718	1,196	2,619
1 in 500	2,361	1,584	3,772

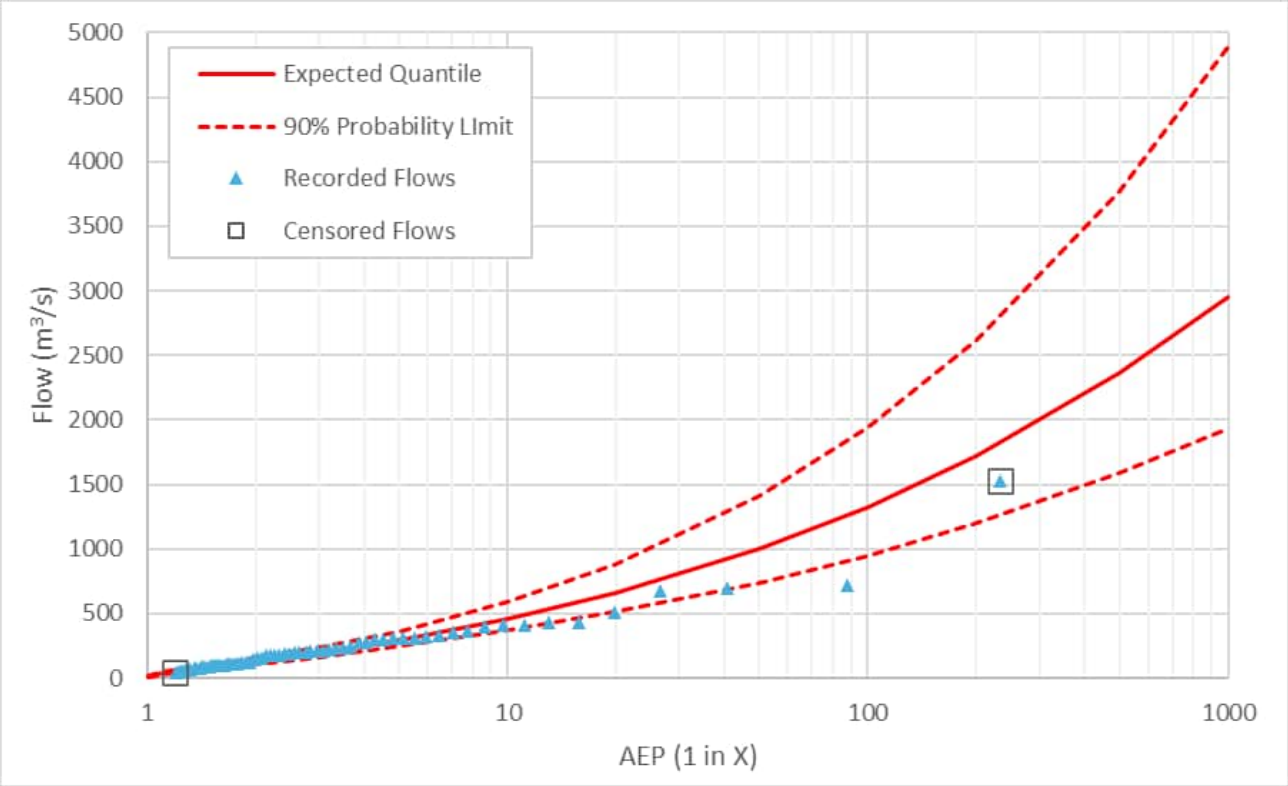


Figure 3-1 FFA curve for Glenelg River at Dartmoor

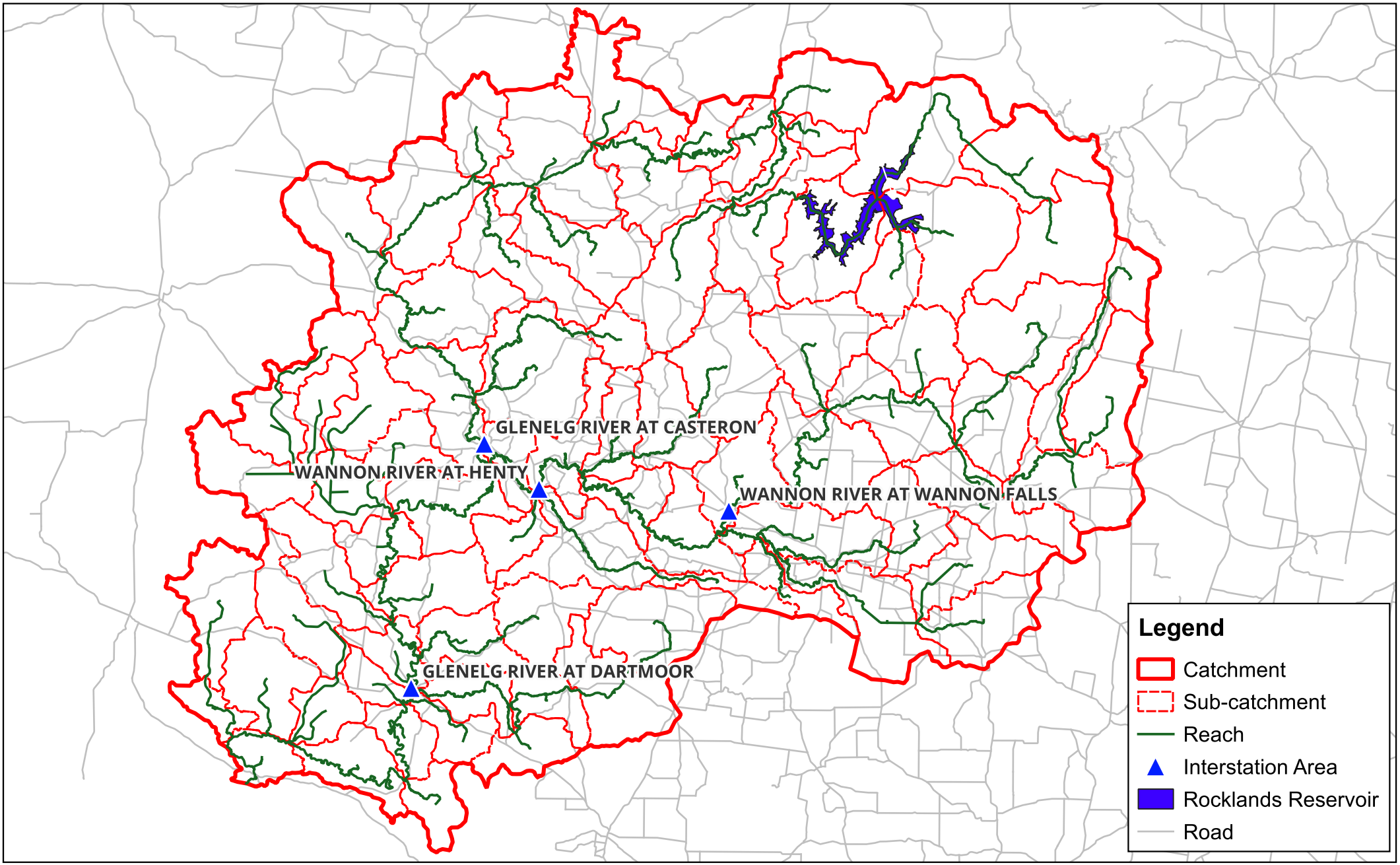
3.1.2 RORB model development

As shown in Figure 3-2 the RORB model covers the entire Glenelg River catchment. For this Study delineation into sub-catchments was performed to ensure sufficient sub-catchment representation to provide suitable flow estimates upstream of the stream gauges used in the calibration and validation process (Section 3.1.3).

RORB Reach Type 1, representing natural channels, were used throughout the model except for those in the Rocklands Reservoir which were modelled as Reach Type 4, representing drowned reaches.

It was assumed that the catchment consists entirely of pervious area. This is consistent with standard modelling approaches for primarily rural / conservation area catchments, especially in a catchment such as the Glenelg River catchment where the township areas make up a very small percentage of the total catchment area.

The Rocklands Reservoir, which is the storage that could potentially influence flood flows in the lower Glenelg River catchment, was represented in the RORB model (Figure 3-2) with a storage node using a weir formula and a height – storage relationship provided GWMWater.



Title: Dartmoor & Nelson Flood Study
RORB Model Layout

Figure: 3-2

Rev: A

0 12.5 25 km

This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.

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By: LD

Oct 2023

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3.1.3 RORB model calibration and validation

The RORB model routing parameters were calibrated to the September 1983 and September 2016 flood events and validated to the March 1946 flood event. All calibrations took place within a joint calibration framework, where historical estimations from the RORB model were tested in the TUFLOW model, the results checked and both models adjusted as necessary.

The results of the calibration and validation indicate that overall the RORB model represents the rainfall-runoff characteristics of the Catchment and confirmed that in the upper Glenelg River catchment (upstream of Casterton) the routing parameters used in Water Technology (2014) are appropriate. A comparison of the recorded and modelled flows at the stream gauges is shown in Figure 3-3 and Figure 3-4 for the September 1983 and September 2016 events respectively.

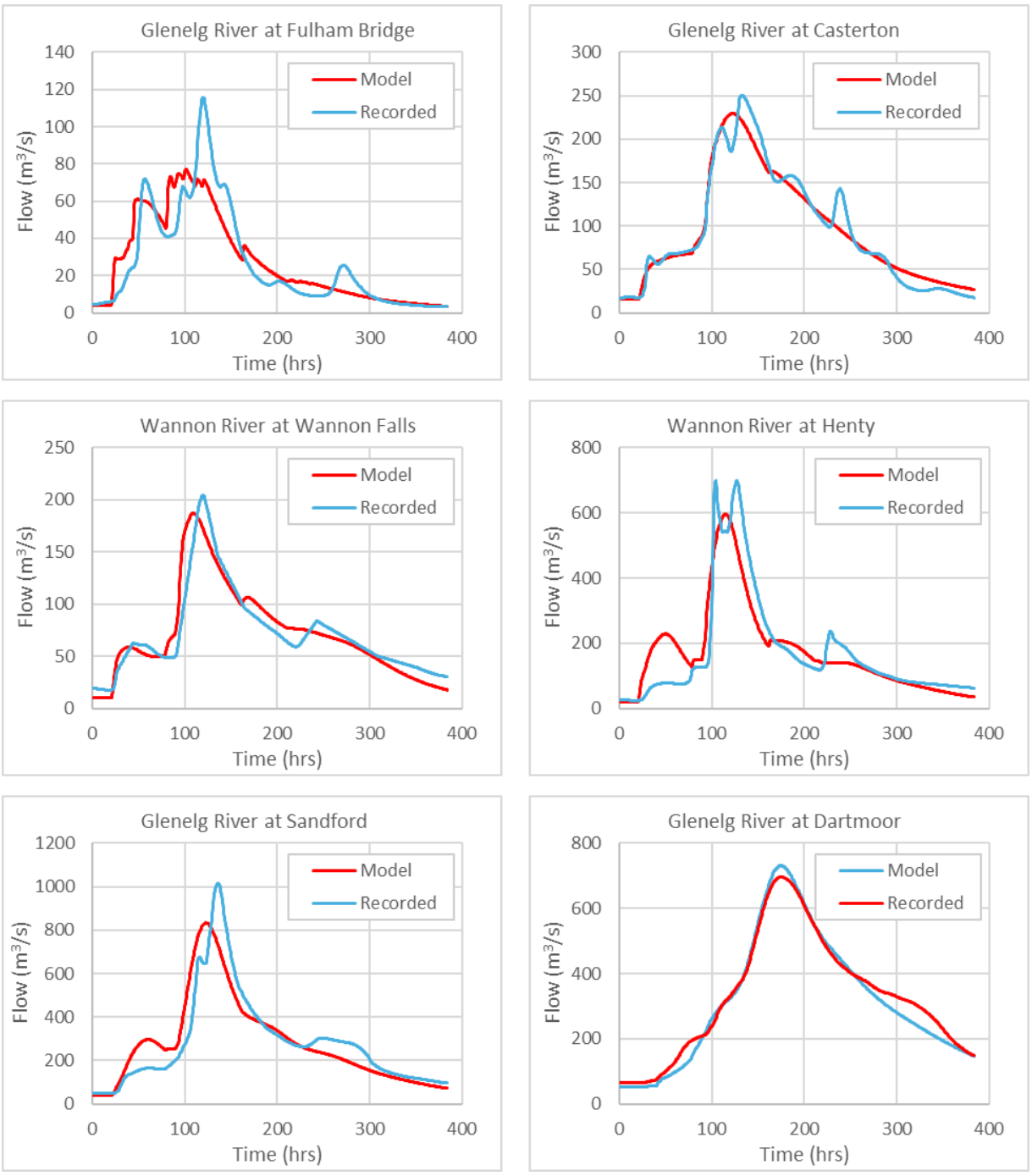


Figure 3-3 September 1983 calibration event hydrograph comparison

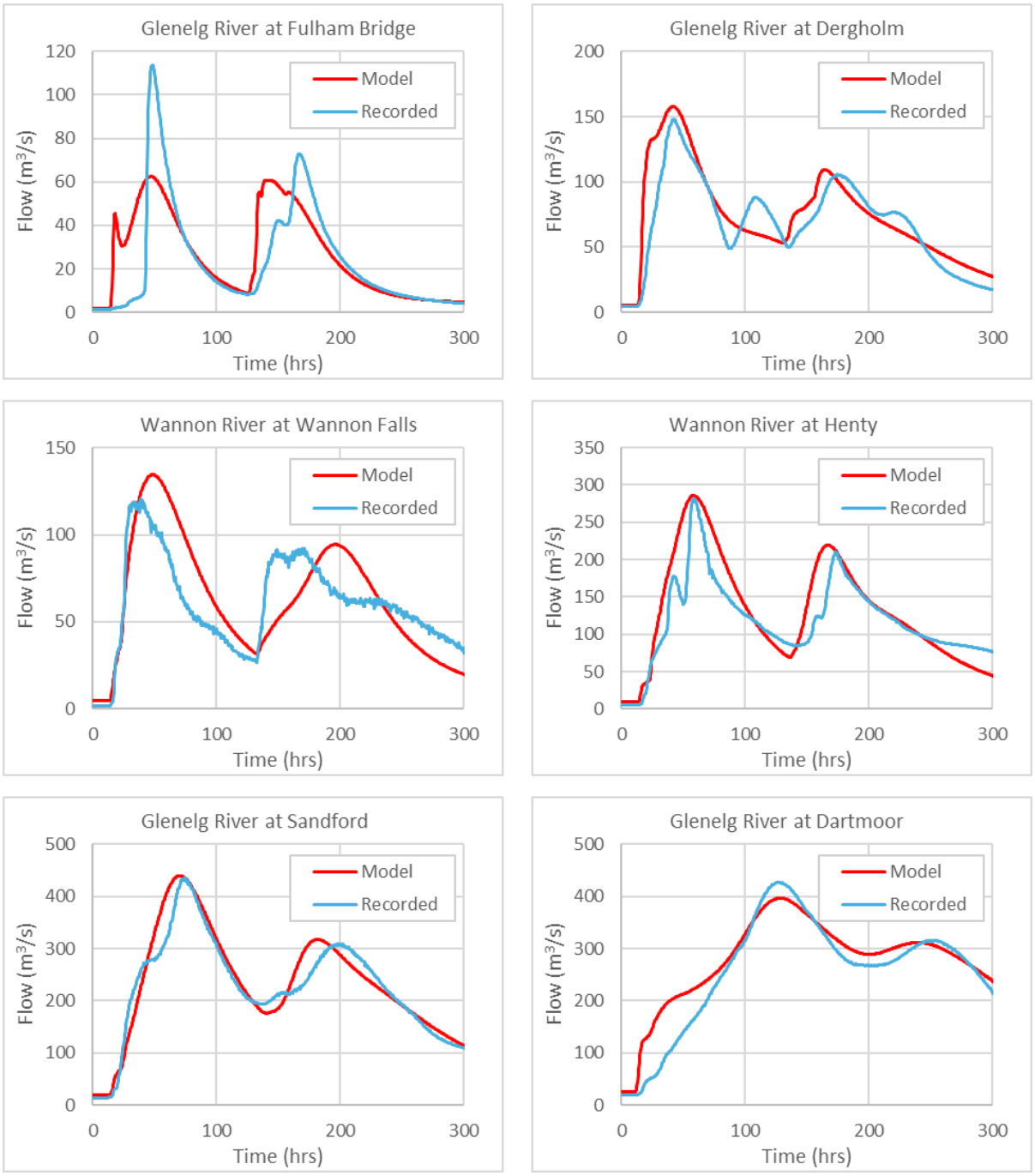


Figure 3-4 September 2016 calibration event hydrograph comparison

3.1.4 Design event modelling

Design event modelling has been undertaken for the 20%, 10%, 5%, 2%, 1%, 1 in 200 and 1 in 500 AEP current and future climate events along with Probable Maximum Precipitation (PMP) (refer to Table 1-1 for full list of design events) to provide inflows into the hydraulic model. The procedures in ARR 2019 were followed for the creation of design storms.

The design event rainfall was defined by the Intensity-Frequency-Duration (IFD) curves published the Bureau of Meteorology (BoM) were used to generate design rainfall depths for events from 12 hours to 168 hours in duration and from 63.2% AEP to 1 in 2,000 AEP. The BoM IFDs were published in 2016 and best represent the climate period between 1961 and 1990. To represent current climate conditions IFDs were derived via the methodology outlined in the Draft updates to the Climate Change Considerations chapter in Australian Rainfall

and Runoff guidelines (DCCEEW 2024). The SSP5-8.5 Current and near-term (2021-2024) scenario was used as it is the climate scenario that best represents emissions to date (Schwalm, et al. 2020).

The Generalised Southeast Australia Method (GSAM) (BoM 2003) was used to develop PMP rainfall depth estimates for durations 24 hours to 72 hours.

Design flows have been defined by validating Monte Carlo flood frequency analysis results using the 2016 IFDs to the at-Site FFA results at the Glenelg River at Dartmoor gauge. The validation was achieved by varying the initial and continuing losses. Weighting was given to validating the Monte Carlo flood frequency analysis results to the FFA results at more frequent events (10% to 1% AEPs) where the uncertainty bounds are smaller as a result of the length of available gauge records.

The critical events and design event flows were selected using the ensemble modelling approach and accounted for the influence of climate change to current conditions regarding both increased rainfall intensity and the expected increase in initial and continuing loss resulting from an overall “drying” of the Catchment. The resulting design event peak flows, hydrograph volumes and critical storm events are presented in Table 3-2 with hydrographs at the Glenelg River at Dartmoor gauge presented in Table 3-2.

Table 3-2 Glenelg River at Dartmoor RORB design event peak flows, volumes and critical storm

Event	Peak Flow (m^3/s)	Hydrograph Volume (m^3)	Critical Duration (hr)	Critical Temporal Pattern
20% AEP	323	$1.44x10^8$	24	8
10% AEP	539	$2.37x10^8$	24	1
5% AEP	765	$3.29x10^8$	24	1
2% AEP	1,181	$5.79x10^8$	36	1
1% AEP	1,562	$7.31x10^8$	36	8
1 in 200 AEP	2,119	$9.80x10^8$	48	8
1 in 500 AEP	2,978	$1.30x10^9$	48	2
PMF	15,889	$5.32x10^9$	72	GSAM

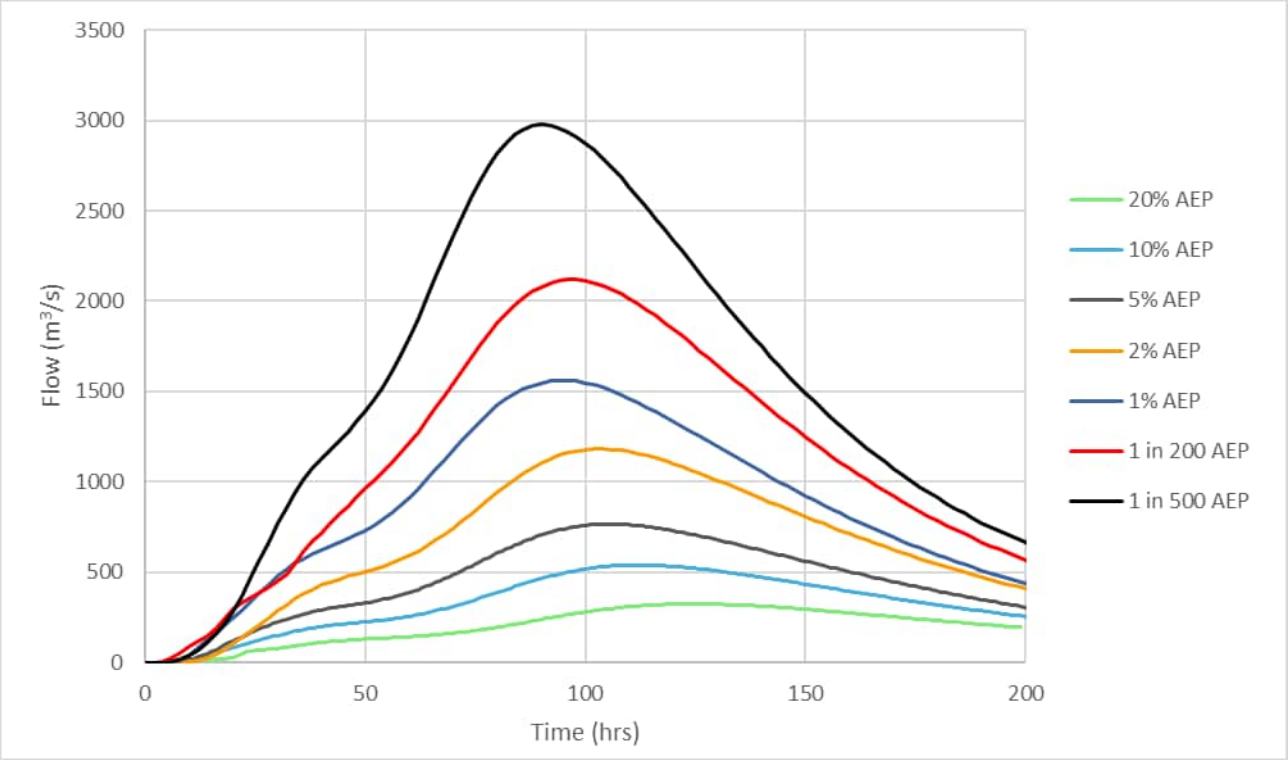


Figure 3-5 Glenelg River at Dartmoor design event flow hydrographs

3.1.4.1 Climate change

The Climate Change 1 and 2 scenario (refer to Section 1.3) IFDs were derived via the methodology outlined in the draft update to the ARR 2019 climate change guidelines (DCCEEW 2024). The resulting Increase in Rainfall Intensity (IRI) were 32% and 41% for the 2100 SSP3-7.0 (CC1) and SSP5-8.5 (CC2) climate scenarios respectively relative to the ARR 2016 IFDs.

Design event peak flows, hydrograph volumes and critical storm events for the Climate Change 1 and Climate Change 2 scenarios are presented in Table 3-3 and Table 3-4 respectively. A comparison of the Climate Change 1 and Climate Change 2 hydrographs at the Glenelg River at Dartmoor to current climate conditions are presented in Figure 3-6 and Figure 3-7 respectively.

For the Climate Change 1 scenario peak flows are increased by between 24% for the 20% AEP event and 24% for the 1 in 500 AEP event. For the Climate Change 2 scenario peak flows are increased by between 37% for the 20% AEP event and 33% for the 1 in 500 AEP event. As shown in Figure 3-7 this makes the Climate Change 2 scenario peak flows equivalent to the next assessed less frequent event peak flow. For example, the 10% AEP Climate Change 2 peak flow is similar to the current climate 5% AEP peak flow.

Similar percentage increases in hydrograph volume as for peak flow are observed for the Climate Change 1 and 2 scenarios and for the 18.5 IRI scenario hydrograph volumes are equivalent to the next assessed less frequent event hydrograph volume noting some differences between storm event critical durations.

Table 3-3 Glenelg River at Dartmoor RORB CC1 design event peak flows, volumes and critical storm

Event	Peak Flow (m^3/s)	Flow Increase (%)	Hydrograph Volume (m^3)	Volume Increase (%)	Critical Duration (hr)	Critical Temporal Pattern
20% AEP	402	24%	$1.78x10^8$	24%	24	8
10% AEP	655	22%	$2.85x10^8$	20%	24	1
5% AEP	946	24%	$3.99x10^8$	21%	24	1
2% AEP	1,423	20%	$6.81x10^8$	18%	36	7
1% AEP	1,922	23%	$8.75x10^8$	20%	36	8
1 in 200 AEP	2,553	20%	$1.13x10^9$	15%	48	5
1 in 500 AEP	3,644	22%	$1.55x10^9$	19%	48	2

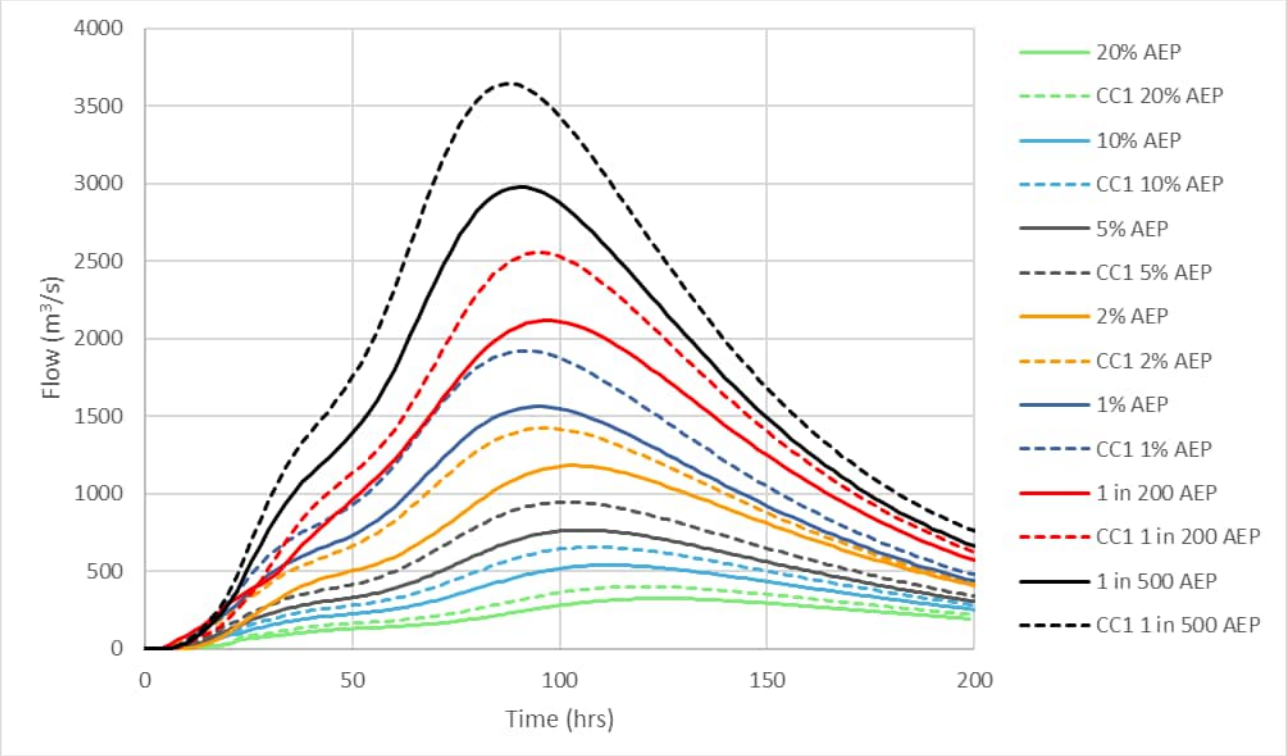


Figure 3-6 Glenelg River at Dartmoor CC1 event hydrographs

Table 3-4 Glenelg River at Dartmoor RORB CC2 design event peak flows, volumes and critical storm

Event	Peak Flow (m^3/s)	Flow Increase (%)	Hydrograph Volume (m^3)	Volume Increase (%)	Critical Duration (hr)	Critical Temporal Pattern
20% AEP	443	37%	$1.96x10^8$	36%	24	8
10% AEP	725	35%	$3.13x10^8$	32%	24	10
5% AEP	1,030	35%	$4.32x10^8$	31%	24	1
2% AEP	1,568	33%	$7.33x10^8$	27%	36	8
1% AEP	2,103	35%	$9.54x10^8$	31%	36	7
1 in 200 AEP	2,784	31%	$1.22x10^9$	24%	48	5
1 in 500 AEP	3,968	33%	$1.67x10^9$	28%	48	2

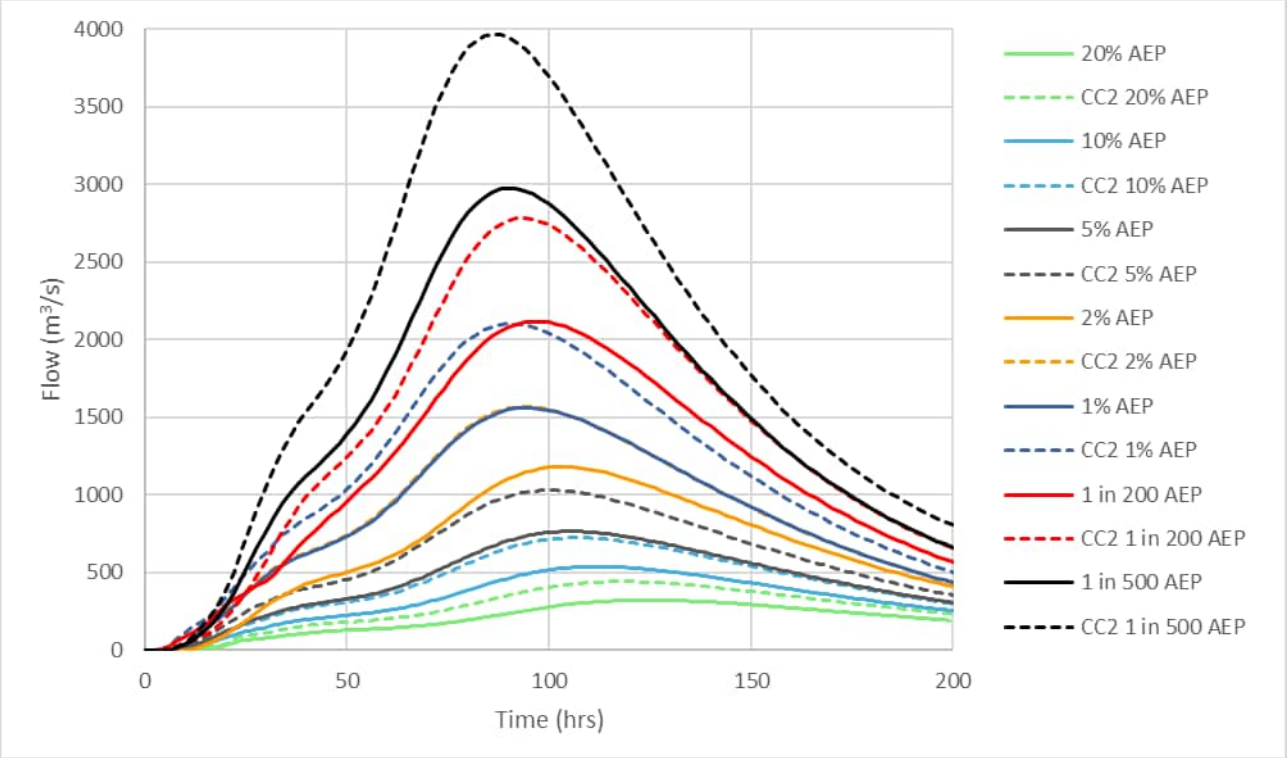


Figure 3-7 Glenelg River at Dartmoor CC2 event hydrographs

3.2 Storm tide assessment

Coastal inundation occurs due to extreme sea-levels caused by severe coastal storms. Such storms generate elevated water-levels because of low atmospheric pressure (sometimes referred to as reverse barometric pressure) and strong winds that pile up water towards the coast, with the combined effect referred to as storm surge. Storm surge often coincides with strong waves breaking on the open coast which can also drive increased water-levels at the coastline, known as wave setup. Along with astronomical tide level, these three components make up what is referred to as a storm tide. Figure 3-8 shows a schematic of these process.

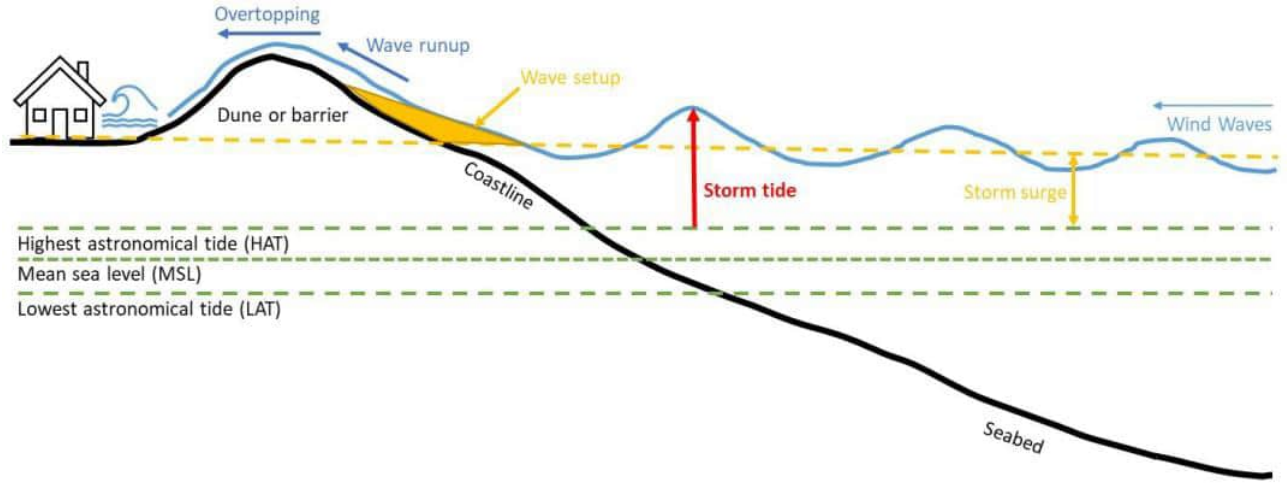


Figure 3-8 Schematic showing the components of a storm tide (Streamology 2022a)

The southwest Victorian coastline is exposed to strong wave energy from the Southern Ocean. The Glenelg River entrance is situated on the open coast and is exposed to ocean swells which may drive temporary increases to water-level due to local wave setup. Historical storms (e.g., the June 2014 storm tide event) have shown that the significant waves can result in temporary elevation of water levels due to local wave setup.

A set of design coastal extreme water-level events calibrated to the June 2014 event (refer to Section 3.3.2.4) have been developed to provide boundary conditions to the TUFLOW model, so that flooding due to coastal storms is assessed. The coastal storms consider tides, storm surge and wave setup in accordance with the guidance provided in the Victorian Guideline for Modelling the Interaction of Catchment & Coastal Flooding (Streamology 2022a).

The extreme storm tide levels (and peak wave setup components) that have been prepared for modelling are shown in Table 3-5 with the water-level timeseries for the TUFLOW model shown in Figure 3-9. Given that only one storm tide calibration event is available leaving a lot of uncertainty in appropriateness of an 8% factor for design event modelling, the recommended regional 12% factor (Streamology 2022a) has been adopted.

To estimate worst case storm tide scenario peak, tsunami water levels (maximum stage) from the 2018 Australian Probabilistic Tsunami Hazard Assessment: Hazard from earthquake generated tsunamis (PTHA18) (Davies and Griffin 2018) were used resulting in a tsunami water level estimate of 4.3 m AHD has been adopted to represent a “worst case” storm tide level for this Study and was applied to the TUFLOW model as static water level, often referred to as the “bathtub” approach. This is because detailed numerical modelling using the offshore maximum-stage heights is required for a detailed tsunami hazard assessment.

Table 3-5 Nelson storm tide levels

AEP	Extreme SWL (m rel. MSL)	Peak Wave Setup Component (m rel. MSL)	Extreme SWL with Wave Setup (m rel. MSL)
20%	0.79	0.91	1.70
10%	0.85	0.97	1.81
5%	0.90	1.01	1.91
2%	0.96	1.07	2.03
1%	1.00	1.12	2.12
1 in 200	1.04	1.16	2.19
1 in 500	1.08	1.20	2.28

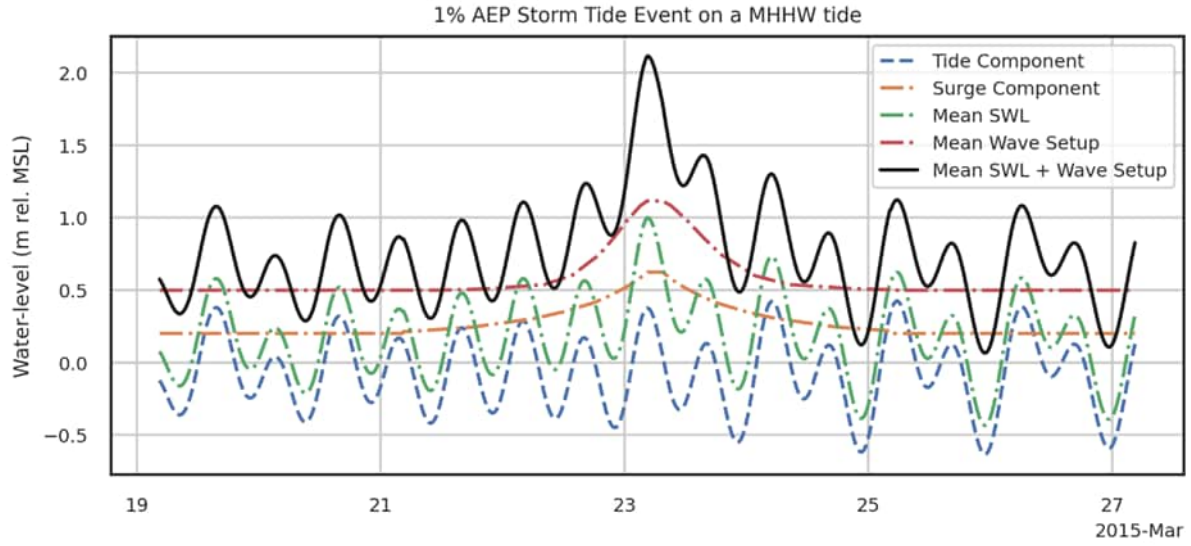


Figure 3-9 1% AEP storm tide time series

3.3 Hydraulic modelling

3.3.1 TUFLOW model development

The TUFLOW model covers the entire Study Area extending from upstream of Dartmoor to the Glenelg River mouth. The broad layout of the TUFLOW model can be seen in Figure 3-10.

To ensure accurate representation of flooding within the Study Area base a grid resolution of 10 metres was adopted. In the areas around the townships quadtree was used to reduce the grid size to 5m and in the towns themselves a 2.5 m grid was used. These areas can be seen in Figure 3-10. Sub-grid Sampling (SGS) was used with a sample frequency of 11 for the 10 m grid and 7 for the 5 and 2.5 m grids.

The base topography used in the hydraulic model was based on the LiDAR and bathymetry survey DEM datasets as detailed in Section 2.

The Glenelg River estuary mouth bathymetry is dynamic being subject to sand deposition and natural and artificial openings resulting in the bathymetry for every riverine or storm tide flood event being unique. The Estuary Entrance Management Support System (EEMSS) indicates that mouth is open 82% of the time but no bathymetric survey is available of the mouth opening depths during normal flow or flood flow conditions. For both riverine and storm tide design events the mouth has been modelled under open conditions from the start of the event. As there is no reliable method at present for estimating potential change in the geometry of river mouths into the future, the current geometry of the river mouth has been used in modelling the climate change scenarios for this study (CC1 and CC2).

The manning's 'n' surface roughness values for the model were based on areas of different land-use type as indicated in the aerial photography and observed during the site visit. Initially these values were based on standard texts such as Open Channel Hydraulics (Chow 1959), but they were refined during the rating curve verification (refer to Section 2.5.1) and calibration (refer to Section 3.3.2) processes.

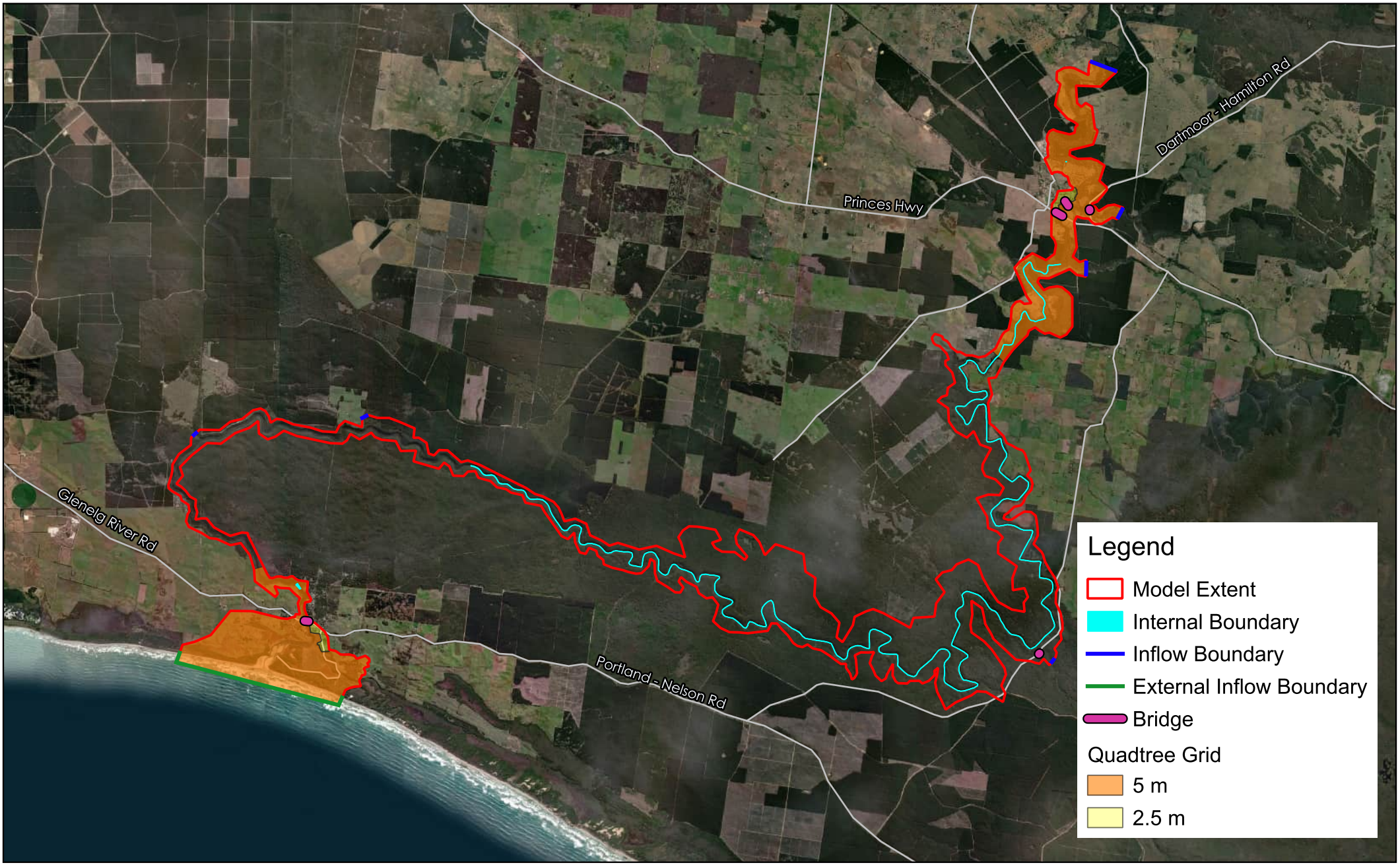
The hydraulic structures modelled for this Study include the following bridges:

- The old Dartmoor railway bridge
- The Princes Highway bridge over the Glenelg River
- The Portland – Nelson Road bridge over the Glenelg River
- The Dartmoor - Hamilton Road bridge over the Crawford River
- The Winnap – Nelson Road bridge over Moleside Creek

The location of these bridges is shown in Figure 3-10.

The TUFLOW model inflow boundaries were determined from the RORB model for the riverine events, and for the storm tide events the adopted riverine inflow boundary represented the median daily flow between May and September when most storm tides events are expected to occur.

The TUFLOW model outflow boundary was defined by a dynamic tide height boundary. For design event modelling the peak tidal level is timed to coincide with the peak of the flood so as to provide a conservative estimate of flood levels by providing a worst case scenario. For the climate change scenarios the whole dynamic tide boundary was raised by the amount of SLR being accounted for in each scenario, 0.8 m for Climate Change 1 and 1.2 m for Climate Change 2 scenarios.



Title: Dartmoor & Nelson Flood Study TUFLOW model layout	Figure: 3-10	Rev: A	0 2.5 5 km	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.VenantSolutions.com.au
Filename: S:\Projects\M00398.MS.Dartmoor_NelsonFloodStudies\GIS\Drawings\R.M00398.005.01\Fig3-10_TUFLOW model layout.qgz				By: JS	May 2024

3.3.2 TUFLOW model calibration and validation

The TUFLOW model was calibrated and validated to three riverine flood events and one storm tide flood event:

- September 2016 riverine calibration event
- March 1946 riverine validation event
- September 1983 riverine validation event
- June 2014 storm tide calibration event

The justification for selecting the September 2016 event for calibration is that it was the only riverine flood event with any information available downstream of the Glenelg River at Dartmoor gauge. There was not enough data available to calibrate the TUFLOW model to the March 1946 and September 1983 events so they have been selected as validation events. The relative magnitudes of these events are shown in Figure 1-3.

The June 2014 storm tide event was selected for calibration as it was the only significant storm tide event recorded at the Glenelg River at Nelson gauge. The magnitude of the June 2014 storm tide event is estimated to be approximately a 10% AEP event based on an 8% wave setup factor as shown in Figure 3-11, but below a 20% AEP event with 12% wave setup factor adopted for the design event modelling (refer to Section 3.2).

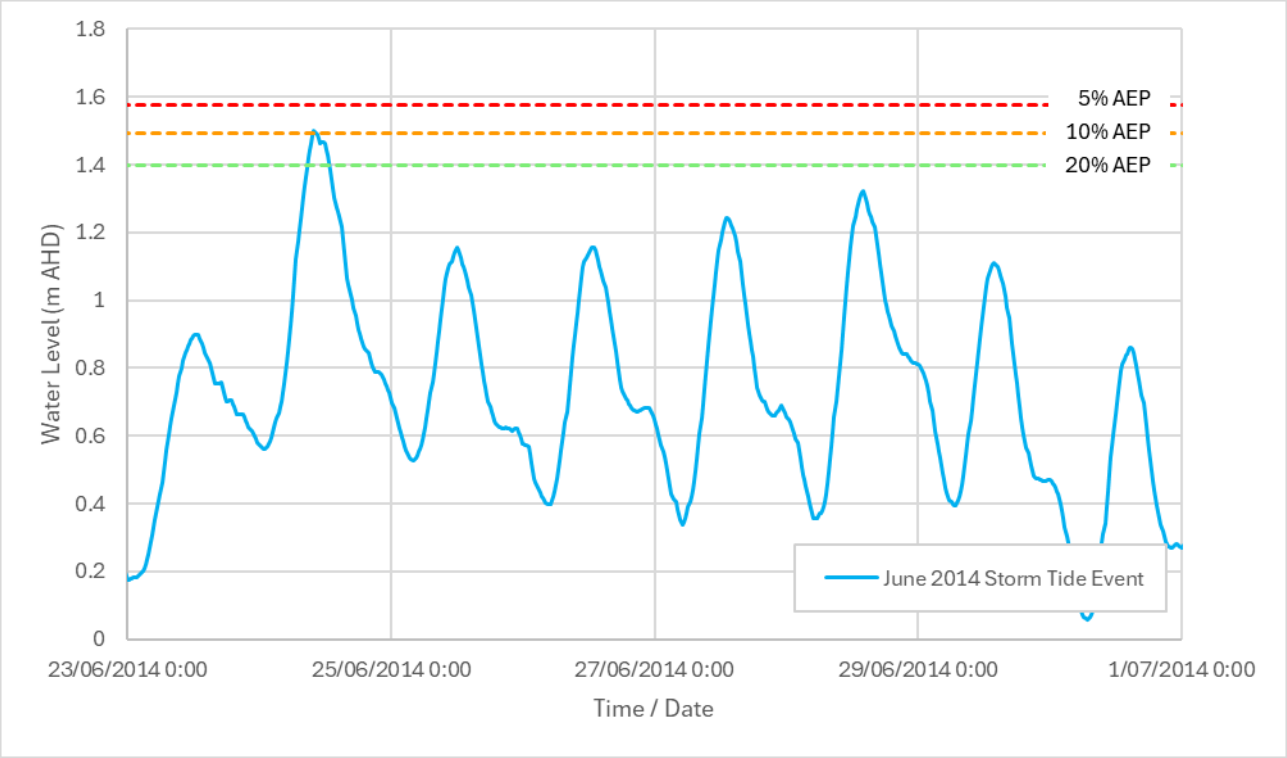


Figure 3-11 June 2014 storm tide event magnitude

3.3.2.1 September 2016 riverine calibration event results

The historic flood data available to calibrate the TUFLOW model includes:

- The recorded water levels at the Glenelg River at Dartmoor stream gauge
- A surveyed flood mark on the Princes Highway bridge over the Glenelg River in Dartmoor
- Observations of flood levels provided by the community

Figure 3-12 shows a comparison of the recorded flood at the Glenelg River at Dartmoor gauge to the modelled levels. As shown there is close fit between the recorded peak flood level of 11.27 m and the modelled peak flood level of 11.16 m, a -0.11 m difference. Noting that the hydrograph is primarily controlled by the RORB model calibration (Section 3.1.3) there is also a good match for the timing with the modelled first peak occurring approximately seven hours after the recorded and the second peak approximately 12 hours before the recorded.

A close fit was also achieved at the surveyed flood mark on the Princes Highway bridge over the Glenelg River in Dartmoor (Figure 2-1) with difference of -0.12 m between the flood mark level of 11.74 m AHD and modelled level of 11.61 m AHD. This is expected given that bridge is only 650 m downstream of Glenelg River at Dartmoor gauge.

Table 3-6 presents a comparison of the observed flood behaviour to the model results. Initially the modelled flood levels in Nelson were significantly higher than those observed at the Nelson Boat Ramp. Given the close match to recorded levels at Dartmoor it was most likely that this was a result of estuary mouth being too constricted in the TUFLOW model.

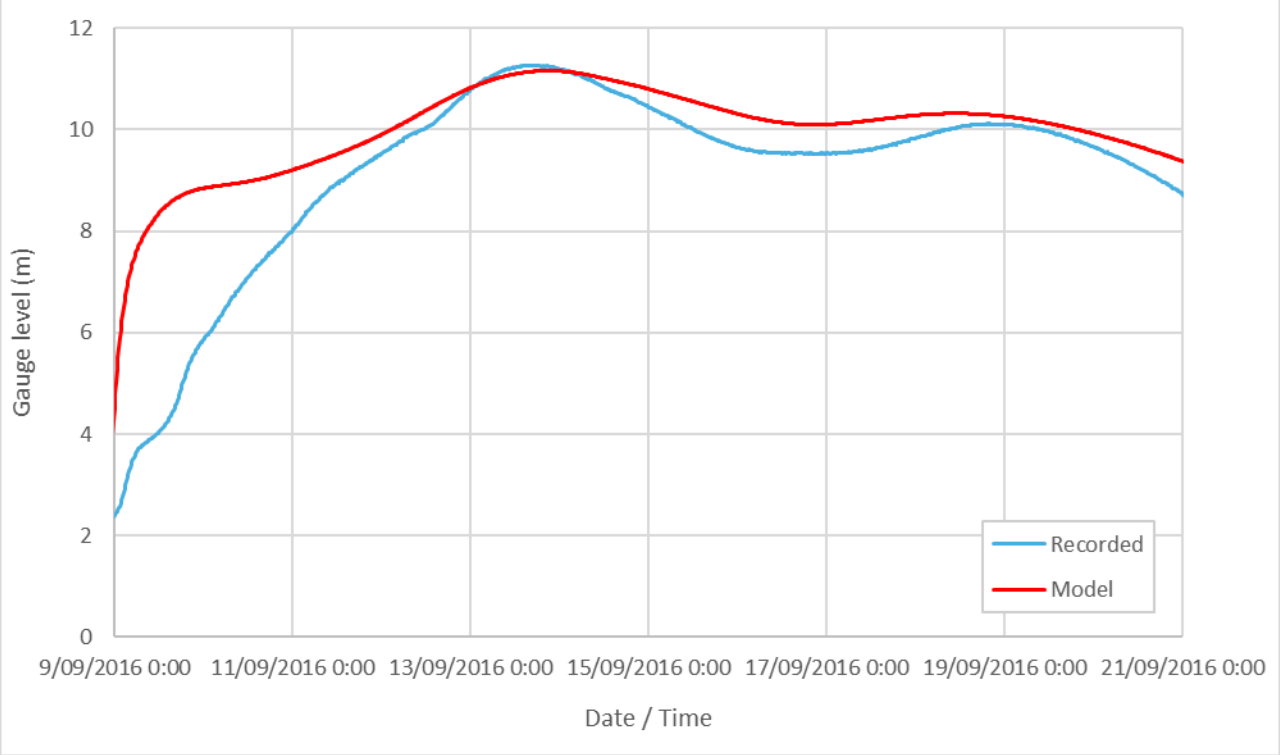


Figure 3-12 September 2016 event Glenelg River at Dartmoor flood level comparison

Table 3-6 September 2016 event comparison of observed flood behaviour to model

Observation	Model Comparison	Figure
		Figure Legend Depth (m): < 0.3; 0.3 - 1.0; 1.0 - 2.0; 2.0 - 3.0; > 3.0
The Nelson Boat Ramp Jetty was 300 mm underwater.	From the LiDAR data the Nelson boat ramp jetty has an estimated level of 0.95 to 1.0 m AHD. This results in an estimated peak flood level of 1.25 to 1.30 m AHD. The model is showing peak flood levels of 1.25 m AHD which compares well with the observation.	

The Moleside campground (in the Lower Glenelg National Park) was underwater and at the jetty water levels were 6-8 m high.	The Moleside campground is inundated in the modelling. The jetty deck level is approximately 1 m AHD, and hence the observed water level is approximately 7-9 m AHD. The model results in a peak flood level of 6.3 m AHD at the jetty.	
At the Wild Dog Creek campground (in the Lower Glenelg National Park) water levels were 2-3 steps from the top of the steps to the river estimated to be 4-5 m above normal level.	The figure shows the flood extent reaching the top of the steps in the calibration model, and no inundation of the Wild Dog Bend campground. A rough estimate of the observed water level of 4-5 m above normal, is 4.5 - 5.5 m AHD based on average water level of approximately 0.5 m AHD at the Nelson gauge. The model is resulting in peak flood levels of 5.9 m AHD.	

3.3.2.2 March 1946 riverine validation event results

There is a flood level mark available for the March 1946 event in the Victorian Flood Database (VFD) between the Dartmoor railway bridge and Princes Highway bridge with a level of 18.65 m AHD of an unknown reliability. This level compares well with the estimate level of 3-4 feet above the rails on the railway bridge in the Report on Western District Floods of March 1946 (SRWSC 1946) so was considered appropriate to validate the model against.

The Report on Western District Floods of March 1946 also provided a peak flow estimate at Dartmoor of 2,831 m^3/s based on the above level. This flow estimate was derived using the manning's formula with velocities estimated from travel times between Casterton and Dartmoor. Initial testing in the TUFLOW model indicated that this was a significant overestimation of the peak flow due to the manning's formula calculation not accounting for the backwater effect (flattened hydraulic gradient) as the large volume of water passes through constriction of the Glenelg River gorge in the Lower Glenelg National Park. Based on the revised rating curve (Section 2.5.1) a peak flow estimate of 1,526 m^3/s was adopted. This resulted in a good match to the flood mark with the modelled levels of 18.56 m AHD being only 0.09 m below the flood mark.

3.3.2.3 September 1983 riverine validation event results

The only information available regarding the September 1983 flood event available in the Study Area is the flood levels recorded at the Glenelg River at Dartmoor gauge. As shown in Figure 3-13 there is close fit between the peak recorded peak flood level of 13.42 m and the modelled peak flood level of 13.53 m, a 0.12 m difference. Noting that the hydrograph is primarily controlled by the RORB model calibration (Section 3.4.2.1) there is also a good match for the timing with the modelled peak occurring approximately five hours after the recorded peak.

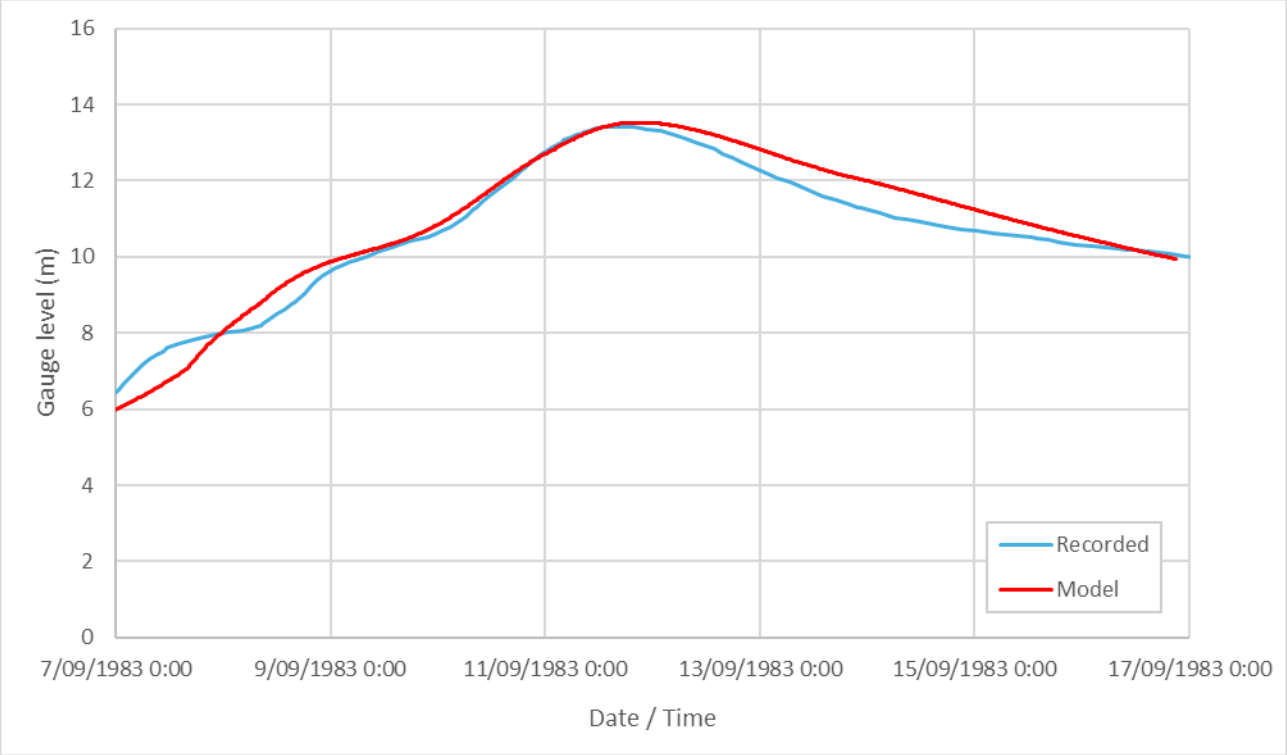


Figure 3-13 September 1983 event Glenelg River at Dartmoor flood level comparison

3.3.2.4 June 2014 storm tide calibration event results

As shown in Figure 3-14 there is a good agreement between the recorded storm tide peaks at the Glenelg River at Nelson gauge with an 8% offshore wave height factor. Testing in the model was undertaken and it

was found that a mouth channel base level of -0.3 m AHD provided the best fit to the tide troughs during the event.

Prior to the event on the 21st and 22nd of June 2014 a 12% offshore wave height factor provided a better fit to the recorded levels. This variable calibration performance (pre and during the event) to the recorded levels is not unexpected given the simplistic representation of the wave setup that does not consider other influential parameters (e.g., wave period and direction, the open coast geometry).

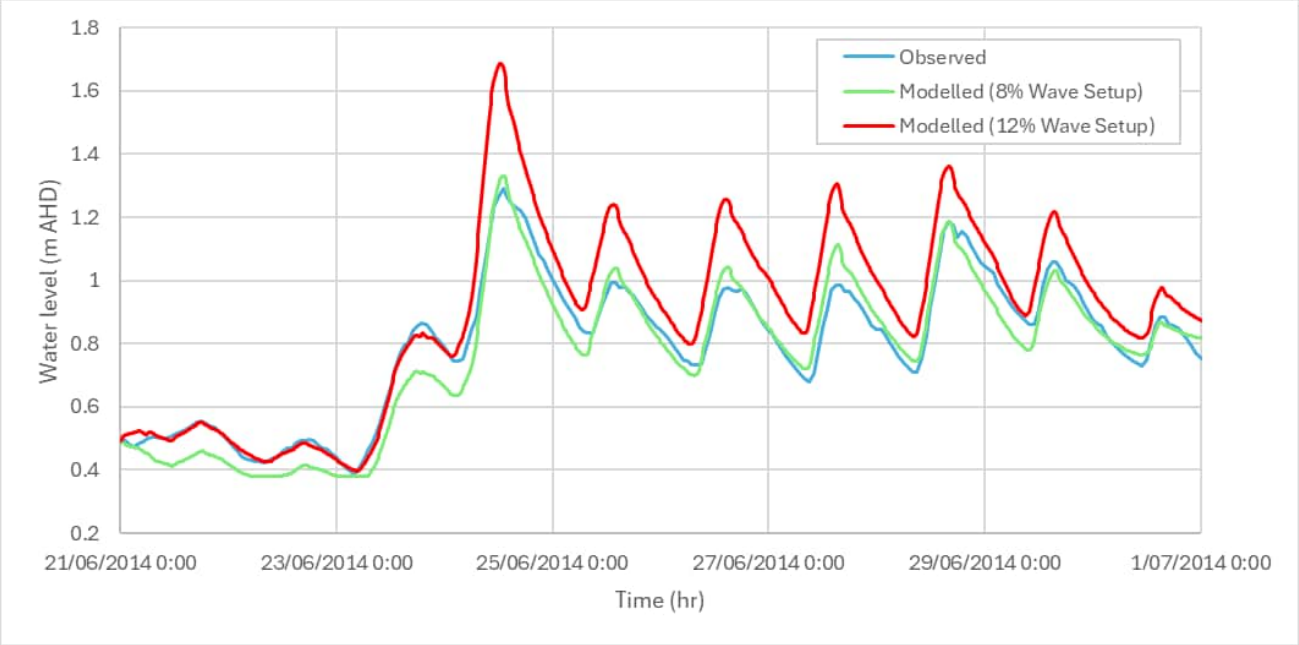


Figure 3-14 June 2014 event Glenelg River at Nelson flood level comparison

3.4 Quality assurance and sensitivity testing

The hydrologic and hydraulic modelling was internally reviewed by a registered professional engineer in Victoria. The flood modelling was also independently peer reviewed. The reviewers' comments regarding modelling methods, setup, parameters, assumptions and results were documented in a Technical Note provided to Venant Solutions, Council and GHCMA and have been addressed in the development of flood modelling presented in this report.

To better understand the level of uncertainty associated with the adopted flood modelling parameters, sensitivity analysis has been undertaken on the following parameters:

- The critical storm duration
- Rainfall temporal patterns
- The spatial rainfall variation across the catchment
- The RORB model routing parameters
- Storm losses (antecedent catchment conditions)
- Rocklands Reservoir storage volumes
- Adopted surface roughness parameters
- Glenelg River mouth berm height and scour times
- Glenelg River mouth geometry
- Bridge blockage
- The adopted storm tide event wave setup factor

4 Flood mapping and intelligence outputs

This section provides a summary of key flood mapping and intelligence information (flood behaviour characteristics that are not represented by flood mapping) that is used to inform the key outputs of the study including:

- Draft planning overlay mapping
- Flood damages assessment
- Flood warning feasibility assessment
- Inputs into the Municipal Flood Emergency Plan (MFEP) and any other subsequent flood intelligence information / documentation

Whilst in this summary report a limited selection of flood mapping and intelligence outputs is been presented, these outputs have been developed for all of the design event scenarios presented in Table 1-1.

Mapping is limited to the Study Area and does not include mapping of local storm water runoff behaviour.

4.1 Flood depth mapping

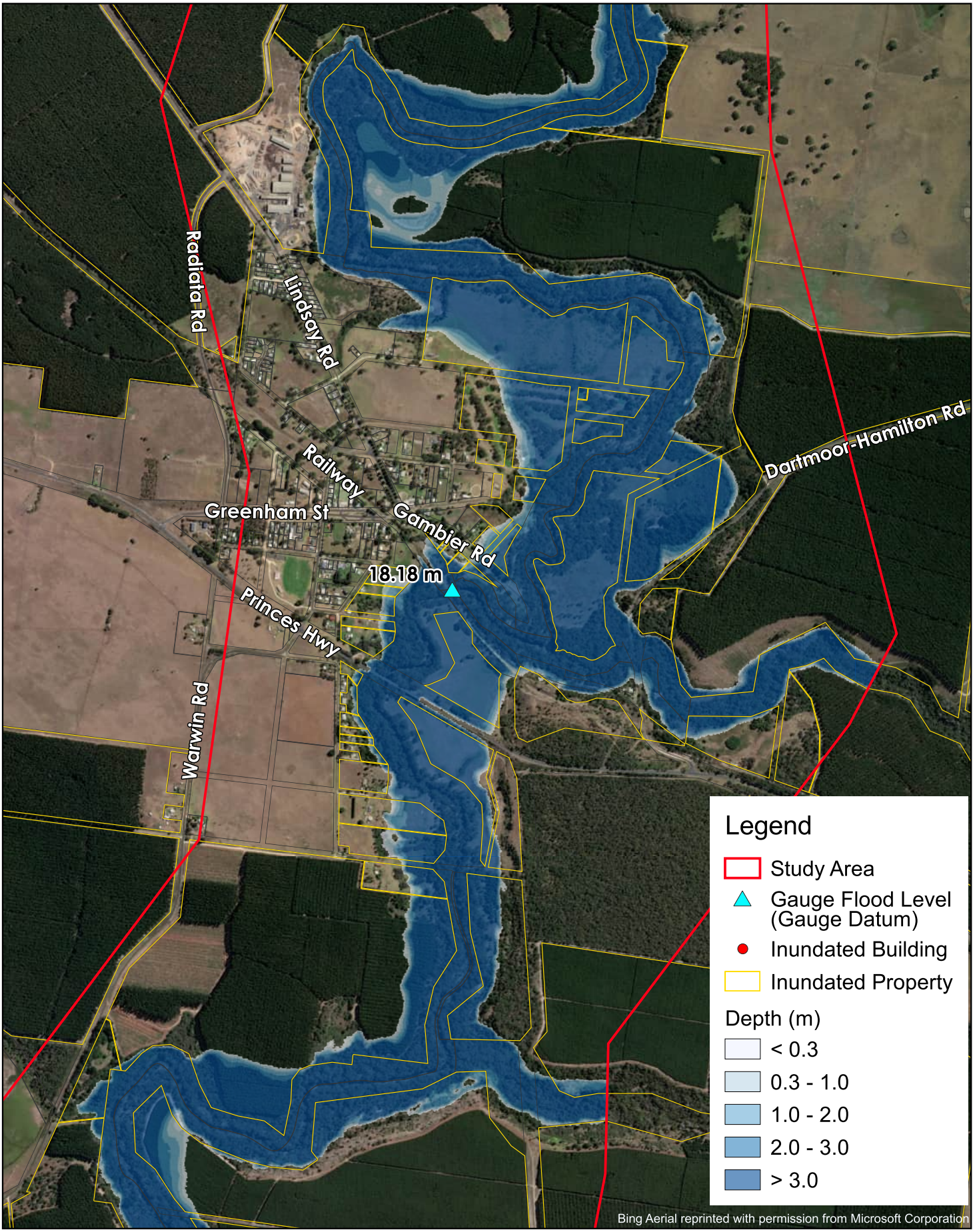
Flood depth mapping is presented in Figure 4-1 to Figure 4-9 for the 1% AEP riverine and storm tide events under current climate and climate change scenarios. The flood depth mapping shows the floodplain throughout the Study Area is generally confined to the channel and adjacent active flow paths and flood storage areas of the floodplain.

4.2 Flood velocity mapping

Peak flood velocity mapping is presented in Figure 4-10 to Figure 4-12 for the current climate 1% AEP riverine and storm tide events. As flowrate increases the velocity in the main channel at Dartmoor moderately increases from 0.4 m/s in the 20% AEP to 1 m/s in the 0.2% AEP Current Climate riverine events. Velocities are highest near Nelson and the river mouth where velocities peak at 2.2 m/s near Simsons Landing Road in the 1% AEP current climate event.

4.3 Flood hazard mapping (velocity x depth product)

Peak flood hazard (velocity x depth) mapping is presented in Figure 4-13 to Figure 4-15 for the current climate 1% AEP riverine and storm tide events. As shown in the flood hazard mapping all but the edges of the flood extents have a velocity x depth product of greater than 0.3 m^2/s which is considered hazardous for vehicles and people and the majority of the inundated area has a velocity x depth product of greater than 1.0 m^2/s which becomes hazardous to buildings as well.



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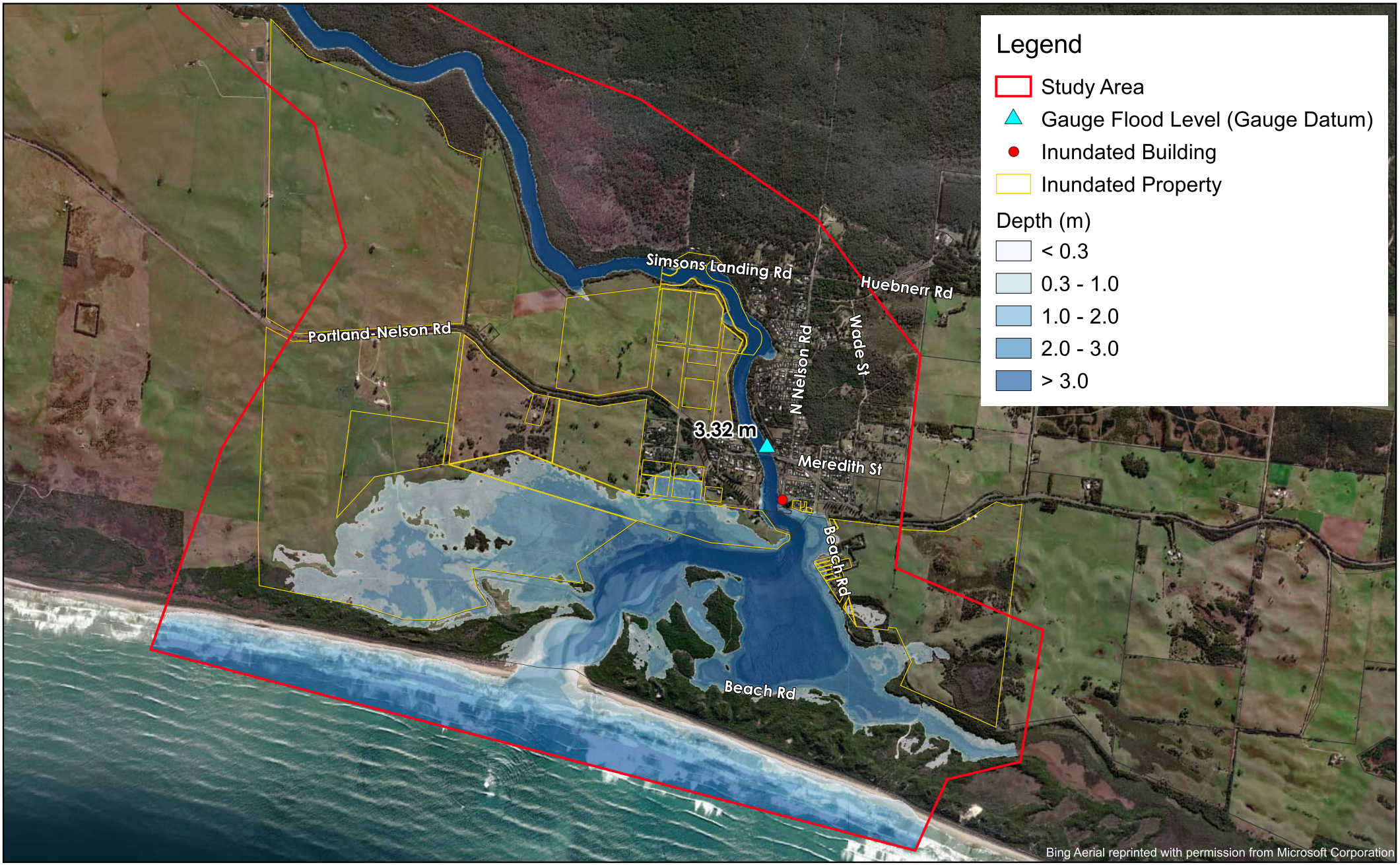
Dartmoor Nelson Flood Study - Current Climate
1% AEP Riverine Peak Flood Depth - Dartmoor

Figure:	Rev:			
4-1	A	0 400 800 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	By: JS Nov 2024

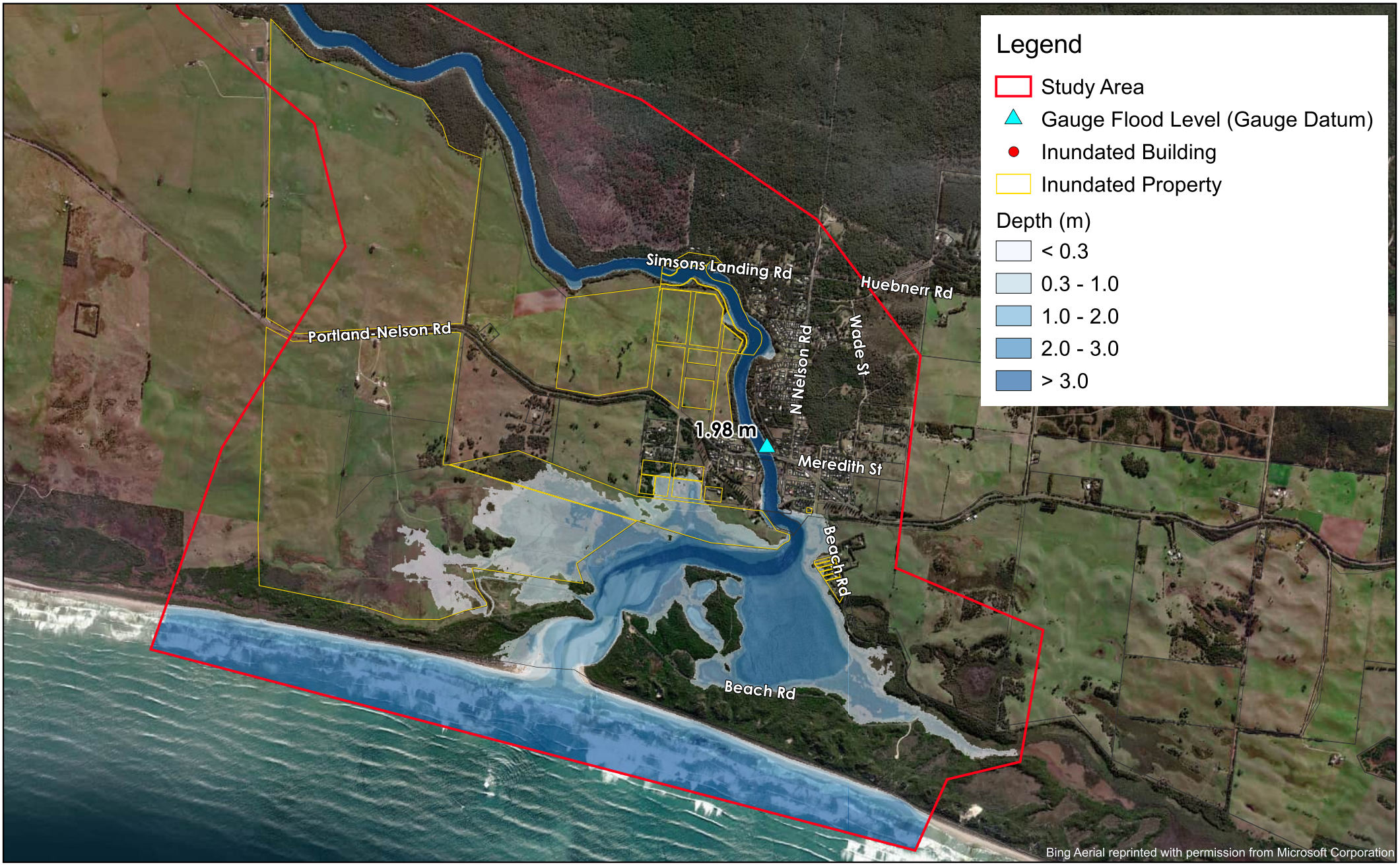
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Title: Dartmoor Nelson Flood Study - Current Climate 1% AEP Riverine Peak Flood Depth - Nelson	Figure: 4-2	Rev: A	0 0.5 1 km	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.venantsolutions.com.au
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Title: Dartmoor Nelson Flood Study - Current Climate
1% AEP Storm Tide Peak Flood Depth - Nelson

Figure: 4-3

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0 0.5 1 km

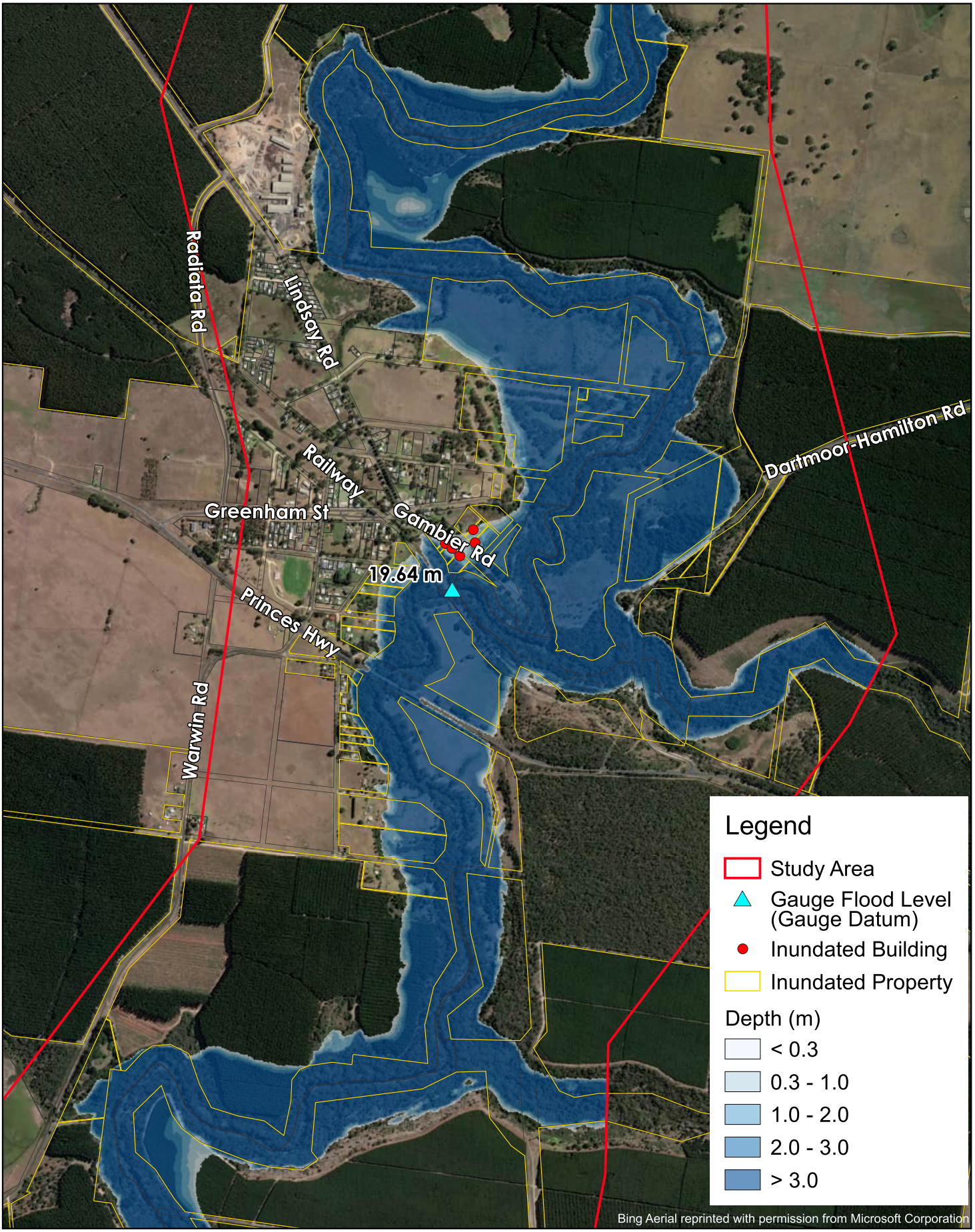
This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.

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Nov 2024

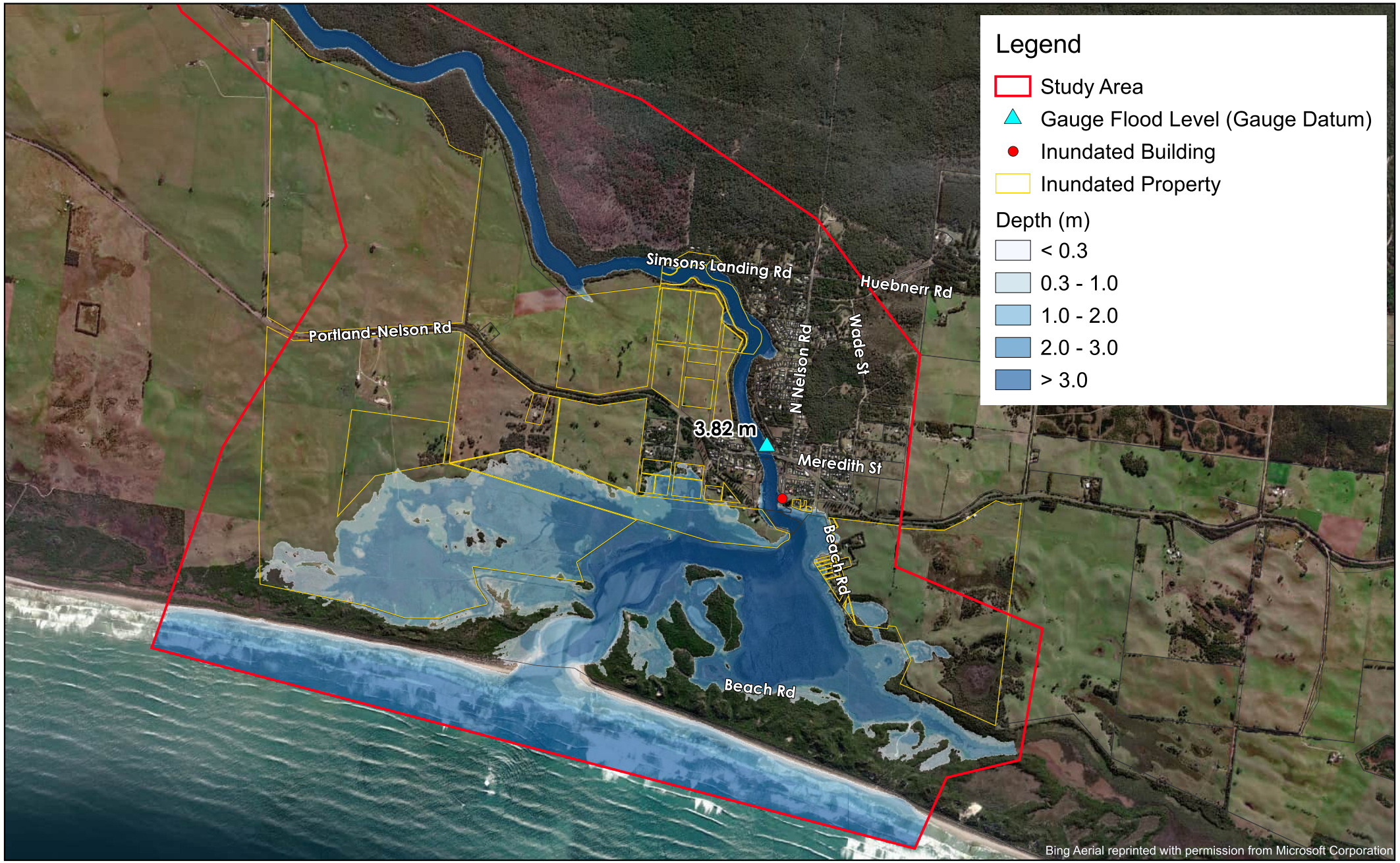


Title: Dartmoor Nelson Flood Study - Climate Change Scenario 1
1% AEP Riverine Peak Flood Depth - Dartmoor

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4-4	A	0 400 800 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	By: JS Nov 2024

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Title: Dartmoor Nelson Flood Study - Climate Change Scenario 1
1% AEP Riverine Peak Flood Depth - Nelson

Figure: 4-5

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0 0.5 1 km

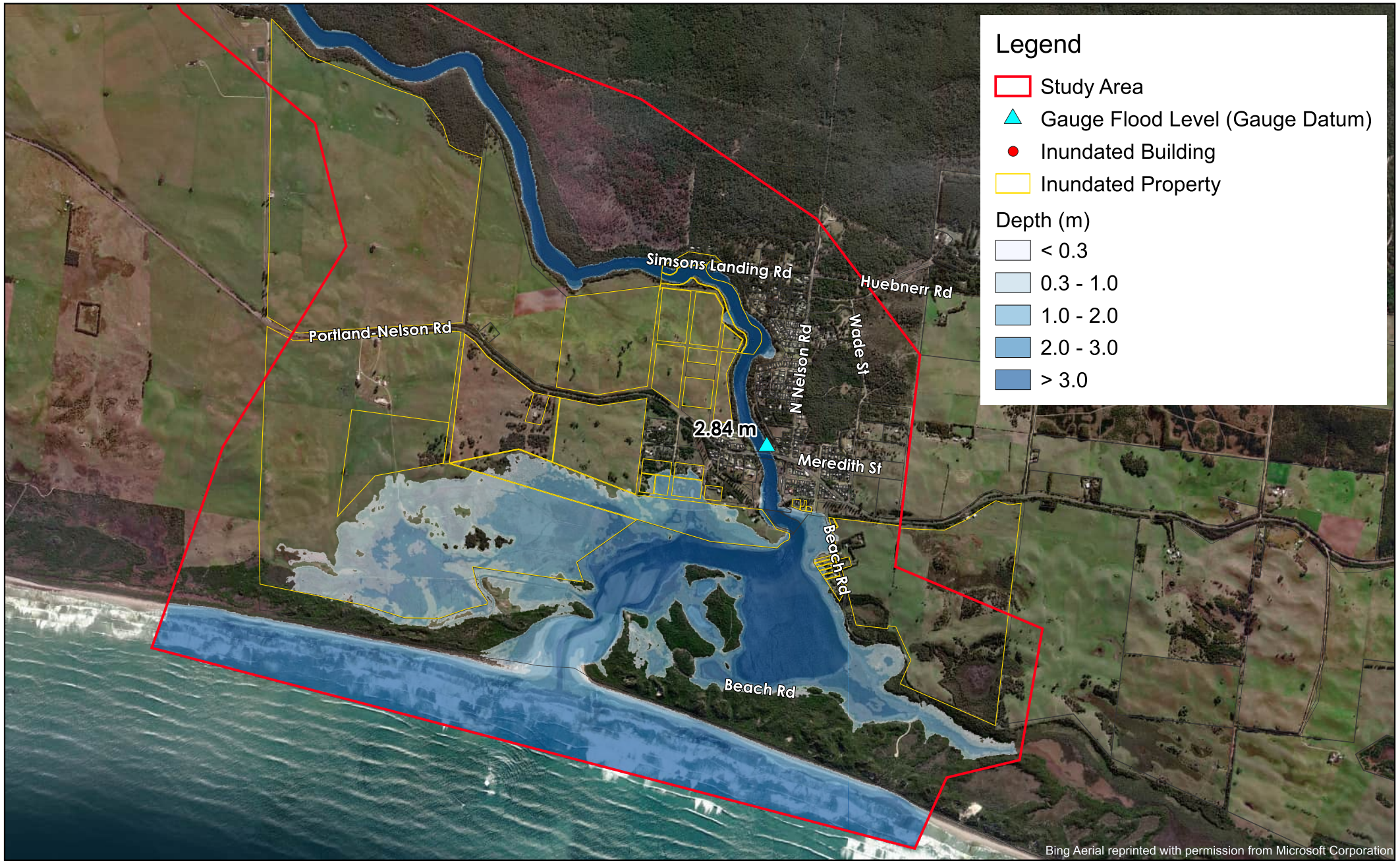
This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.

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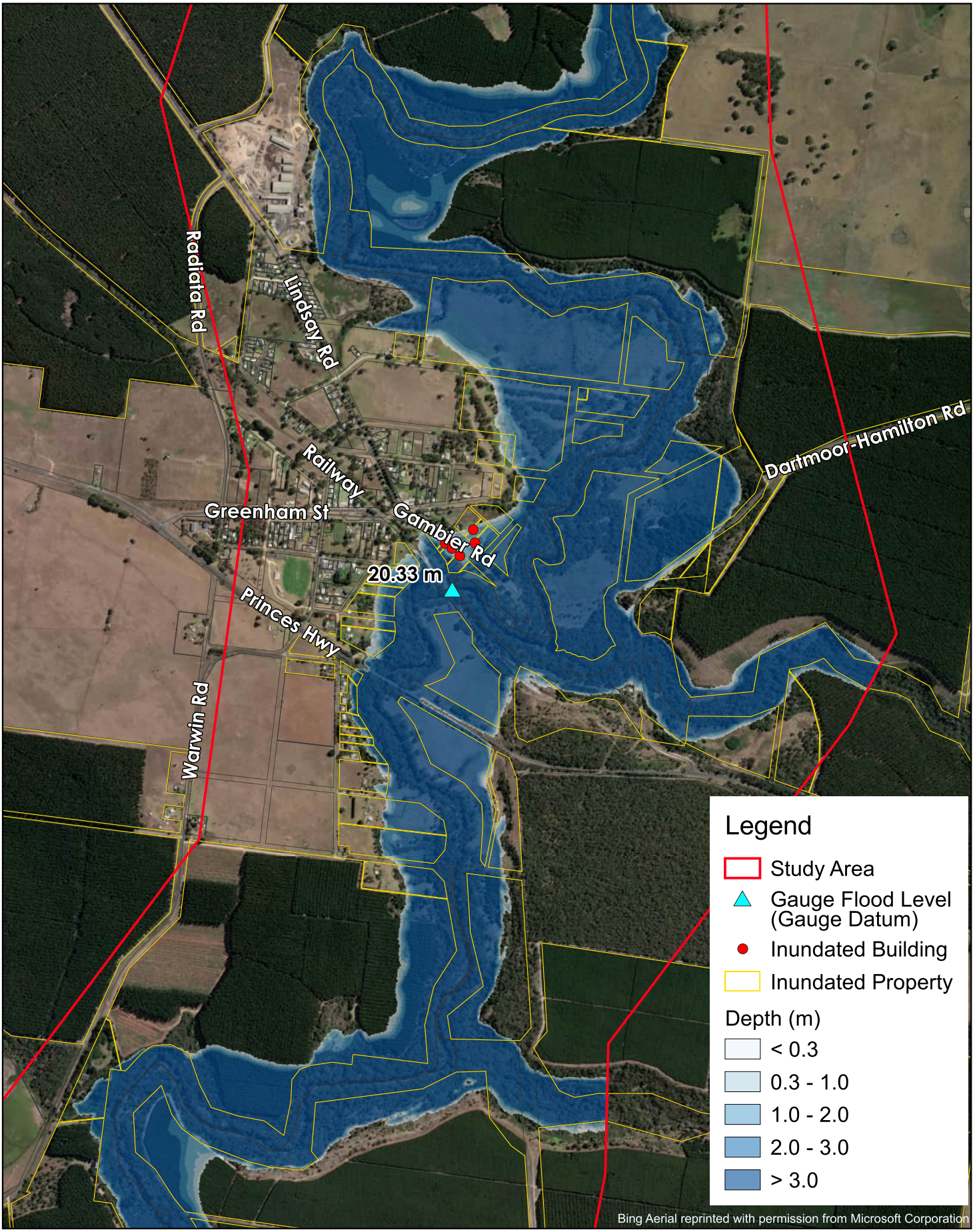
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By: JS

Nov 2024



Title: Dartmoor Nelson Flood Study - Climate Change Scenario 1 1% AEP Storm Tide Peak Flood Depth - Nelson	Figure: 4-6	Rev: A	0 0.5 1 km	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.venantsolutions.com.au
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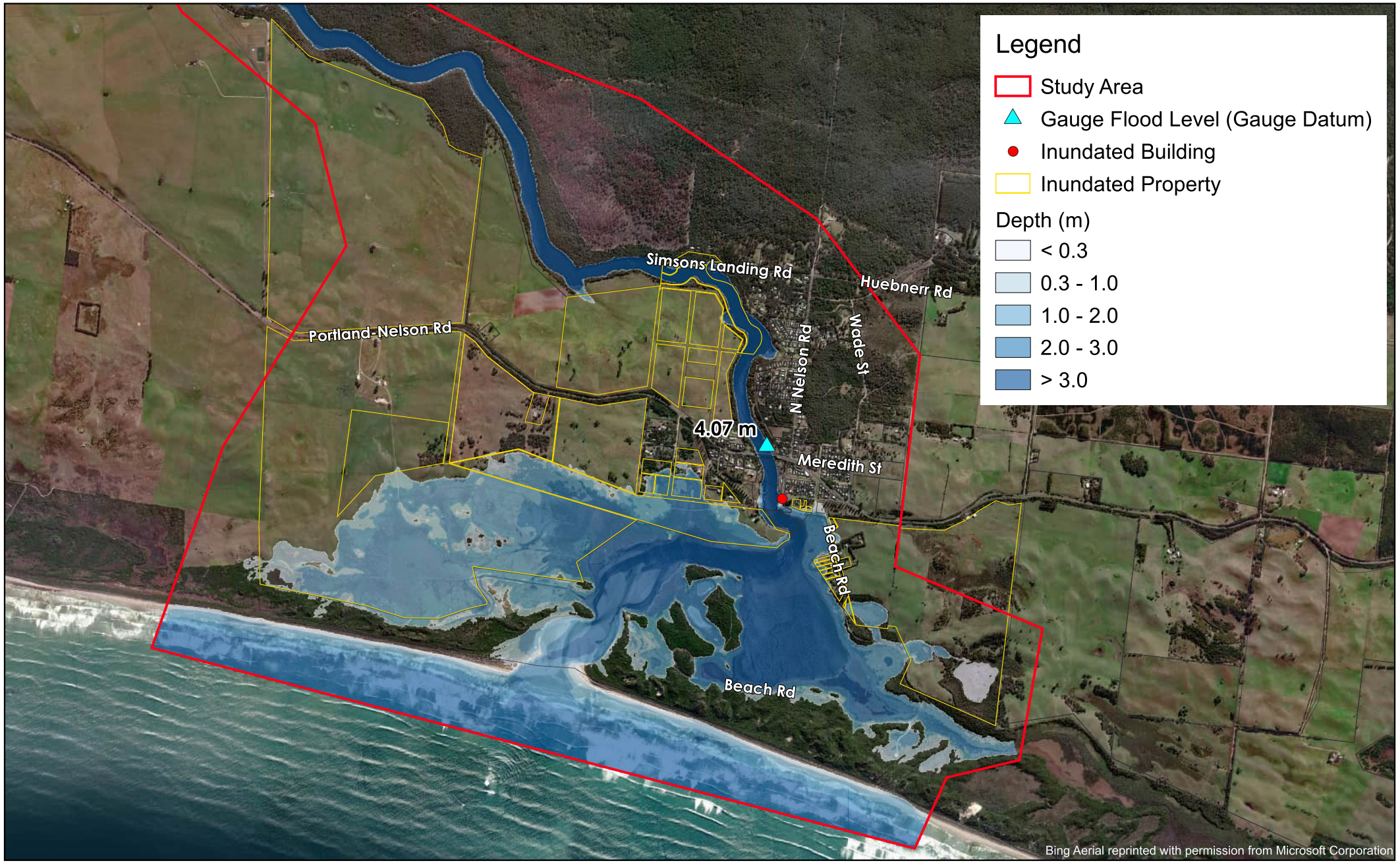


Title: Dartmoor Nelson Flood Study - Climate Change Scenario 2
1% AEP Riverine Peak Flood Depth - Dartmoor

Figure:	Rev:			By: JS
4-7	A	0 400 800 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	Nov 2024

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Title: Dartmoor Nelson Flood Study - Climate Change Scenario 2
1% AEP Riverine Peak Flood Depth - Nelson

Figure: 4-8

Rev: A

0 0.5 1 km

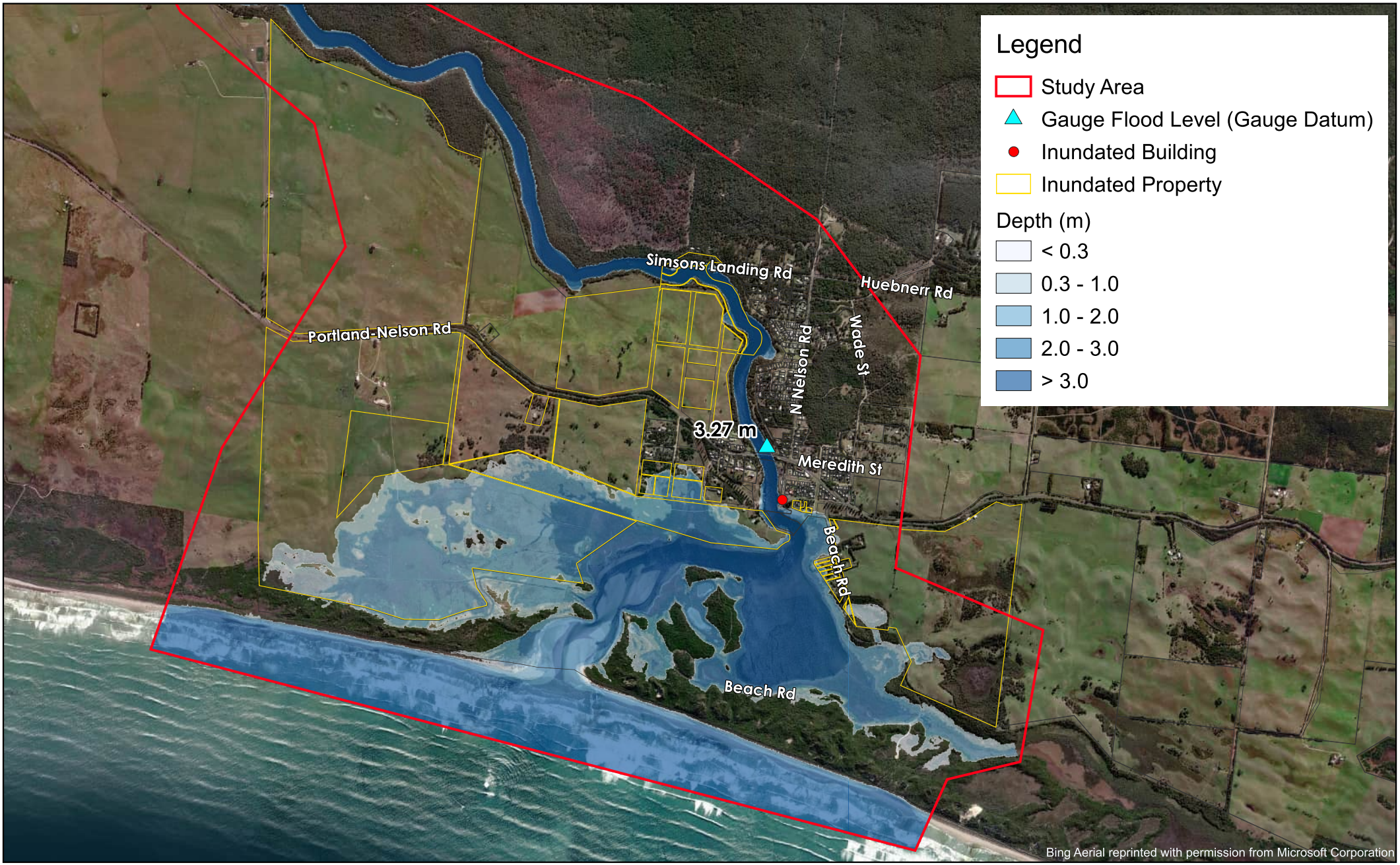
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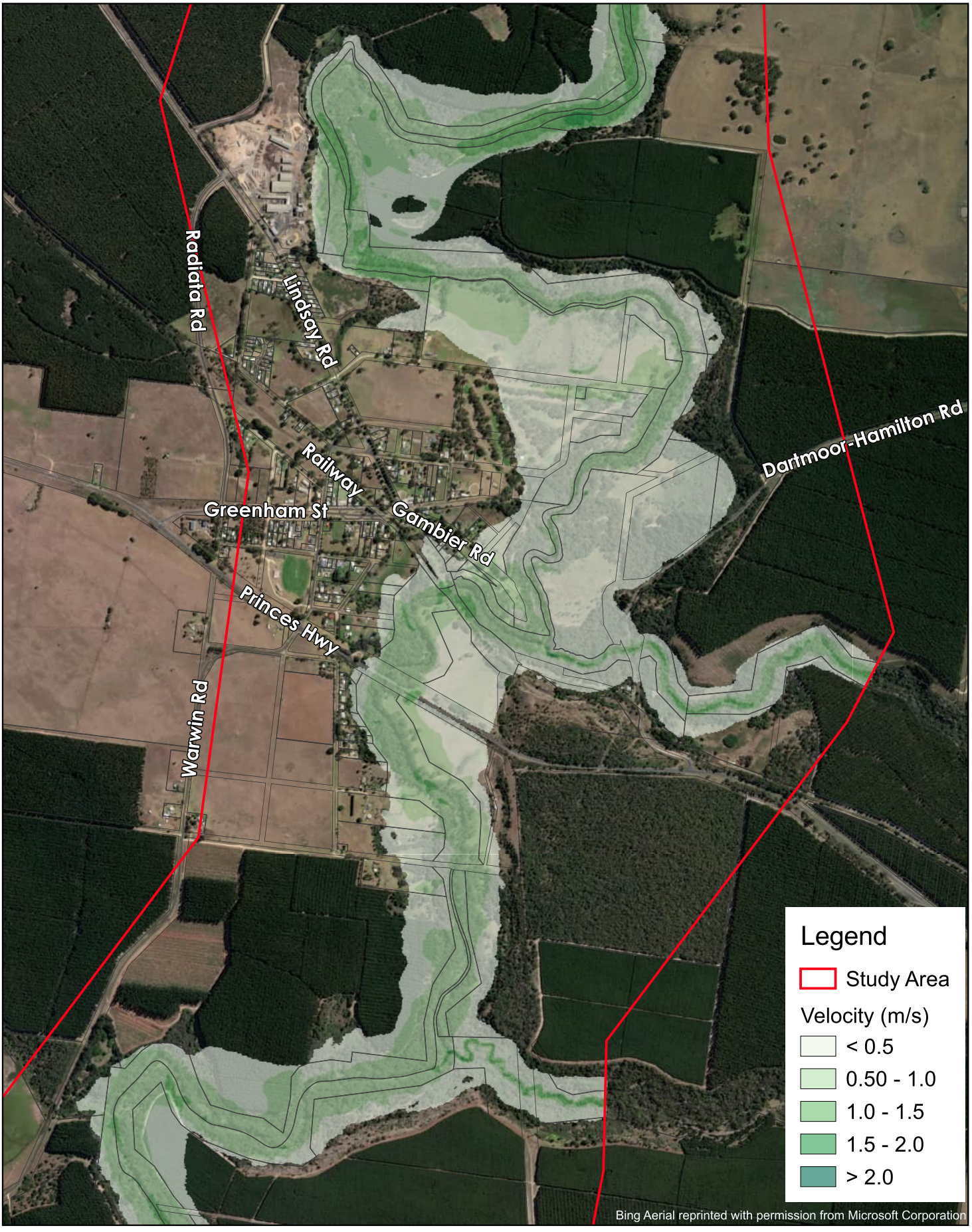
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Title: Dartmoor Nelson Flood Study - Climate Change Scenario 2 1% AEP Storm Tide Peak Flood Depth - Nelson	Figure: 4-9	Rev: A	0 0.5 1 km	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.venantsolutions.com.au
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Title:

Dartmoor Nelson Flood Study - Current Climate
1% AEP Riverine Peak Flood Velocity - Dartmoor

Figure:	Rev:			
4-10	A	0 400 800 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	By: JS Nov 2024

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Filename: S:\Projects\M00398.MS.Dartmoor_NelsonFloodStudies\GIS\Drawings\R.M00398.005.01\Fig4-10_RIV_E01_1pc_043_V_Max_Dartmoor.qgz



Title: Dartmoor Nelson Flood Study - Current Climate
1% AEP Riverine Peak Flood Velocity - Nelson

Figure: 4-11

Rev: A

0 0.5 1 km

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Filename: S:\Projects\M00398.MS.Dartmoor_NelsonFloodStudies\GIS\Drawings\R.M00398.005.01\Fig4-11_RIV_E01_1pc_043_V_Max_Nelson.qgz

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Title: Dartmoor Nelson Flood Study - Current Climate
1% AEP Storm Tide Peak Flood Velocity - Nelson

Figure: 4-12

Rev: A

0 0.5 1 km

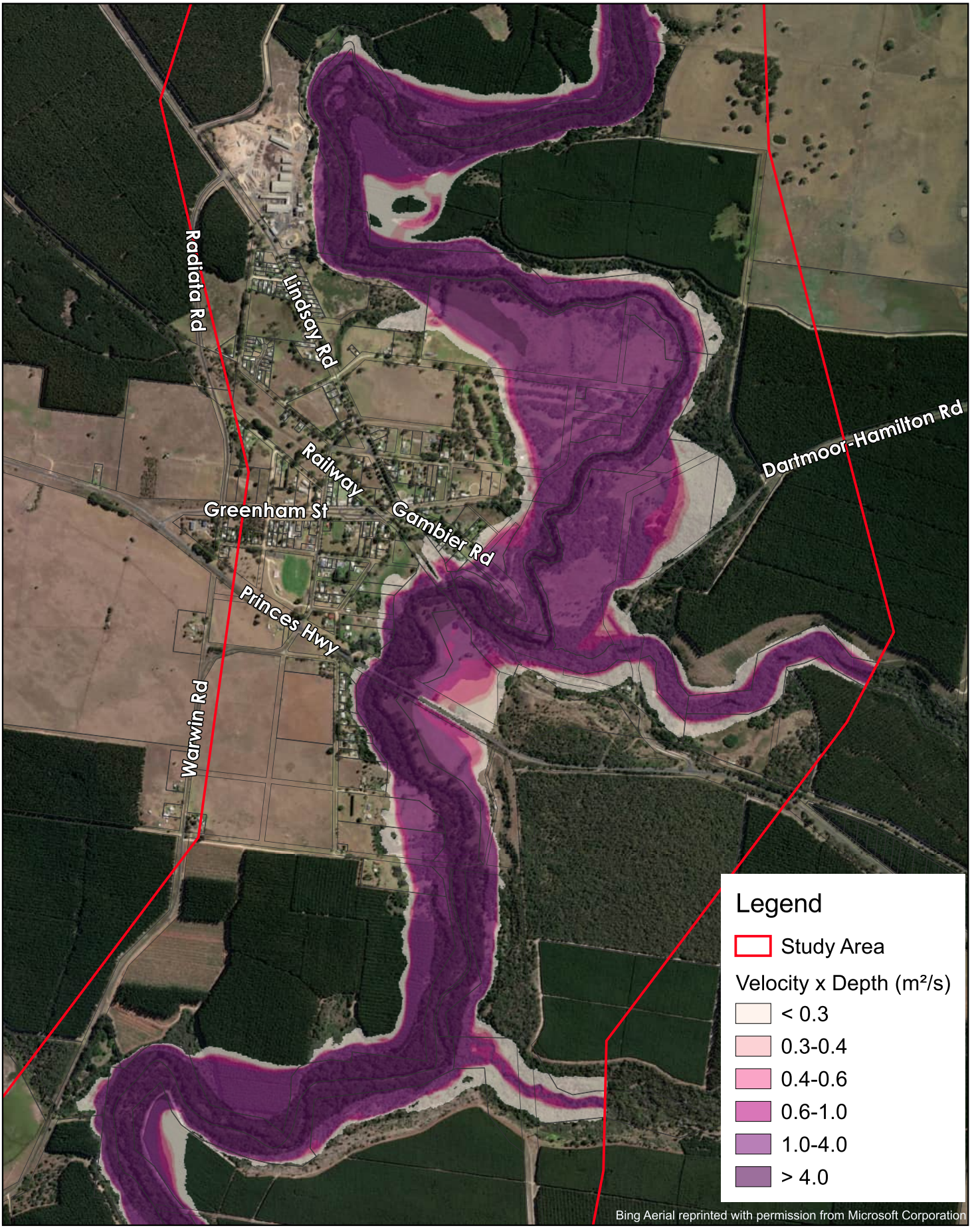
This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.

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Title:

Dartmoor Nelson Flood Study - Current Climate
1% AEP Riverine Peak Flood Velocity x Depth - Dartmoor

Figure:	Rev:			
4-13	A	0 400 800 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	By: JS Nov 2024

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Title: Dartmoor Nelson Flood Study - Current Climate
1% AEP Riverine Peak Flood Velocity x Depth - Nelson

Figure: 4-14

Rev: A

0 0.5 1 km

This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.

Filename: S:\Projects\M00398.MS.Dartmoor_NelsonFloodStudies\GIS\Drawings\R.M00398.005.01\Fig4-14_RIV_E01_1pc_043_Z0_Max_Nelson.qgz

By: JS

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Title: Dartmoor Nelson Flood Study - Current Climate
1% AEP Storm Tide Peak Flood Velocity x Depth - Nelson

Figure: 4-15

Rev: A

0 0.5 1 km

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4.4 Flood levels

Peak flood levels at the two stream gauges located in the Study Area are presented in Table 4-1 and Table 4-2 for riverine and storm tide events respectively. It should be noted that the levels presented are in gauge datum where the datum of the Glenelg River at Dartmoor gauge is m AHD +0.57 m and the Glenelg River at Nelson gauge's datum is in m AHD.

Figure 4-16 shows a long-section of flood levels along the Glenelg River for riverine events. The water level grade in the riverine events along the majority of the river is relatively constant but as flow exits the confines of the Glenelg River gorge approximately 5 km upstream of the mouth (near Simsons Landing) there is a sharp drop off in flood levels. In comparing the shape of the long-section curves for the more frequent to the extreme events the backwater effect caused by the constricting effect of the gorge on upstream flood levels is highlighted as the "curves" on flood level long-section are inverted.

Figure 4-17 shows a long-section comparison of the year 2100 1% AEP climate change scenario flood levels along the Glenelg River. The 1% AEP Climate Change 1 scenario water levels in Dartmoor are approximately 1.4 m higher than current climate conditions and the Climate Change 2 scenario levels are approximately 2.1 m higher. In Nelson the 1% AEP Climate Change 1 water levels in Dartmoor are approximately 0.5 m higher than current climate conditions and the Climate Change 2 levels are approximately 0.7 m higher. In both Dartmoor and Nelson this results in the 1% AEP Climate Change 1 event being equivalent to a current conditions 1 in 160 AEP event and the 1% AEP Climate Change 2 event being equivalent to a current conditions 1 in 200 AEP event.

As shown in Figure 4-18 the water levels up the Glenelg River remain fairly constant during storm tide events that occur when the estuary mouth is open and the increases in 1% AEP climate change scenario flood levels (Figure 4-19) is consistent with the amount of sea level rise.

Table 4-1 Stream gauge riverine event levels (gauge datum (m))

Event	Glenelg River at Dartmoor			Glenelg River at Nelson		
	Current Climate	CC1	CC2	Current Climate	CC 1	CC 2
20% AEP	10.41	11.20	11.58	1.01	1.47	1.80
Sep 2016	11.27[1]	-	-	-	-	-
10% AEP	12.38	13.27	13.74	1.53	1.88	2.14
Sep 1983	13.42[1]	-	-	-	-	-
5% AEP	14.00	15.12	15.61	2.01	2.37	2.54
2% AEP	16.41	17.58	18.21	2.75	3.12	3.34
1% AEP	18.18	19.64	20.33	3.32	3.82	4.07
Sep 1946	18.56	-	-	-	-	-
1 in 200 AEP	20.44	21.82	22.49	4.11	4.61	4.87
1 in 500 AEP	23.01	24.68	25.41	5.08	5.73	6.02
PMF	36.28	-	-	10.42	-	-

1. Recorded flood level at stream gauge.

Table 4-2 Stream gauge storm tide event levels (gauge datum (m AHD))

Event	Glenelg River at Nelson (m AHD)		
	Current Climate	CC 1	CC 2
Jun 2014	1.29[1]	-	-
20% AEP	1.51	2.43	2.85
10% AEP	1.64	2.54	2.96
5% AEP	1.75	2.63	3.06
2% AEP	1.89	2.75	3.19
1% AEP	1.98	2.84	3.27
1 in 200 AEP	2.06	2.92	3.35
1 in 500 AEP	2.15	3.01	3.43
Tsunami	4.30	-	-

1. Recorded flood level at stream gauge.

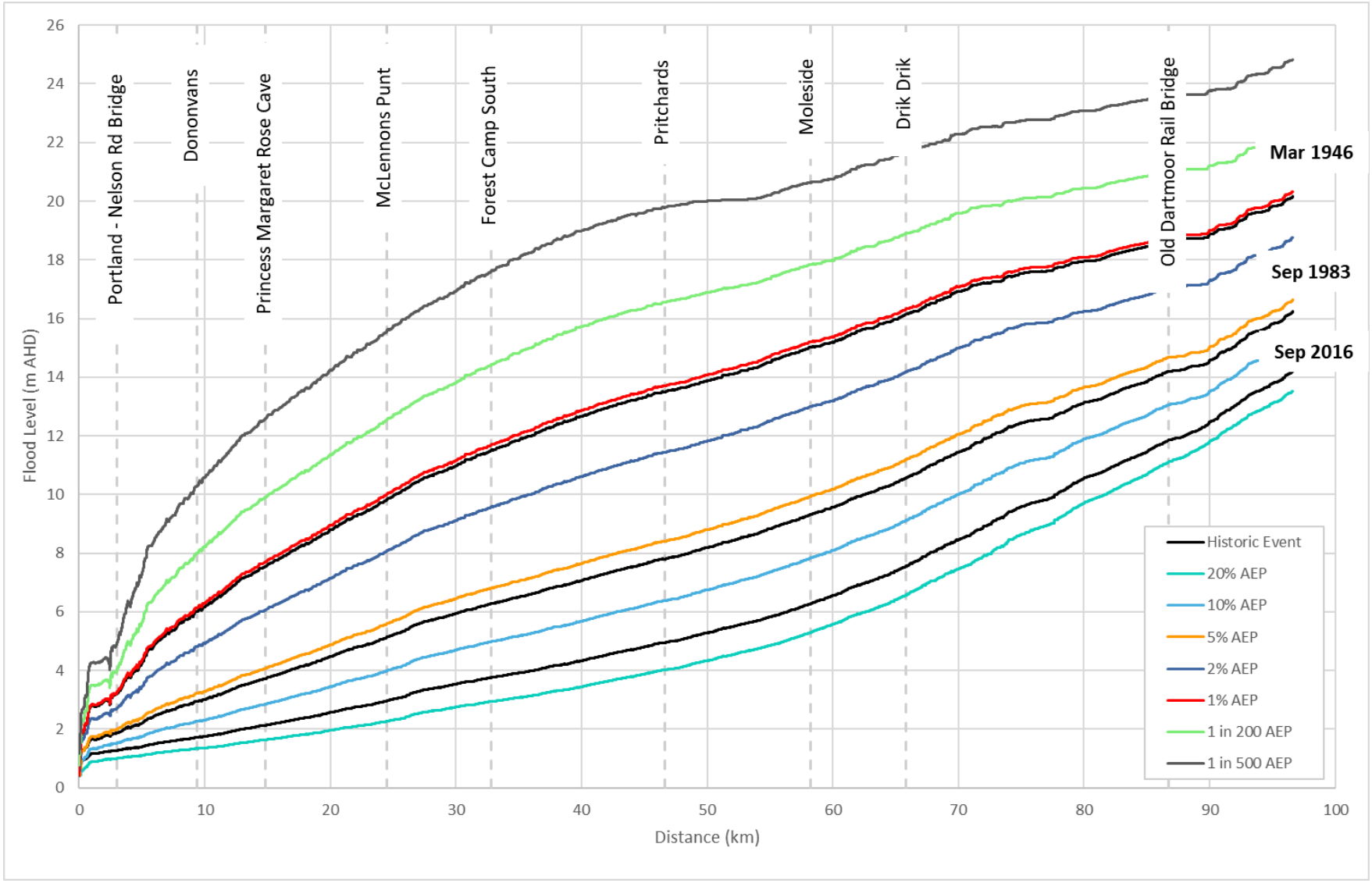


Figure 4-16 Riverine event flood level long-section

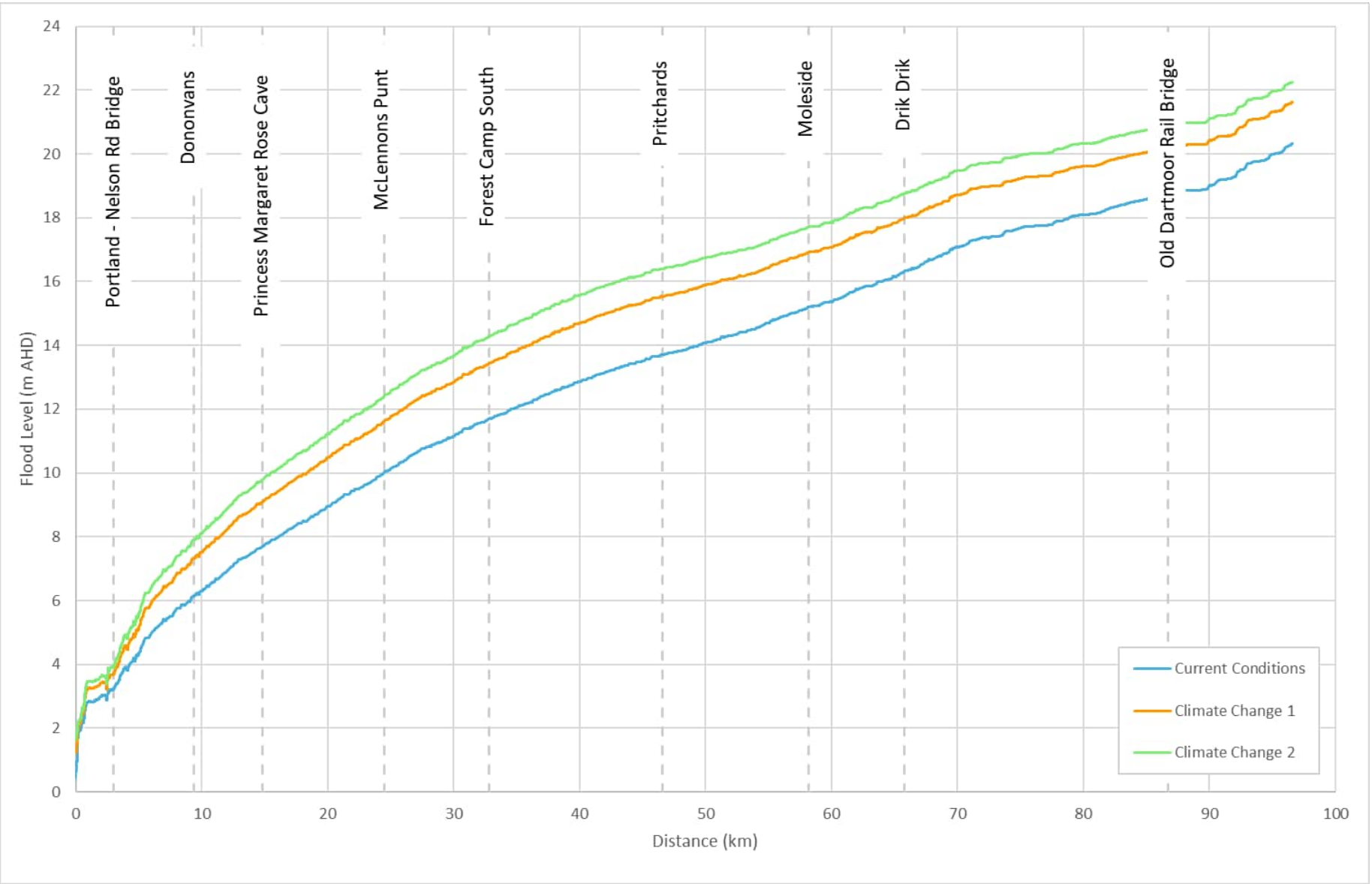


Figure 4-17 1% AEP Climate Change scenarios riverine event flood level long-section

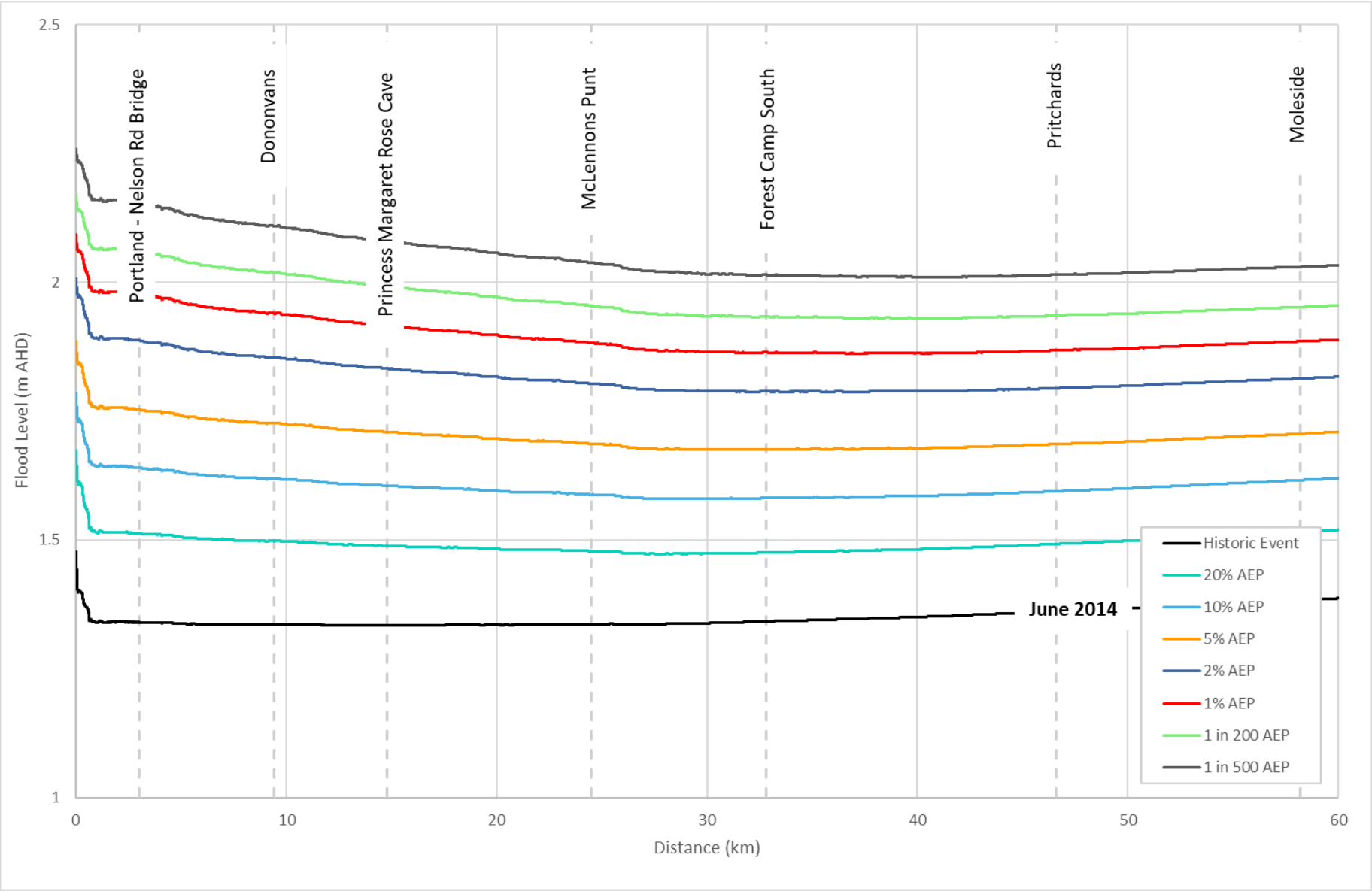


Figure 4-18 Storm tide event flood level long-section

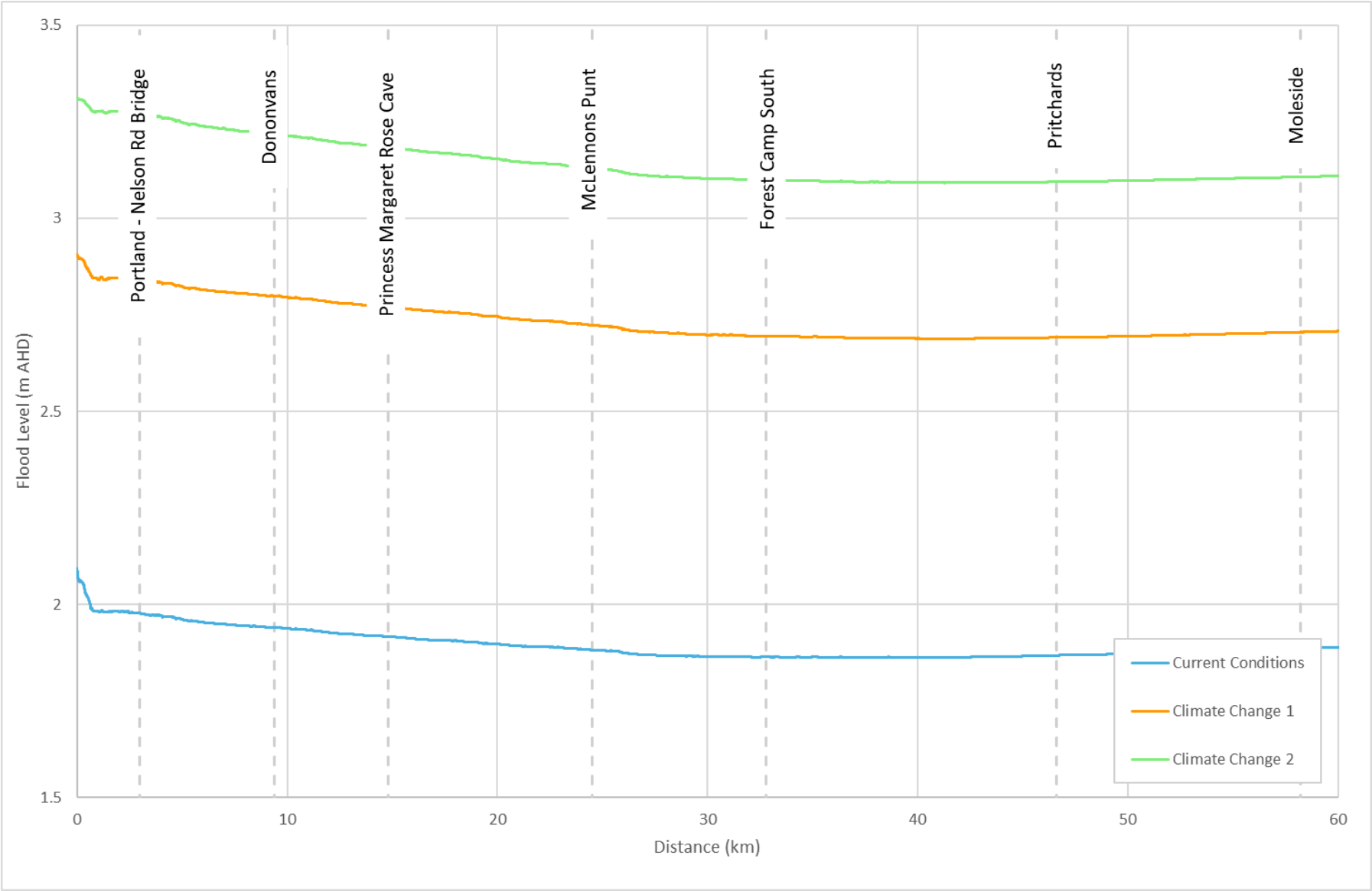


Figure 4-19 1% AEP Climate Change scenarios storm tide event flood level long-section

4.5 Property and building inundation

Counts of inundated properties and buildings for riverine and storm tide events are shown in Table 4-3 and Table 4-4. Inundated properties and buildings are also shown in the depth mapping for the Dartmoor and Nelson townships. **It should be noted that for the inundated buildings the floor level is not known so they could be inundated above or below floor level.**

Properties zoned Public Park and Recreation (PPRZ) and Public Conservation and Resource (PCRZ) except for those in the townships such as the Dartmoor Recreation Reserve have been removed from the inundated properties counts. Properties within transport reserves and within the waterways have also been removed.

The sheds, outbuildings and units / permanent caravans within the caravan park were removed from the inundated buildings with dwellings and business premises and public buildings retained.

Table 4-3 Riverine design event inundated properties and buildings

Event (AEP)	Existing Conditions		Climate Change Scenario 1		Climate Change Scenario 2	
	Prop.	Build.	Prop.	Build.	Prop.	Build.
20%	46	0	55	0	61	0
10%	64	0	67	0	71	0
5%	72	0	75	0	80	0
2%	82	0	86	0	91	1
1%	90	1	98	6	100	6
1 in 200	103	6	118	11	119	13
1 in 500	121	15	135	16	140	18

Table 4-4 Storm tide design event inundated properties and buildings

Event (AEP)	Existing Conditions		Climate Change Scenario 1		Climate Change Scenario 2	
	Prop.	Build.	Prop.	Build.	Prop.	Build.
20%	23	0	31	0	34	0
10%	24	0	33	0	34	0
5%	24	0	34	0	35	0
2%	25	0	34	0	37	1
1%	26	0	34	0	37	1
1 in 200	26	0	34	0	40	1
1 in 500	27	0	34	0	40	1

4.6 Road inundation

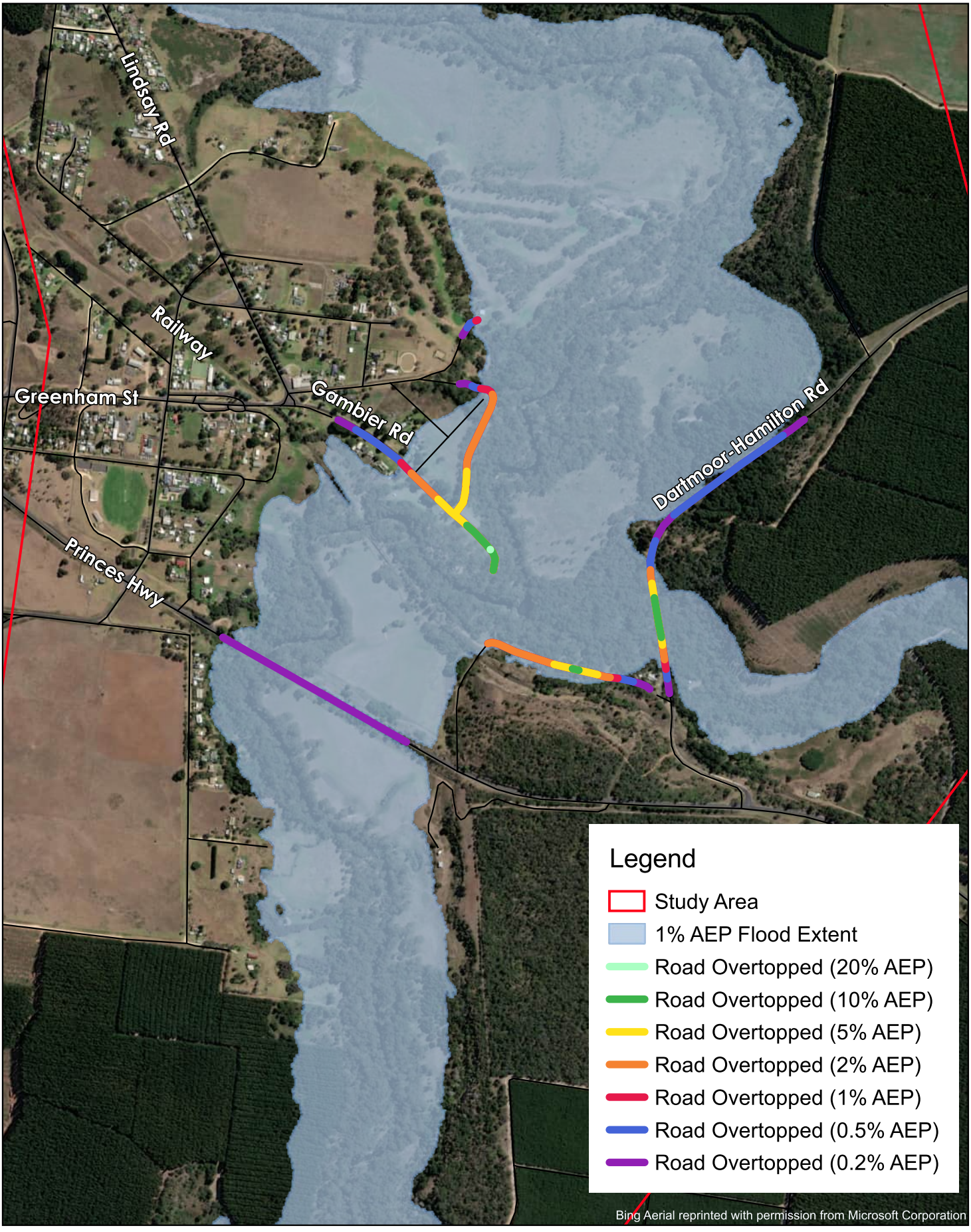
Inundated roads in the Dartmoor and Nelson townships for Current Climate are shown in Figure 4-20 to Figure 4-22. Road sections are coloured by the smallest event at which overtopping occurs. The maximum flood depths along inundated roads are presented in Table 4-5 and Table 4-6 for riverine and storm tide events respectively. Inundated roads that have been inundated beyond 0.3 m have been highlighted magenta.

Table 4-5 Riverine design event inundated road depths

Road	Event (AEP)						
	20%	10%	5%	2%	1%	1 in 200	1 in 500
Beach Road	0.03	0.52	0.97	1.64	2.14	2.81	3.61
Dartmoor-Hamilton Road		0.87	2.48	4.87	6.61	8.84	11.41
Gambier Road	0.00	1.37	3.00	5.41	7.16	9.39	11.96
Glenelg Drive						1.41	4.69
Isle Of Bags Road	0.04	0.36	0.94	1.88	2.66	3.76	5.17
Kellett Street							0.58
Nelson Boat Ramp Driveway			0.13	0.74	1.24	1.91	2.66
Old Bridge Road			0.14	0.27	0.79	1.55	2.48
Old Gambier Rd east of Glenelg River		0.13	1.11	3.51	5.25	7.48	10.04
Princes Highway							2.36
Simsons Landing Driveway				0.19	0.95	2.16	3.05
Simsons Landing Road				0.40	1.19	2.41	3.95
Sturt Street			0.13	0.51	1.02	1.71	2.53
Wapple Avenue					0.16	2.35	4.92
Wattle Avenue			0.81	3.00	4.76	7.00	9.57
Winnap - Nelson Road			1.46	4.52	6.72	9.36	12.15

Table 4-6 Storm tide design event inundated road depths

Road	Event (AEP)						
	20%	10%	5%	2%	1%	1 in 200	1 in 500
Beach Road	0.56	0.68	0.80	0.93	1.02	1.11	1.20
Isle Of Bags Road	0.19	0.32	0.43	0.56	0.65	0.74	0.83
Nelson Boat Ramp Driveway		0.05	0.09	0.16	0.15	0.18	0.28
Old Bridge Road		0.02	0.06	0.13	0.14	0.18	0.25
Sturt Street		0.01	0.04	0.10	0.15	0.14	0.16

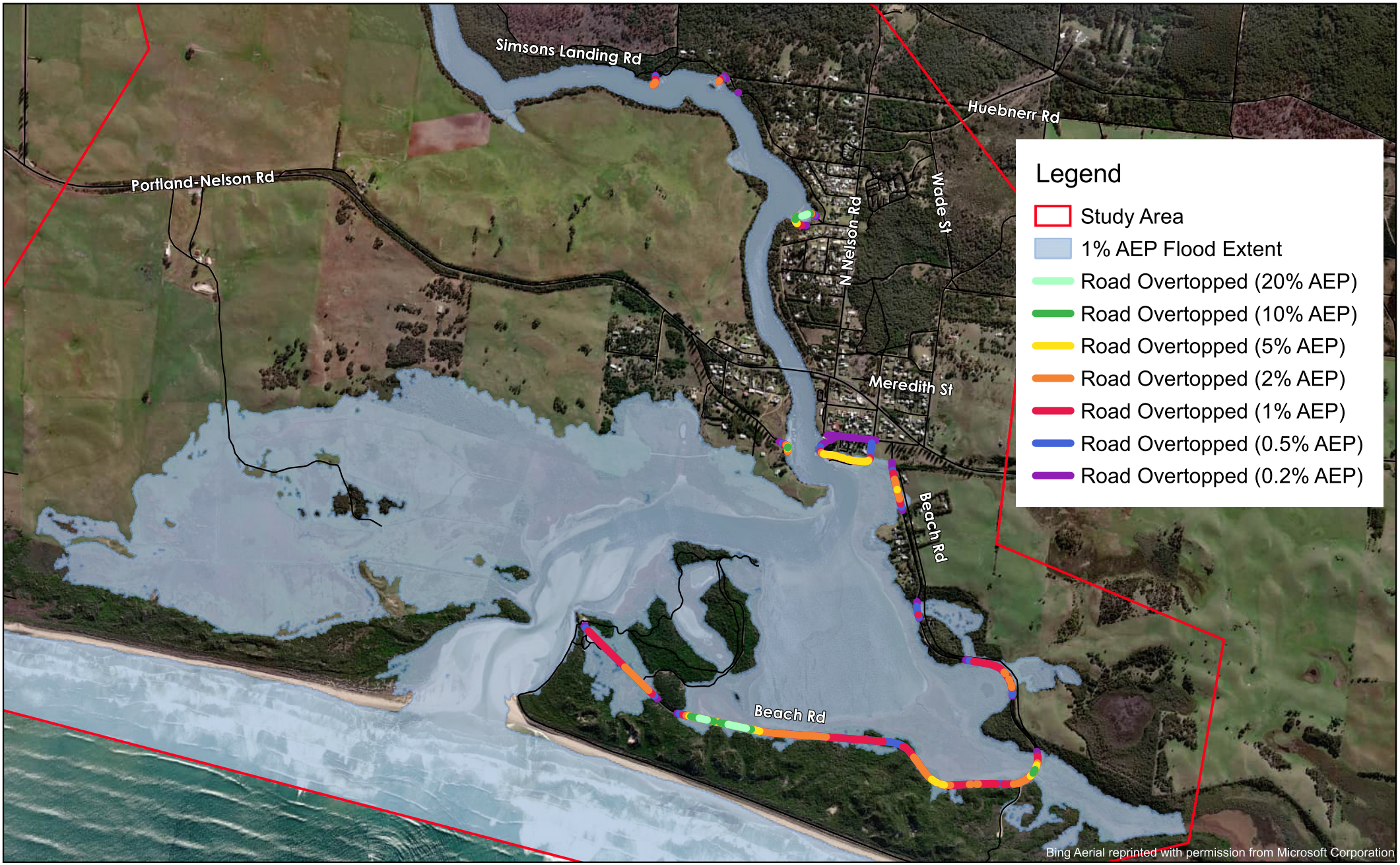


Title: Dartmoor Nelson Flood Study - Current Climate
Inundated Roads in Riverine Flood Event - Dartmoor

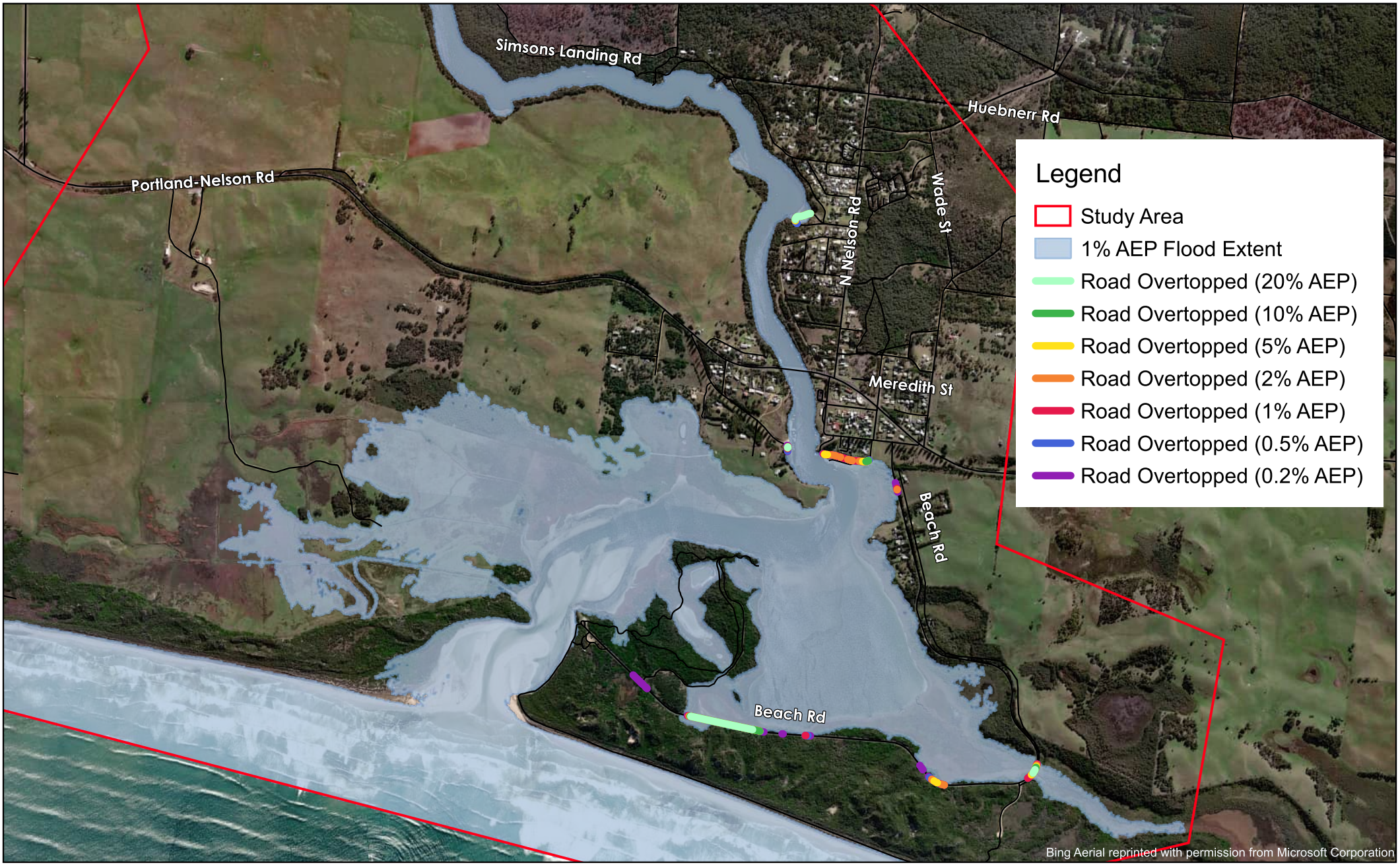
Figure:	Rev:	0 250 500 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	By: JS
4-20	A			May 2024

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Title: Dartmoor Nelson Flood Study - Current Climate Inundated Roads in Riverine Flood Event - Nelson	Figure: 4-21	Rev: A	0 300 600 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.venantsolutions.com.au
Filename: S:\Projects\M00398.MS.Dartmoor_NelsonFloodStudies\GIS\Drawings\R.M00398.005.00\Fig4-21_Roads_Inundated_E01_043_Nelson.qgz				By: JS	May 2024



Title: Dartmoor Nelson Flood Study - Current Climate Inundated Roads in Storm Tide Flood Event - Nelson	Figure: 4-22	Rev: A	0 300 600 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.venantsolutions.com.au
Filename: S:\Projects\M00398.MS.Dartmoor_NelsonFloodStudies\GIS\Drawings\R.M00398.005.00\Fig4-22_Roads_Inundated_E01_043_Nelson.qgz				By: JS	May 2024

4.7 Travel times

From the start of rainfall it typically takes approximately 1 day for water levels in the Glenelg River to start rising at Dartmoor and Nelson. However, this is due to inflows from the smaller local tributaries and will be contained within the river channel and adjacent low lying floodplain areas and hence does not create a significant flood risk. Flood peaks at Dartmoor typically occur 4-7 days from the start of rainfall and approximately 1 day later at Nelson. Table 4-7 presents the estimated travel times relative to Sandford.

Travel times are a function of storm duration which varies by design event and reporting location. **Please note that travel times can vary significantly for individual flood events as a result of several factors including**:

- **Catchment antecedent (wetness) conditions (including waterway baseflow) altering the time to convert rainfall to runoff.**
- **Storm durations - Intense short duration storms are likely shorter travel times than longer less intense storms.**
- **Temporal patterns - The time distribution of rainfall within a storm event can alter the travel times.**
- **Spatial patterns - The location of storm in the catchment can alter travel times. For example, a storm centred over the Grampians is likely to have a longer travel time than a storm centred over the mid-catchment (Casterton and Coleraine).**

Table 4-7 Estimated travels times

Location from	Location to	Typical travel time	Comments	Duration
Dartmoor (Glenelg River)				
Start of rainfall (upper catchment)	Dartmoor	1-2 days	Begin to rise from normal levels	1-2 weeks
Sandford	Dartmoor	1-3 days	To peak, average 2 days	
Nelson (Glenelg River)				
Start of rainfall (upper catchment)	Nelson	1-2 days	Begin to rise from normal levels	1-2 weeks
Dartmoor	Nelson	20-30 hrs	To peak, average 25 hrs	

5 Draft planning overlay mapping

A key objective of the Victorian Floodplain Management Strategy (DELWP 2016) is "*not making things worse*" and the strategy recognises avoidance and minimisation of flood risk via the Victorian land use and development and building approval systems as key to achieving this objective.

Land use planning controls are one of the most, if not the most effective, instruments available to mitigate the risk of flooding on communities. The objectives of the State and Glenelg planning policy for floodplain management is to assist 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

The strategy to achieve these objectives includes identifying land affected by flooding, including land inundated by 1% AEP or as determined by the floodplain management authority in planning schemes. For this Study the 1% AEP event is defined as a combination of the maximum of 1% AEP riverine (allowing for the influence of joint probability, refer to Section 3.4) and 1% AEP storm tide events.

Currently, there are no flood risk related planning controls for Dartmoor and Nelson. The flood risk mapping produced by this Study provides the foundation for addressing this gap in the Glenelg Planning Scheme. For Dartmoor and Nelson this will be achieved through application of the Land Subject to Inundation (LSIO) and Floodway (FO) overlay to the flood prone land in and around both townships.

LSIOs are defined by the 1% AEP and show where development is generally permissible. FOs identify areas which have the greatest risk and frequency of being affected by flooding exceeding accepted safety thresholds where development should generally not be permitted. For this Study the safety criteria used to delineate the FOs is land where the 1% AEP flood depth is likely to reach or exceed 0.5 m, and/or land where the 1% AEP flood hazard factor (the product of depth and velocity) is likely to reach or exceed 0.4 m^2/s, and/or water velocity is likely to be 2m/s or more. This is based on the safety thresholds for children and light building structures as presented in the Guidelines for Development in Flood Affected Areas (DELWP 2019).

It is also an objective State and Glenelg planning policy to minimise the impacts of natural hazards and adapt to the impacts of climate change by identifying at risk areas using the best available data and climate change science. It is understood that Glenelg Shire will seek to apply the LSIO and FO to the floodplain land between Dartmoor and the river mouth south of Nelson based on the draft LSIO and FO maps produced by this project using the Climate Change 2 (CC2) scenario as described in detail in Section 1.3. CC2 is representative of the best estimate (50^{th} percentile) of the SSP5-8.5 very high greenhouse gas emissions scenario. This increase provides conservative estimates of expected climate change impacts and is generally recognised as providing the most appropriate range of plausible future increase in mean surface temperature scenarios for consideration in land use and development planning purposes across Australia.

The applied increased rainfall intensity factors account for the likely impact of climate change on the amount of inland catchment rainfall runoff, which affects the magnitude of flood flows in the Glenelg River and its tributaries. Flood risk in Nelson and further upstream the Glenelg River estuary is also affected by the height of the ocean at the Glenelg River mouth. This is because sea level rise results in higher ocean levels that will make large storm tide and riverine flood event impacts more severe. Higher mean sea level will make riverine floods more severe, as the higher ocean level at the river mouth will cause Glenelg River floods to back up for

a greater distance upstream from the river mouth. This increased back up of water into the river will result in higher riverine flood levels.

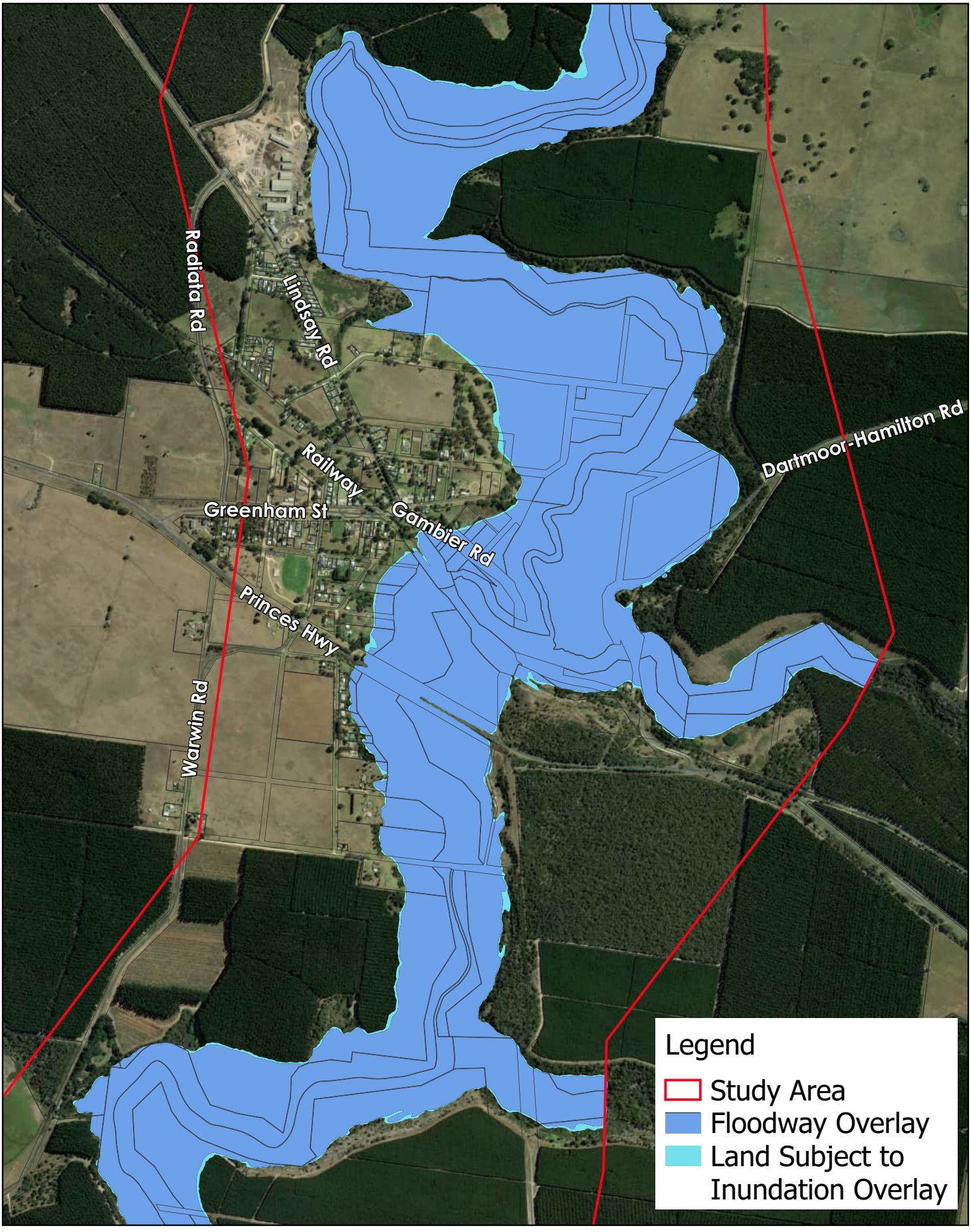
Increased rainfall intensity has been defined by this study in accordance with the guidance provided in the Draft Update to Climate Change Considerations Chapter in Australian Rainfall and Runoff: A guide to Flood Estimation (DCCEEW 2023). Applying this guidance results in a 41% increased rainfall intensity from the 1961 to 1990 baseline. It should be noted that following the climate change assessment completed by this project (July 2024), the draft climate change considerations were incorporated into Version 4.2 of ARR 2019 (August 2024). Version 4.2 of ARR 2019 uses the Summary for Policymakers report (IPCC 2021) as opposed to the Interactive Atlas used in the draft as the source of the global mean surface temperature projections. The change in the source for global mean surface temperature projections has resulted in downward revision of the recommended global warming levels used in calculating potential future increase in rainfall intensity from 4.5°C to 4.1°C relative to the 1961 to 1990 baseline. This means the increased rainfall intensity factors adopted by this study are in the order of 4% higher than they would be if the ARR Version 4.2 warming levels (4.1°C) had been applied.

Victoria's current sea level rise planning policy (Clause 13.01-2s of the Victoria Planning Provisions) is to plan for not less than 0.8 m of sea level rise by the year 2100. It is understood at the time of the Study, that this policy has been reviewed as per Action 3.9 of the Marine and Coastal Strategy (DELWP 2022). It is also understood that this review responds to the IPCCs 6th assessment report finding that the global average increase in mean sea level can be expected to be in the order of 1.1 metres by the year 2100, given the current trajectory of greenhouse gas emissions and the potential impact of this trajectory on the future mean surface temperature. Consequently, Victoria's minimum required planning allowance for sea level rise is likely to be revised upward, to account for more than 0.8 m of rise.

A notable decision relating to this and Victoria's adaptive approach to dealing with the sea level rise risk was made by the Minister for Planning in early October 2024. The decision related to amendment C69 of the Moyne Shire planning scheme. The Ministers Decision was to revise the flood risk related planning controls (overlays) covering the coastal and riverine floodplains at Port Fairy to account for up to 1.2 m of sea level rise. This reversed the Moyne C69 Planning Panel recommendation for the amendment to adopt planning controls that only account for up to 0.8 m of sea level rise, The decision has underlined the "not less than" element of Victoria's sea level rise planning policy and revised planning scheme controls accounting for up to 1.2m of sea level rise were gazetted for port Fairy on the 3rd of October 2024. The decision accounts for the fact that there is high confidence that sea levels will continue to rise for centuries beyond 2100 due to continuing deep ocean heat uptake and mass loss of glaciers and ice sheets and remain elevated for thousands of years (IPCC 2019). Therefore the 1.2 m sea level rise mapping is an appropriate tool for understanding, planning for and adapting to, future levels of risk.

Planning for up to 1.2 m of sea level rise is consistent with planning for the effect of the increase in mean surface temperature predicted by the SSP5-8.5 emissions scenario. This represents the upper limit estimate (95th percentile) of the SSP5-8.5 very high greenhouse gas emissions scenario for 2100 (Streamology 2022b). On this basis it is logical that planning for the potential effects of increasing rainfall intensity on riverine flood risk should be consistent with the approach to the sea level rise and the SSP5-8.5 emissions scenario should also be account for with regard to planning for the potential increase in riverine flood risk by the year 2100.

The resulting draft overlays for are mapped in Figure 5-1 and Figure 5-2 for Dartmoor and Nelson respectively.

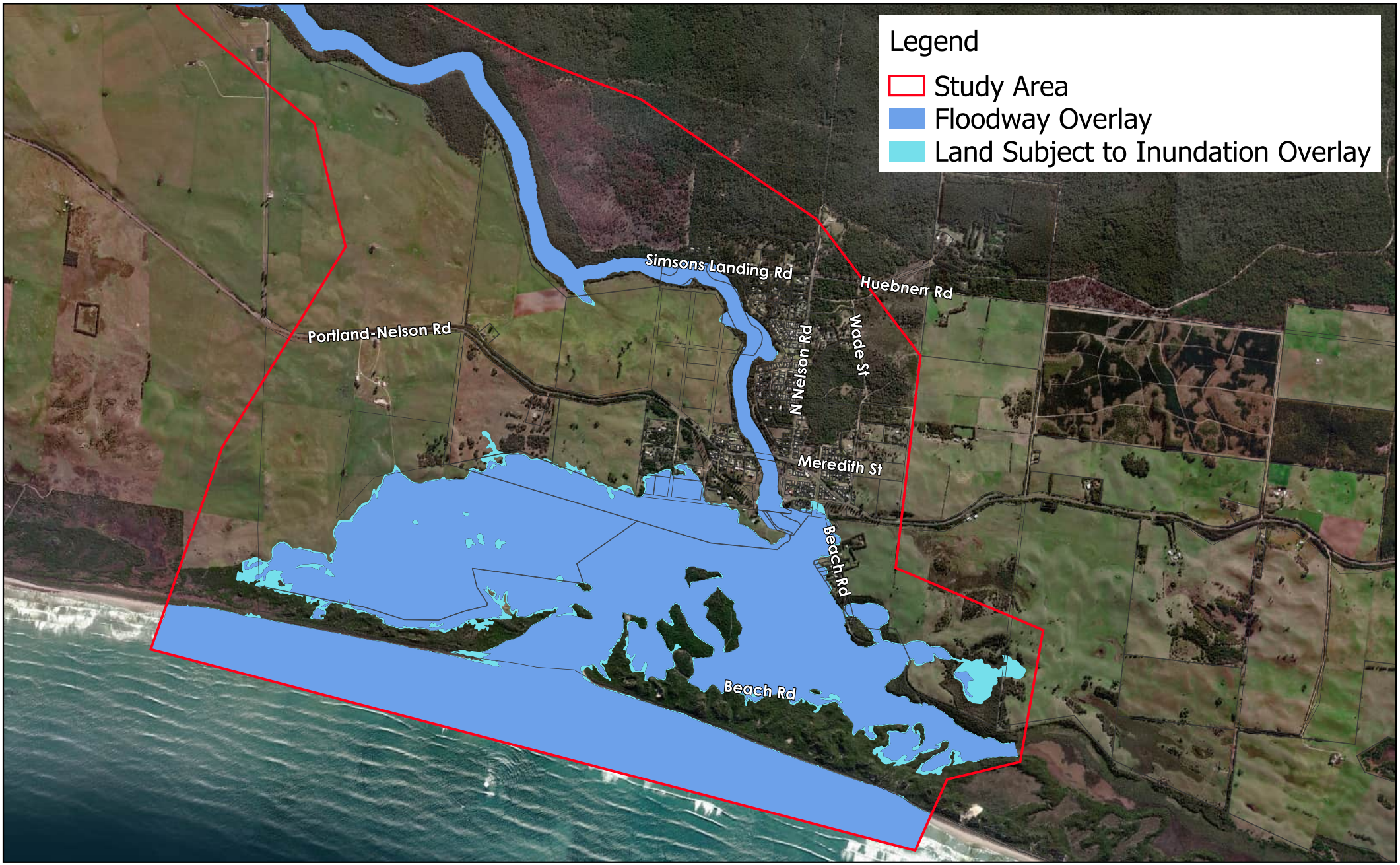


Title:
Dartmoor Nelson Flood Study - Climate Change 2
Draft Planning Overlays and Hazardous Access Areas - Dartmoor

Figure:	Rev:			
5-1	A	0 400 800 m	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	By: JS Nov 2024

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Filename: S:\Projects\M00398.MS.Dartmoor_NelsonFloodStudies\GIS\Drawings\R.M00398.005.01\Fig5-1_CC2_PlanningScheme_Dartmoor.qgz



Title: Dartmoor Nelson Flood Study - Climate Change 2 Draft Planning Overlays and Hazardous Access Areas - Nelson	Figure: 5-2	Rev: A	0 0.5 1 km	This mapping product is based on techniques and data in accordance with the study scope. Users should consider the mapping in the context of the report. No two floods are the same and care should be taken in the use and interpretation of the results presented.	VENANT SOLUTIONS www.VenantSolutions.com.au
Filename: S:\Projects\M00398.MS.Dartmoor_NelsonFloodStudies\GIS\Drawings\R.M00398.005.01\Fig5-2_CC2_PlanningScheme_Nelson.qgz				By: JS	Nov 2024

6 Flood damages assessment

This section summaries the methods used to calculate the Average Annual Damage (AAD) estimate for the Study Area of $238,000 for riverine events and $23,000 for storm tide events resulting in a combined AAD estimate $261,000.

Quantification of flood damages enables floodplain managers and decision makers to gain an understanding of the monetary cost of flooding. For this assessment the flood damages are presented as AAD which is the average flood damage in monetary terms per year that would occur over a long period of time.

As shown in Figure 6-1 flood damages can be categorised as either direct or indirect damages. Direct damages comprise the physical impact of the flood, for example, damages to structure and contents of buildings, agricultural enterprises and regional infrastructure. Indirect damages comprise losses from disruption of normal economic and social activities that arise because of flooding; for example, costs associated with emergency response, clean-up, community support, as well as disruption to transport, employment and commerce.

Further, depending on the difficulty of assigning a monetary value, damages can also be categorised as tangible or intangible. Tangible flood damages are those which can easily be assigned a monetary value such as damages to buildings. Intangible flood damages are those which cannot be easily assigned a monetary value such as environmental and social costs.

Potential flood damages can be reduced by actions taken during the warning time available in response to a flood event referred to as actual damages.

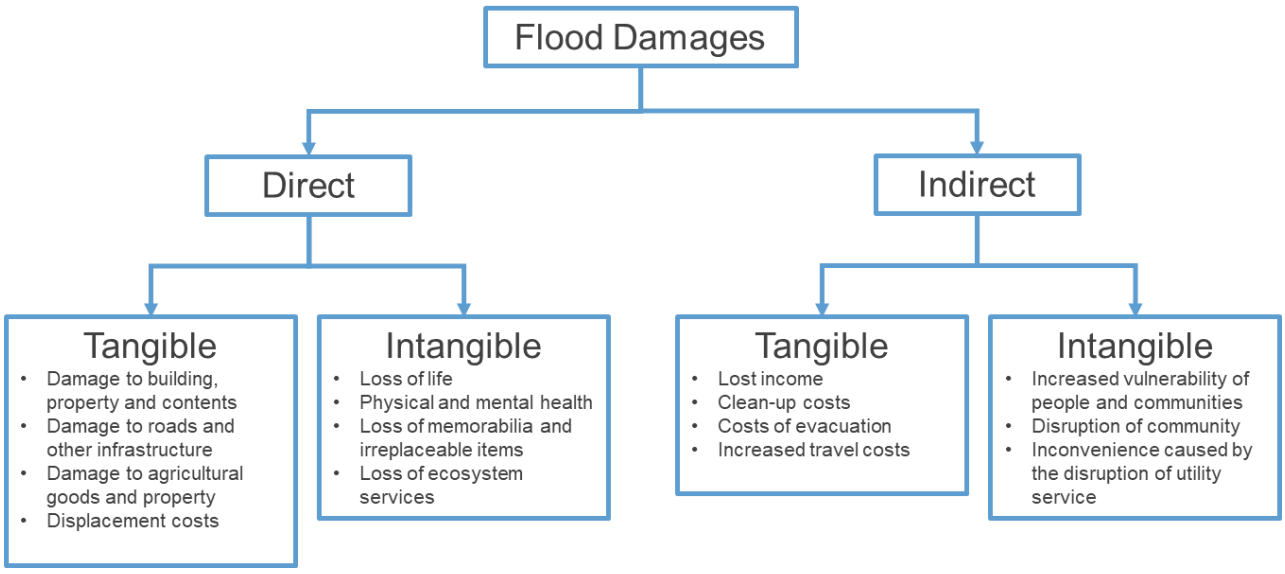


Figure 6-1 Categories of flood damage

6.1 Economic inputs

The following economic input data, indexed to a monetary value relative to that at the end of the June quarter of 2024, was used as inputs into the damage calculations:

- **Building and property damages**
  - **Residential direct damages** – Residential direct damages are comprised of several aspects; structural damage, contents damage, external (property) damage and relocation costs.
    The inundation depth-damage curves for residential buildings which include structural and contents damages were sourced from DPE (2023) factored for the Glenelg Local Government Area.

External damages which are applied to each residential property with a building on it when inundated above 0.3 m as recommended in DPE (2023).
Relocation costs are based on the March 2024 quarter median rental rates for regional Victoria published by the Department of Families, Fairness and Housing applied via an inundation depth-relocation duration curve provided in the Flood Damage Assessment FRM Tool DT01 developed by the NSW Department of Planning and Environment

  - **Commercial and industrial building direct damages** - Commercial and industrial building direct damages are comprised of structural and contents damage. The inundation depth-damage curves for commercial and industrial buildings were sourced from DPE (2023)
  - **Public building damage** - Public building direct damages are comprised of structural and contents damage. The inundation depth-damage curves for public buildings were sourced from DPE (2023) and are classified in three categories; schools, hospitals and other public buildings

- **Road and other infrastructure damages** - Road damages were defined by DNRE (2000) and include initial road repair, subsequent accelerated deterioration and bridge repair and accelerated deterioration. Other infrastructure damages are assumed to be 5% of residential property damages as recommended in the Flood Damage Assessment FRM Tool DT01 developed by the NSW Department of Planning and Environment.
- **Agricultural damages** - The predominant agricultural land use types in the Study Area plantation and dryland pasture which are not expected to experience plant death during inundation periods of less than five to seven days (DNRE 2000). As such only clean-up costs have been accounted for
- **Indirect damages** - For residential clean-up costs when buildings are inundated above floor level a clean-up cost has been applied as recommended in DPE (2023). Non-residential Indirect damages are assumed to be 30% of total direct damages as recommended in DNRE (2000)
- **Intangible damages** - Intangible damages are assumed to be 100% (Deloitte 2016 and Werritty et al. 2007) of total direct damages. Intangible damages are comprised of non-physical and unpriced damages that result from direct and indirect impacts. These include but are not limited to the following:
  - Physical health (including loss of life)
  - Psychological health impacts (e.g. mental health impacts, trauma, concerns of future floods and loss of confidence in authorities and services)
  - Social impacts (loss of community and irreplaceable societal memorabilia)
  - Cultural and heritage impacts
  - Flora and fauna impacts

6.2 Current climate average annual damages

The AAD and the breakdown from each type of damages for riverine and storm tide flooding are presented in Table 6-1 and Table 6-2 respectively. The composition of the type of damage contributing to the AAD are for riverine and storm tide flooding are shown in Figure 6-2 and Figure 6-3 respectively. These figures show that for riverine events damages to building and property and roads and other infrastructure contribute the largest portion of damages excluding intangibles while for storm tide events roads and other infrastructure are almost the sole source of damage.

Table 6-1 Riverine event current climate damages summary

AEP	Building and property damages	Road and other Infrastructure Damages	Agricultural Damages	Intangible Damages	Total Damages	Contribution to AAD
PMF	$56,210,000	$11,598,000	$253,000	$62,868,000	$130,928,000	**$138,000**
1 in 500	$2,817,000	$1,233,000	$4,000	$3,372,000	$7,425,000	**$15,000**
1 in 200	$672,000	$826,000	$3,000	$1,322,000	$2,823,000	**$10,000**
1%	$21,000	$564,000	$2,000	$458,000	$1,045,000	**$9,000**
2%	$0	$380,000	$2,000	$293,000	$675,000	**$16,000**
5%	$0	$203,000	$1,000	$157,000	$360,000	**$15,000**
10%	$0	$133,000	$0	$102,000	$235,000	**$18,000**
20%	$0	$68,000	$0	$52,000	$120,000	**$18,000**
Average Annual Damages						**$238,000**

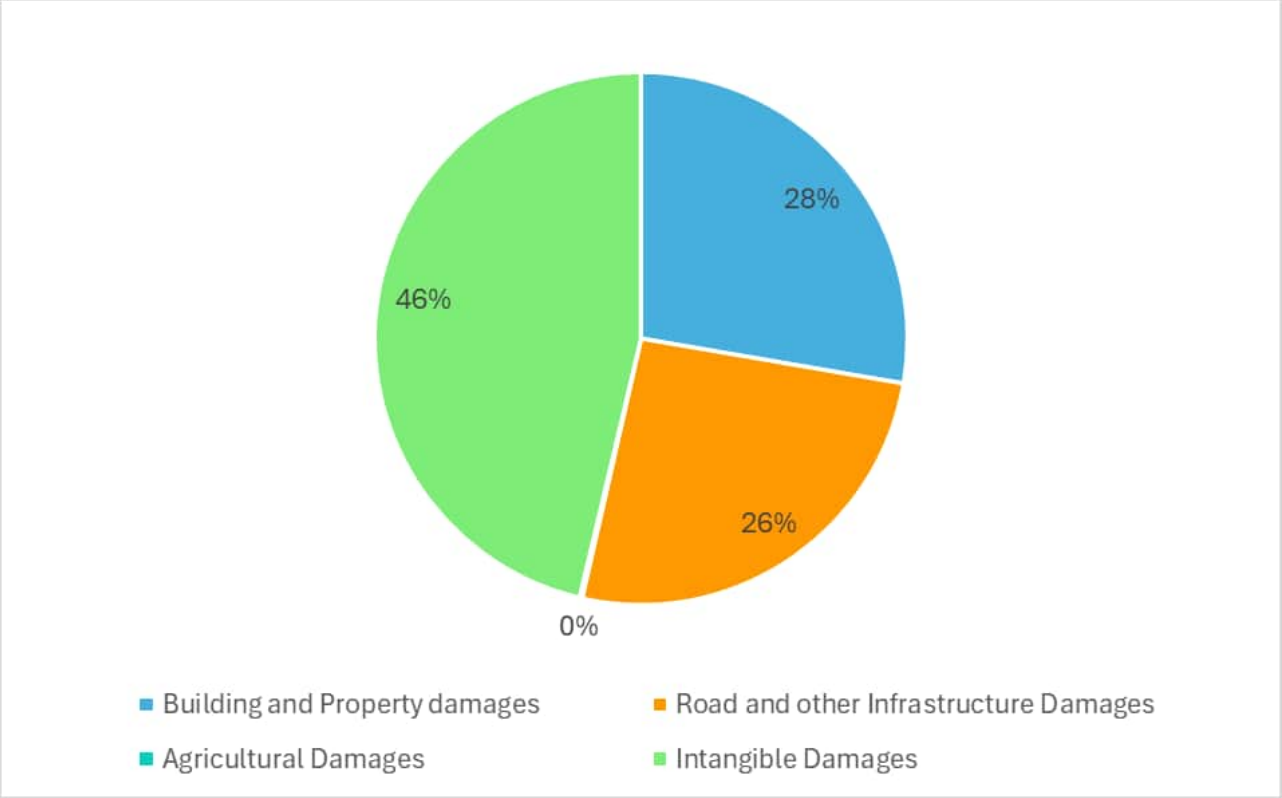


Figure 6-2 Riverine event current climate AAD composition

Table 6-2 Storm tide event current climate damages summary

AEP	Building and property damages	Road and other Infrastructure Damages	Agricultural Damages	Intangible Damages	Total Damages	Contribution to AAD
Tsunami	$80,000	$272,000	$0	$277,000	$629,000	**$1,000**
1 in 500	$0	$63,000	$0	$48,000	$111,000	**$0**
1 in 200	$0	$54,000	$0	$42,000	$96,000	**$0**
1%	$0	$50,000	$0	$39,000	$89,000	**$1,000**
2%	$0	$45,000	$0	$35,000	$80,000	**$2,000**
5%	$0	$40,000	$0	$31,000	$71,000	**$3,000**
10%	$0	$38,000	$0	$29,000	$67,000	**$6,000**
20%	$0	$34,000	$0	$26,000	$60,000	**$9,000**
Average Annual Damages						**$23,000**

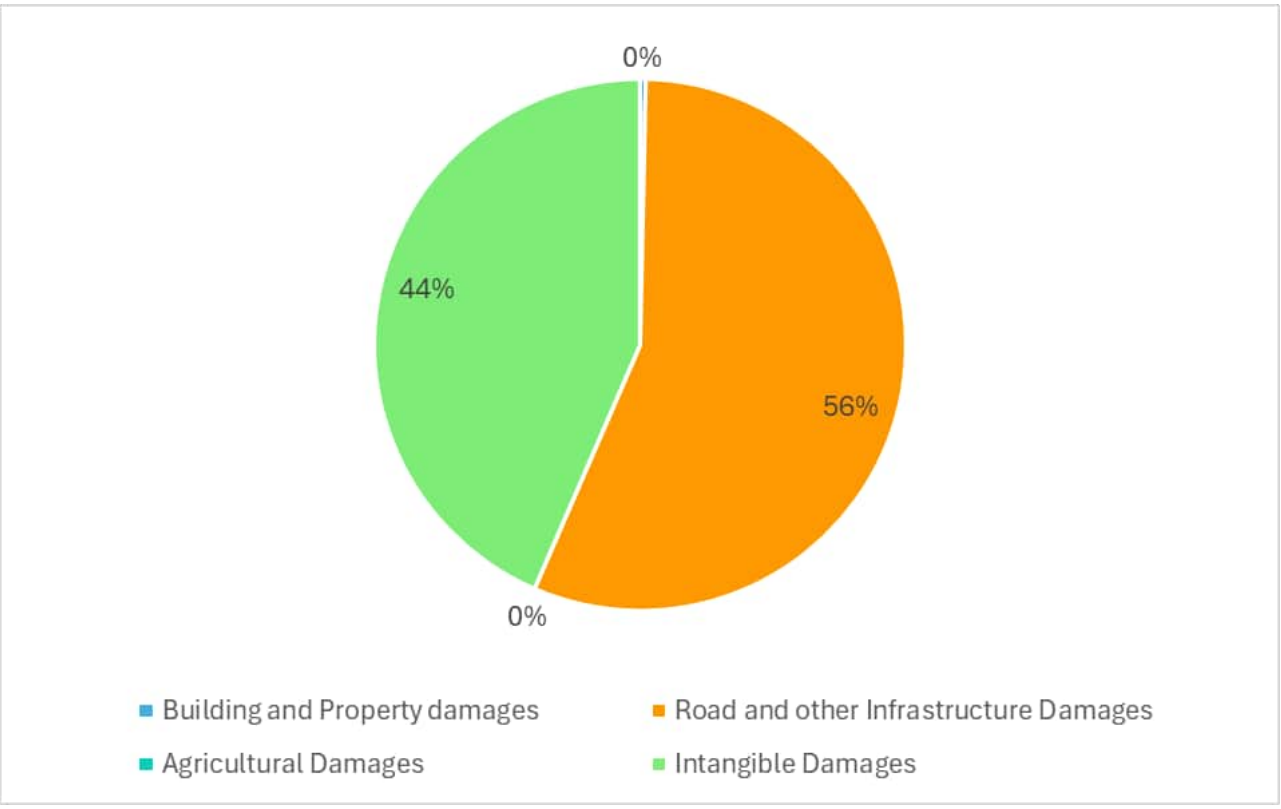


Figure 6-3 Storm tide event current climate AAD composition

7 Flood warning feasibility assessment

A review of the current flood warning and arrangements found that the Bureau of Meteorology does not offer a flood warning service for Dartmoor or Nelson but it does provide Coastal Hazard Warnings for abnormally high tides or storm tides that could impact on Nelson. Given the considerable cost and time requirements in making and providing a flood warning service for Dartmoor and Nelson and the relatively low risk, in comparison to other catchments, the benefits of setting up a flood forecasting system are limited. However, there is a good relationship between recorded water levels (and flows) at the upstream Glenelg River at Sandford stream gauge to those predicted to occur downstream at Dartmoor and Nelson. With 1 -3 days flood flow travel time between Sandford and Dartmoor the gauge level relationships produced for this study provide a good tool to use to predict the magnitude of flood events and coordinate the appropriate actions in place of a formal flood forecasting system operated by the Bureau of Meteorology.

The Glenelg Shire Flood Emergency Plan (MFEP) does not currently have a sub-plan or provide any other flood intelligence or warning information for Dartmoor or Nelson. As such any response actions undertaken by the community or emergency agencies will be based on past lived experience or observations / predictions made during flood events.

Making the outcomes of this Study publicly available, supported by other education and awareness activities such as developing a Local Flood Guide, allows for the community to assess their flood risk (or lack of) and develop actions to improve their flood resilience.

Documenting expected consequences of flooding and appropriate response actions in the MFEP will greatly reduce the burden on emergency response agencies in the event of expected flooding in the lower Glenelg River and allow for targeted response actions to be undertaken.

7.1 Flood warning feasibility assessment recommendations

The feasibility of improving flood warning arrangements for Dartmoor and Nelson have been assessed. Improvements are feasible, however given the relatively low flood risk to the populations of Dartmoor and Nelson or serious issues with the existing level of service have not been identified in the past by the community or emergency response agencies, potential improvement actions need to be carefully weighed up from a cost versus benefit perspective including the sustainability of costs into the long term.

Given the above most of the recommended potential improvement actions presented in Table 7-1 are focused on using information, services and systems that are currently in place to incorporate the information derived from this Study. These improvements are achievable and sustainable with relatively little effort and cost, whereas others would require more significant investment which may not be warranted at this point in time. As such each potential improvement action has been assigned a priority based on the following criteria:

High	Actions achievable in the near-term (0 - 1.5 years) using information, services and systems that are currently in place and require minimum investment and will provide the greatest benefit.
Medium	Actions achievable in the mid-term (1.5 – 3 years) requiring a greater level of investment to implement.
Low	Actions achievable in the long-term (+3 years) requiring a greater level of investment to implement but do not provide a significant benefit in comparison to high or medium priority actions.

Table 7-1 Recommended potential improvement actions

TFWS Element	No.	Potential Improvement Actions for Dartmoor and Nelson	Lead Agency(s)	Partner Agency(s)
Building community resilience to disasters	**1**	• Continue flood awareness activities that emphasise personal safety and damage reduction. This includes: ○ Provide links to the Final Summary Report (at a minimum) and Municipal Flood Emergency Management Plan on Council's and/or GHCMA's website ○ Upload the flood mapping onto the regional Flood Information Portal hosted by the GHCMA	Council	GHCMA
	2	• Complete the Local Flood Guides (LFG) for Dartmoor and Nelson and make them available via a link to the VICSES LFG web portal on Council's website.	VICSES	Council
	3	• Identify appropriate location in Dartmoor for the installation of a flood pole to aid in increasing and maintaining the community's and visitor's awareness of flooding and to help visualise the magnitude of past flood events, flood class levels and provide context to the design flood levels developed by this study. The flood pole would also make a suitable location to display flood intelligence products such as posters of the LFG.	Council	Relevant landowner / manager of identified location
Monitoring and prediction	**4**	• Incorporate the gauge level relationships into the Municipal Flood Emergency Management Plan.	VICSES	Council, GHCMA
	5	• Council, GHCMA and VICSES agree who will maintain the relationships and undertake the predictive assessments during an event including if the extrapolation beyond the limit of the rating curve at Sandford is required.	VICSES	Council, GHCMA
	7	• Work with the BoM to make the Glenelg River at Dartmoor live gauge levels available via BoM's website as a river data location	Council	VICSES, DEECA, BoM, GHCMA
	8	• Investigate making the Glenelg River at Nelson gauge operated by the GHCMA data available on the Water Management Information System (WMIS) and/or FloodZoom	Council, GHCMA	DEECA

	9	• Investigate the need for requesting the BoM to establish a flood forecasting system for the Glenelg River at Sandford and/or Dartmoor gauges in the context of the population at risk and cost versus benefit.	Council	BoM, VICSES
Interpretation	**10**	• Establish flood class levels for the Glenelg River at Dartmoor gauge.	GHCMA	VICSES, Council
Message construction	**11**	• Highlight the flood risk of the low lying floodplain areas used for recreation and camping and recommending evacuation of these areas when constructing flood warnings and bulletins.	VICSES	BoM
Communication	**12**	• Investigate the need for requesting the BoM to establish an information location for the Glenelg River at Dartmoor gauge. In the absence of a forecasting system, investigate whether an information location at the Glenelg River at Sandford gauge can be used to provide warning for Dartmoor and Nelson based on gauge level relationships.	Council	BoM, VICSES
Community Response	**13**	• Confirm and incorporate emergency response actions into the Municipal Flood Emergency Management Plan at next review.	VICSES	GHCMA, Council

Continuous review and improvement	**14**	• Review and update all aspects of the Total Flood Warning System including:
		  ○ Ensuring locations and links to flood information are up to date and accessible to the community
		  ○ Additional flood behaviour information and post response review findings following flood events are incorporated into emergency response documentation and actions
		  ○ Incorporate updated flood mapping and intelligence information if it becomes available
		• It is recommended that this review be undertaken periodically or after an event by Council's Emergency Management Unit with input from VICSES, GHCMA and other agencies engaged in emergency response.
			Council	VICSES, GHCMA

	15	• Update gauge relationships in the Municipal Flood Emergency Management Plan if the Glenelg River at Sandford gauge rating curve is extended.	VICSES	Council, GHCMA

8 Key outcomes

This report provides a summary of the Dartmoor and Nelson Flood Study. For a detailed description of the Study inputs, approach and outcomes the accompanying detailed technical reports should be referred to.

The key outcomes of the Study are:

- Thorough documentation of the history of flooding across the Study Area based on the historical information discovered during the study
- Hydrologic (RORB) and hydraulic (TUFLOW) models that are well calibrated to the available historic flood event data providing confidence that the flood risk mapping and flood emergency response planning (flood intelligence) outputs reflect the likely real world extent, depth and velocity of the modelled flood risk scenarios. The calibrated models have enabled:
  - Provision of knowledge and data around the expected effects of climate change (primarily increase in rainfall intensity and rising mean sea level) on flood risk into the foreseeable future
  - Delineation of appropriate extents for land use and development planning controls for incorporation into the Glenelg Shire planning scheme and mitigation of flood risk via the planning system
  - Development of a range of reliable products to support improvement of flood emergency response procedures and actions, including updating of the Municipal Flood Emergency Plan (MFEP)
- Average annual damage (AAD), which represent the average flood damage in present day monetary terms per year that would occur over a long period of time, estimates of $238,000 for riverine events and $23,000 for storm tide events bringing the total AAD estimate up to $261,00
- Improvement of flood forecasting and warning arrangements for the communities of Dartmoor and Nelson is feasible, however the scale of investment should be informed by careful consideration of costs (including long term maintenance) versus benefits

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Planning and Environment Act 1987

Glenelg Planning Scheme

Amendment C115gelg

Explanatory Report

Overview

The amendment seeks to ensure the Glenelg Planning Scheme accounts for and manages the risk posed by riverine and ocean storm tide flooding to land between the township of Dartmoor and the mouth of the Glenelg River at the township of Nelson. It will do this by applying Schedule 1 to the Floodway Overlay (FO1) and Schedule 1 to the Land Subject to Inundation Overlay (LSIO1) according to the findings of the *Dartmoor and Nelson Flood Study* (Venant Solutions, 2024) referred to as the study throughout this document.

The amendment will also update:

- The Planning Policy Framework to include the flood risk for the towns of Dartmoor and Nelson.
- The existing Glenelg Shire Local Floodplain Development Plan incorporated document.
- The schedules to the Urban Floodway Zone, Floodway Overlay, and the Land Subject to Inundation Overlay.
- Other planning scheme ordinance as required.

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

And/or

The amendment is available for public inspection, free of charge, during office hours at the following places:

Portland Customer Service Centre

71 Cliff Street, Portland VIC 3305

Heywood Customer Service Centre

77 Edgar Street, Heywood

Casterton Customer Service Centre

67 Henty Street, Casterton

Nelson Visitor Information Centre

16 Leake Street, Nelson

The amendment can also be inspected free of charge at the Department of Transport and Planning website at http://www.planning.vic.gov.au/public-inspection or by contacting the office on 1800 789 386 to arrange a time to view the amendment documentation.

Submissions

Any person may make a written submission to the planning authority about the amendment. Submissions about the amendment must be received by [insert submissions due date].

A written submission must be sent to:

Glenelg Shire Council
Planning Unit

- In person at:
    - 71 Cliff St, Portland
    - 67 Henty Street, Casterton
    - 77 Edgar Street, Heywood
- 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 hearing dates have been set for this amendment:

- Directions hearing: [insert directions hearing date]
- Public hearing: [insert public hearing date]

Details of the amendment

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 land along the Glenelg River and surrounding land from the north of Dartmoor to the river mouth south of Nelson as identified in the study as shown in Figure 1.

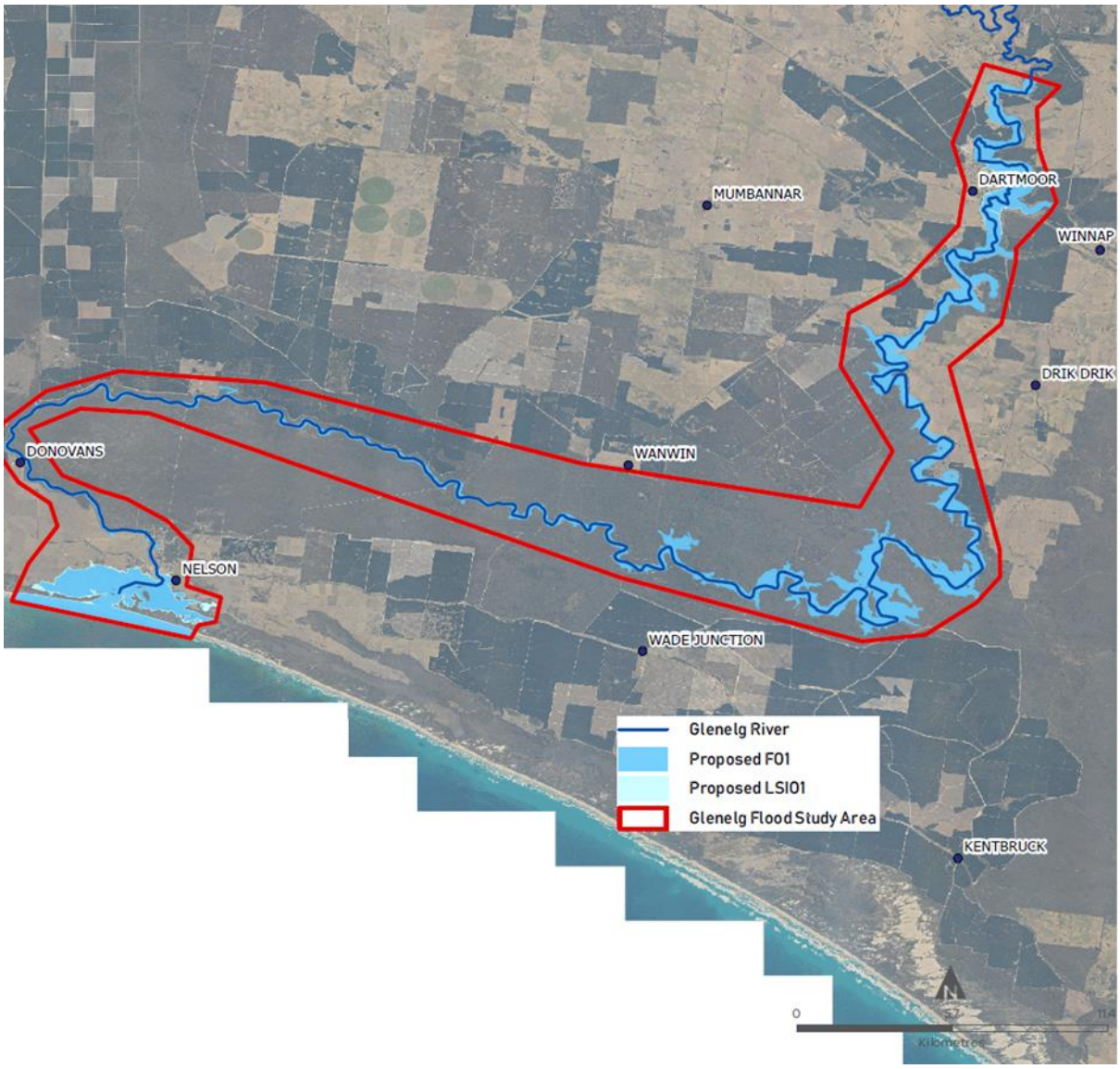


Figure 1: Study area (red boundary) and proposed FO1 and LSIO1.

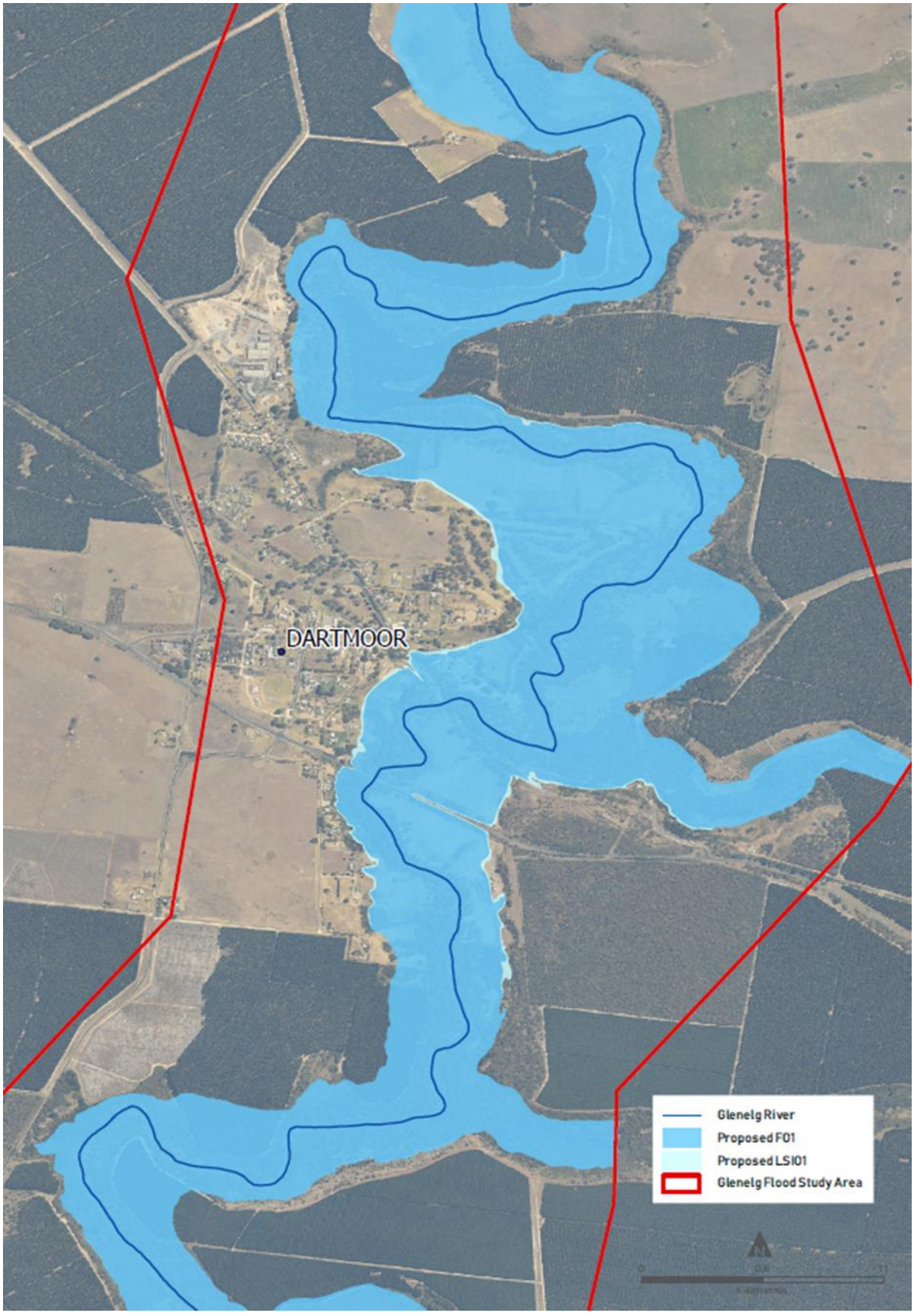


Figure 2: Proposed Dartmoor FO1 and LSIO1.

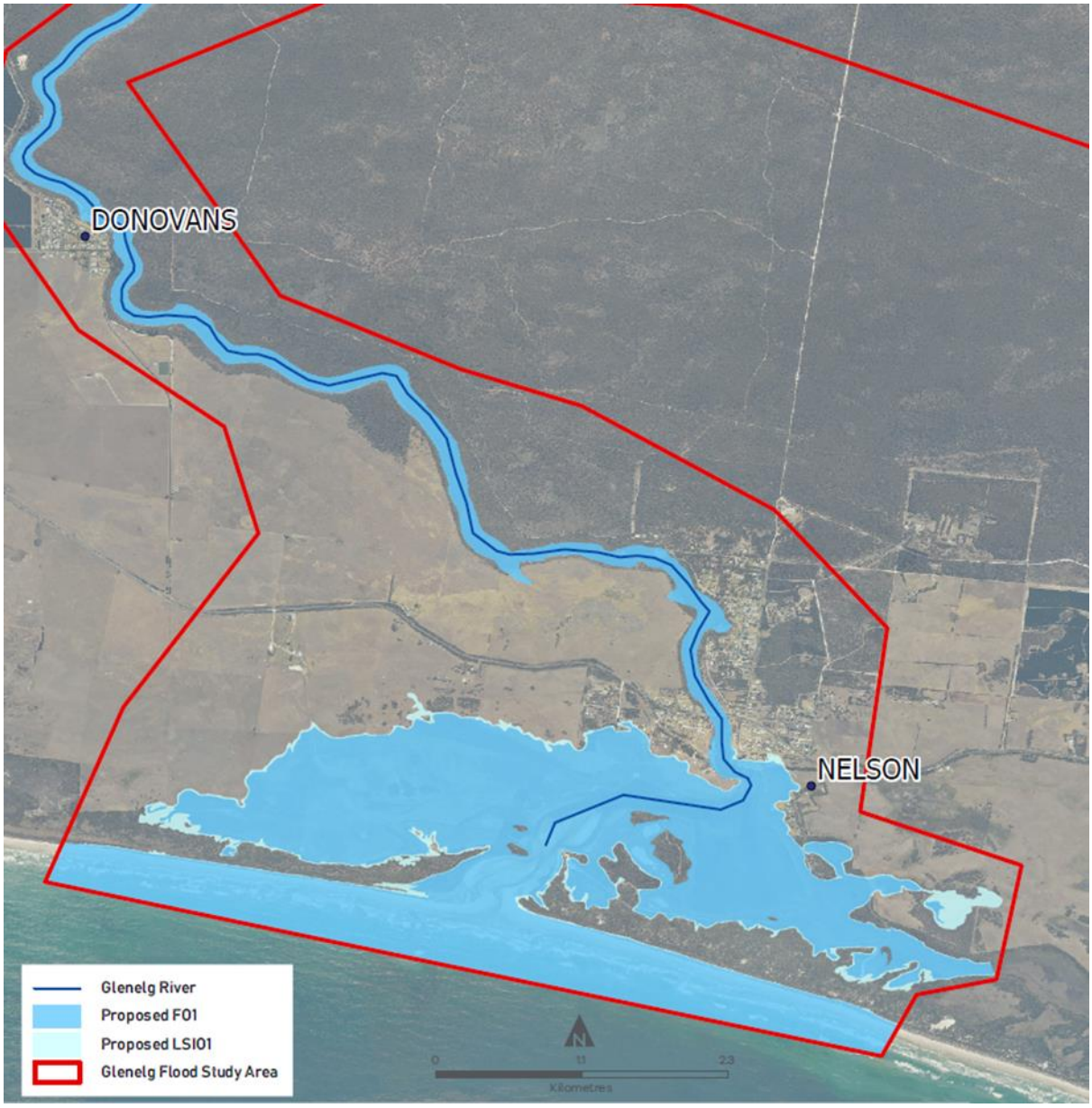


Figure 3: Proposed Nelson FO1 and LSIO1.

A mapping reference table is attached at Attachment 1 to this Explanatory Report.

What the amendment does

Victoria's Planning Policy Framework requires relevant planning authorities, usually councils, to identify any land affected by flooding and to account for the effects of climate change. In flood prone areas councils have a responsibility to manage flood risk to their communities and may use planning scheme mapping and controls to ensure that land use and development decisions appropriately consider flood risk.

Consistent with policy and legislation, the study has followed the latest best practice methodology and guidance to prepare the flood mapping for the amendment. The mapping considers a combination of factors relevant to both the Glenelg River and the Southern Ocean. The proposed extents of the overlays account for up to 1.2

metres of sea level rise and up to a forty-one percent (41%) increase in the intensity of rainfall to account for climate change. The proposed overlays cover the area of land expected to be flooded during a 1 percent Annual Exceedance Probability (AEP) planned for flood design event, which has a 1 percent chance of occurring in any given year. This is based on climate change projections to 2100.

The amendment implements the findings of the study by inserting additional flood risk mapping into the Glenelg Planning Scheme and applying Schedule 1 to the Floodway Overlay (FO1) and Schedule 1 to the Land Subject to Inundation Overlay (LSIO1) to the newly mapped areas.

Specifically, the amendment proposes to make the following changes to the planning scheme ordinance:

- Inserts Clause 02.03-3 Environmental risks and amenity.
- Amends Schedule 1 to Clause 37.03 Urban Floodway Zone to update and align with the Victoria Planning Provisions and the form and content requirements of the Ministerial Direction s7(5).
- Amends Schedule 1 to Clause 44.03 Floodway Overlay to update and align with the Victoria Planning Provisions and the form and content requirements of the Ministerial Direction s7(5).
- Amends Schedule 1 to Clause 44.04 Land Subject to Inundation Overlay to update and align with the Victoria Planning Provisions and the form and content requirements of the Ministerial Direction s7(5).
- Replaces the Schedule to Clause 72.03 to list the new LSIO-FO maps.
- Inserts an updated Glenelg Shire Local Floodplain Development Plan incorporated document and replaces the Schedule to Clause 72.04.
- Replaces the Schedule to Clause 72.08 to include the Dartmoor and Nelson Flood Study Executive Summary as a background document in the planning scheme as attached.

The amendment also makes the following changes to the planning scheme maps:

- Amends planning scheme map sheet 14LSIO-FO as attached.
- Inserts new map sheets 20LSIO-FO, 21LSIO-FO, 22LSIO-FO, 23LSIO-FO, and 27LSIO-FO.

Strategic assessment of the amendment

Why is the amendment required?

No flood risk related planning controls currently exist for the towns of Dartmoor and Nelson. The amendment addresses this significant gap by applying the Floodway Overlay (FO1) and Land Subject to Inundation Overlay (LSIO1) to the flood-prone land in and around both townships.

Despite flood risk being relatively well known for the upper and middle reaches of the Glenelg River catchment, little information existed to define the flood risk in Dartmoor and Nelson.

The March 1946 event is by far the largest riverine flood event to occur in the lower Glenelg River since records began in the mid to late 1800s with an estimated magnitude of approximately a 1 percent AEP event. Other significant flood events occurred in August 1955, September 1960, and September 1983 all with a similar magnitude of approximately a 6 percent AEP event and less severe than the 1946 event. In more recent times the September 2016 event is the largest to occur with an estimated magnitude of approximately 15 percent AEP event. The storm tide events impacting on Nelson are limited, but the June 2014 storm tide event is estimated to be approximately between a 10 and 20 percent AEP event.

Dartmoor was identified in the Glenelg Hopkins Regional Floodplain Management Strategy (GHCMA 2017) as requiring improved flood information to be able to accurately assess risk. This is represented by Action 33 in Table 8: Regional Work Plan of that strategy to “Investigate funding opportunities to undertake flood investigations for Dartmoor and Nelson, and subsequent planning controls”.

The study was initiated by Glenelg Shire Council to define the extent and characteristics of flooding on the Glenelg River and estuary so that future planning decisions are soundly based with measures to be put in place to minimise the flood risk to the community. The study received grant funding from the Australian Government through the Australian Government Preparing Australian Communities - Local Stream Program. Venant Solutions were engaged to undertake the study utilising contemporary flood modelling methods to produce high reliability data that can be used for flood response, planning, and education.

The study has been undertaken in accordance with the latest guidance and parameters provided in the 2019 release of Australian Rainfall and Runoff 2019 (ARR) (Ball, et al. 2019) and the Victorian Guideline for Modelling the Interaction of Catchment and Coastal Flooding (Streamology, 2022) and was independently peer reviewed. This allowed for a calibrated and validated flood model to be developed producing a range of reliable flood mapping and intelligence (emergency response) information covering the full suite of riverine and storm tide design flood events (20%, 10%, 5%, 2%, 1%, 0.5%, and 0.2% AEP and the probable maximum flood (including a tsunami estimate)).

The flood mapping and intelligence information produced for the study includes the flood depth, level, velocity and hazard mapping, identification of inundated properties, buildings and roads, estimation of expected flood travel times and the estimation of monetary flood damages. A riverine event of 1 percent AEP is expected to result in the inundation of 300 properties, 1 building, and 13 roads while a 1 percent AEP ocean storm tide is expected to result in the inundation of 32 properties and 5 roads.

Both mean sea level and rainfall intensity have already increased measurably. Depending on the location of the floodplain (coastal versus inland), mean sea level and rainfall intensity both exert significant influence on flood risk. Increased rainfall intensity will increase the amount of inland catchment rainfall runoff, which affects the magnitude of flood flows in the Glenelg River. This will affect both Dartmoor and Nelson. Sea level rise will make ocean storm tide events more severe and will also increase the height and extent of riverine floods at Nelson.

The planning scheme maps in this amendment are based on an update to the climate change methodology in the Australian Rainfall and Runoff, Version 4.2, which occurred in August 2024. The amendment mapping accounts for up to 41 percent increase in rainfall intensity which is relevant to both Dartmoor and Nelson and up to 1.2 metres of sea level rise, which is primarily relevant to Nelson.

The extent of the overlays represents the best climate science available at the time of the amendment and will ensure that flood risks associated with the subject land are properly considered and accounted for in property transfer, land use, and development decision making processes.

Minimisation of the risks posed by flooding both now and into the future is achieved most effectively and efficiently by land use and development controls. Application of the FO1 and LSIO1 to the subject land will ensure the risks associated with development of floodplain land are minimised. Application of the overlays achieves this by establishing planning permit application requirements and associated mandatory referral of applications to the Glenelg Hopkins Catchment Management Authority (the Floodplain Management Authority for the Glenelg Shire area) for advice enabling Council to make an informed planning decision based on the most accurate flood risk advice.

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)

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.*

The amendment seeks to achieve the objectives for planning in Victoria by identifying land that is at risk of flooding as per:

- Clause 13.01-1S Natural hazards and climate change
- Clause 13.01-2S Coastal inundation and erosion
- Clause 13.03-1S Floodplain management

to direct development to lower risk areas and to regulate development that occurs within the area covered by the overlays.

How does the amendment address any environmental, social, and economic effects?

Environmental effects

The amendment identifies flood-prone areas. Locations of environmental significance, such as wetlands and estuaries, have an important role to play in supporting biodiversity, recycling nutrients, and maintaining water quality, all of which can be impacted by inappropriate development in flood prone areas. The identification of flood-prone areas in planning schemes will ensure that development on land in these areas is compatible with local environmental conditions including flood risk and drainage.

The amendment will ensure that new development is appropriately designed and located for flood risk in a manner that maintains the free passage and temporary storage of floodwaters to minimise compromising natural systems.

Social effects

The amendment will ensure that development is undertaken in an orderly and safe manner. Flooding can have significant consequences for individuals and for local communities. The impacts can include the loss of life, loss of property, and temporary or permanent displacement.

Flooding may affect people and communities differently. Health, including mental health, and social vulnerability may be exacerbated for people living in communities exposed to flooding and can make normally resilient people vulnerable.

Specific groups within communities exposed to flooding may be further disadvantaged. For example, people with disability may be more disadvantaged than people without disability when responding to a flood event. This may be because people with disability may face barriers to receiving/understanding

emergency warnings or responding to them.

The requirement for a planning assessment of development reduces the chance of socially vulnerable people living in flood prone areas. Over the long term, applying appropriate planning controls will reduce the compounding impacts of social vulnerability.

Economic effects

The amendment is expected to have positive economic effects for the municipality. Flooding carries significant costs for the community, individual landowners, occupiers, and government. The identification of flood risk through planning scheme mapping will provide increased certainty for the development of land outside of the identified floodplain and reduce future economic loss from flooding.

Flood damage can disrupt communities and in extreme cases cause, extensive and costly damage to public and private assets, agricultural and industry losses, personal hardship, and loss of life. By careful planning of new development, having regard to flood risk, future economic impacts of flooding can be reduced.

The publicly available flood risk information will assist current and future landowners make informed choices prior to purchasing and developing land. This information will assist in establishing future industries, tourism and community facilities in appropriate locations. Additionally, minor buildings and works are exempt under the proposed schedules to avoid unnecessary planning regulation.

Does the amendment address relevant bushfire risk?

The amendment is unlikely to increase the risk to life, property, community infrastructure, or the natural environment from bushfire, as it identifies flood risk. The identification of flood prone areas is likely to limit future development on the identified land.

The amendment meets bushfire policy in Clause 13.02 of the Glenelg Planning Scheme. The land affected by this amendment is unlikely to be intensified for urban purposes without subsequent planning approval, which will require consideration and assessment against the purpose and decision guidelines of the bushfire provisions, where applicable.

Does the amendment comply with the requirements of any other Minister's Direction applicable to the amendment?

The amendment complies with Minister Direction No. 11, Strategic Assessment of Amendments, under section 12 of the *Planning and Environment Act 1987*. The amendment is consistent with this direction which ensures a comprehensive strategic evaluation of a planning scheme amendment and the outcomes it produces.

It also complies with the form and content requirements of the Ministerial Direction The Form and Content of Plannings Schemes, under section 7 (5) of the *Planning and Environment Act 1987*.

The amendment presents a low risk of harm to the environment and amenity of sensitive uses through pollution. Referral to the Environmental Protection Authority is not deemed necessary under Ministerial Direction 19.

How does the amendment support or implement the Planning Policy Framework and any adopted State policy?

The amendment supports achievement of the objective of Clause 13.01-1S Natural hazards and climate change:

- *To minimise the impacts of natural hazards and adapt to the impacts of climate change through risk based planning*

The amendment assists with the following strategies:

- *Respond to the risks associated with climate change in planning and management decision making processes.*
- *Identify at risk areas using the best available data and climate change science.*
- *Integrate strategic land use planning with emergency management decision making.*
- *Direct population growth and development to low risk locations.*
- *Develop adaptation response strategies for existing settlements in risk areas to accommodate change over time.*
- *Ensure planning controls allow for risk mitigation and climate change adaptation strategies to be implemented.*
- *Site and design development to minimise risk to life, health, property, the natural environment and community infrastructure from natural hazards.*

The amendment supports achievement of the objective in Clause 13.01-2S Coastal inundation and erosion:

- *To plan for and manage coastal hazard risk and climate change impacts.*

The amendment assists with the following strategies:

- *Plan for sea level rise of not less than 0.8 metres by 2100 and allow for the combined effects of tides, storm surges, coastal processes and local conditions such as topography and geology when assessing risks and coastal impacts associated with climate change.*
- *Ensure that land subject to hazards is identified and appropriately managed to ensure that future use and development is not at risk.*
- *Avoid use and development in areas vulnerable to coastal inundation and erosion.*

- *Respond to marine and coastal processes in the context of the coastal compartment type.*
- *Assess the effectiveness, costs, benefits, impacts (direct, cumulative and synergistic) and path dependency of available adaptation options in the following order:*

    1. *non-intervention*
    2. *avoid*
    3. *nature-based methods*
    4. *accommodate*
    5. *retreat*
    6. *protect*

    Ensure that development or protective works that seek to respond to coastal hazard risks avoid detrimental impacts on coastal processes.

The amendment is consistent with the objectives identified in Clause 13.03-1S Floodplain 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.*

The amendment implements or supports the following relevant strategies:

- *Identify land affected by flooding, including land inundated by the 1 in 100 year flood event (1 per cent Annual Exceedance Probability) or as determined by the floodplain management authority in planning schemes.*
- *Avoid intensifying the impact of flooding through inappropriately located use and development.*
- *Locate emergency and community facilities (including hospitals, ambulance stations, police stations, fire stations, residential aged care facilities, communication facilities, transport facilities, community shelters, child care centres and schools) outside the 1 in 100 year (1 per cent Annual Exceedance Probability) floodplain and, where possible, at levels above the height of the probable maximum flood.*
- *Locate use and development that involve the storage or disposal of environmentally hazardous industrial and agricultural chemicals or wastes and other dangerous goods (including intensive animal industries and sewage treatment plants) outside floodplains unless site design and management is such that potential contact between such substances and*

floodwaters is prevented, without affecting the flood carrying and flood storage functions of the floodplain.

The amendment supports the objective of Clause 14.02-1S Catchment planning and management:

- *To assist the protection and restoration of catchments, waterways, estuaries, bays, water bodies, groundwater, and the marine environment.*

The amendment also assists with the following strategies:

- *Retain natural drainage corridors with vegetated buffer zones at least 30 metres wide along each side of a waterway to:*
  - *Maintain the natural drainage function, stream habitat and wildlife corridors and landscape values,*
- *…the preservation of floodplain or other land for wetlands and retention basins.*
- *Ensure that development at or near waterways provide for the protection and enhancement of the environmental qualities of waterways and their instream uses.*

How does the amendment support or implement the Municipal Planning Strategy?

The amendment seeks to support and update 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 utilises the most effective controls available from the Victoria Planning Provisions. Consideration was given to the level of flood risk in terms of the frequency, depth and velocity of flood waters in choosing planning scheme tools.

The amendment is consistent with Planning Practice Note 12: Applying the Flood Provisions in Planning Schemes.

Glenelg Hopkins Catchment Management Authority supports the application of the Floodway Overlay and the Land Subject to Inundation Overlay as proposed by the amendment.

The Floodway Overlay is applied to areas which flood frequently at high depth and/or velocity and for which the impacts of flooding are moderate to high.

The Land Subject to Inundation Overlay is applied to areas of lesser depth and velocity from flooding.

In the areas affected by the flood overlays the focus is on control of development not on land uses. Where the risk of flooding is high in urban areas and there is a need to control future land uses due to the unsuitability of the land for development the Urban Floodway Zone is utilised.

The planning permit exemptions, as set out in the overlay schedules, correspond to the level of flooding risk for the local conditions.

How does the amendment address the views of any relevant agency?

The amendment seeks to achieve the floodplain management authority objectives for the region and State as conveyed by the Regional and Victorian Floodplain Management Strategies which among other things, include the objective of not making the social and economic costs of flooding worse.

The amendment has been prepared in collaboration with the Glenelg Hopkins Catchment Management Authority which is the relevant floodplain management authority under Clause 66.03 of the planning scheme.

Does the amendment address relevant requirements of the Transport Integration Act 2010?

The amendment is consistent with the objectives and decision-making principles in the *Transport Integration Act 2010*.

The amendment will manage flood risk which can be used to assist in the future management and design of the transport system.

This amendment is unlikely to have a significant 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 will improve the application and administration of the Glenelg Planning Scheme, by providing greater certainty for the Glenelg Shire Council, Glenelg Hopkins Catchment Management Authority, landowners, occupiers, local businesses, and the community.

The amendment will result in an increase in planning permit applications if development is proposed within the FO1 or LSIO1 areas. By including these overlays in the planning scheme, it is anticipated that most development will be directed away from flood prone land.

Any additional planning permit applications received are expected to be determined within prescribed timeframes and are not anticipated to require increased staff or financial burden to Council.

Attachment 1 – Mapping reference table

Location	Land /Area Affected	Mapping Reference	Address	Proposed Zone changes	Proposed Overlay changes	Proposed deletion changes
Dartmoor	Glenelg River Floodplain	14LSIO-FO, 22LSIO-FO, 23LSIO-FO	Dartmoor	N/A	FO1, LSIO1	N/A
Nelson	Glenelg River Floodplain	20LSIO-FO, 21LSIO-FO, 27LSIO-FO	Nelson	N/A	FO1, LSIO1	N/A
Glenelg River between Dartmoor and Nelson	Glenelg River Floodplain	14LSIO-FO, 20LSIO-FO, 22LSIO-FO, 23LSIO-FO, 27LSIO-FO	Glenelg River between Dartmoor and Nelson	N/A	FO1, LSIO1	N/A

Planning and Environment Act 1987

Glenelg Planning Scheme

Amendment C115gelg

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 6 attached map sheets.

Overlay Maps

1. Amend Planning Scheme Map No 14LSIO-FO in the manner shown on the 1 attached map marked “Glenelg Planning Scheme, Amendment C115”.

2. Insert new Planning Scheme Map Nos 20LSIO-FO, 21LSIO-FO, 22LSIO-FO, 23LSIO-FO, 27LSIO-FO, in the manner shown on the 5 attached maps marked “Glenelg Planning Scheme, Amendment C115”.

Planning Scheme Ordinance

The Planning Scheme Ordinance is amended as follows:

3. In **Purpose and Vision** – insert Clause 02.03-3 in the form of the attached document.

4. In **Zones** – Clause 37.03, replace Schedule with a new Schedule in the form of the attached document.

5. In **Overlays** – Clause 44.03, replace Schedule 1 with a new Schedule 1 in the form of the attached document.

6. In **Overlays** – Clause 44.04, replace Schedule 1 with a new Schedule 1 in the form of the attached document.

7. In **Operational Provisions** – Clause 72.03, replace the Schedule with a new Schedule in the form of the attached document.

8. In **Operational Provisions** – Clause 72.04, replace the Schedule with a new Schedule in the form of the attached document.

9. In **Operational Provisions** – Clause 72.08, replace the Schedule with a new Schedule in the form of the attached document.

End of document

GLENELG PLANNING SCHEME - LOCAL PROVISION

AMENDMENT C115gelg



LEGEND

FO1 - Floodway Overlay - Schedule 1

Municipal Boundary

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Australian Map Grid Zone 54

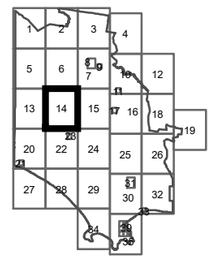
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INDEX TO ADJOINING SCHEME MAPS

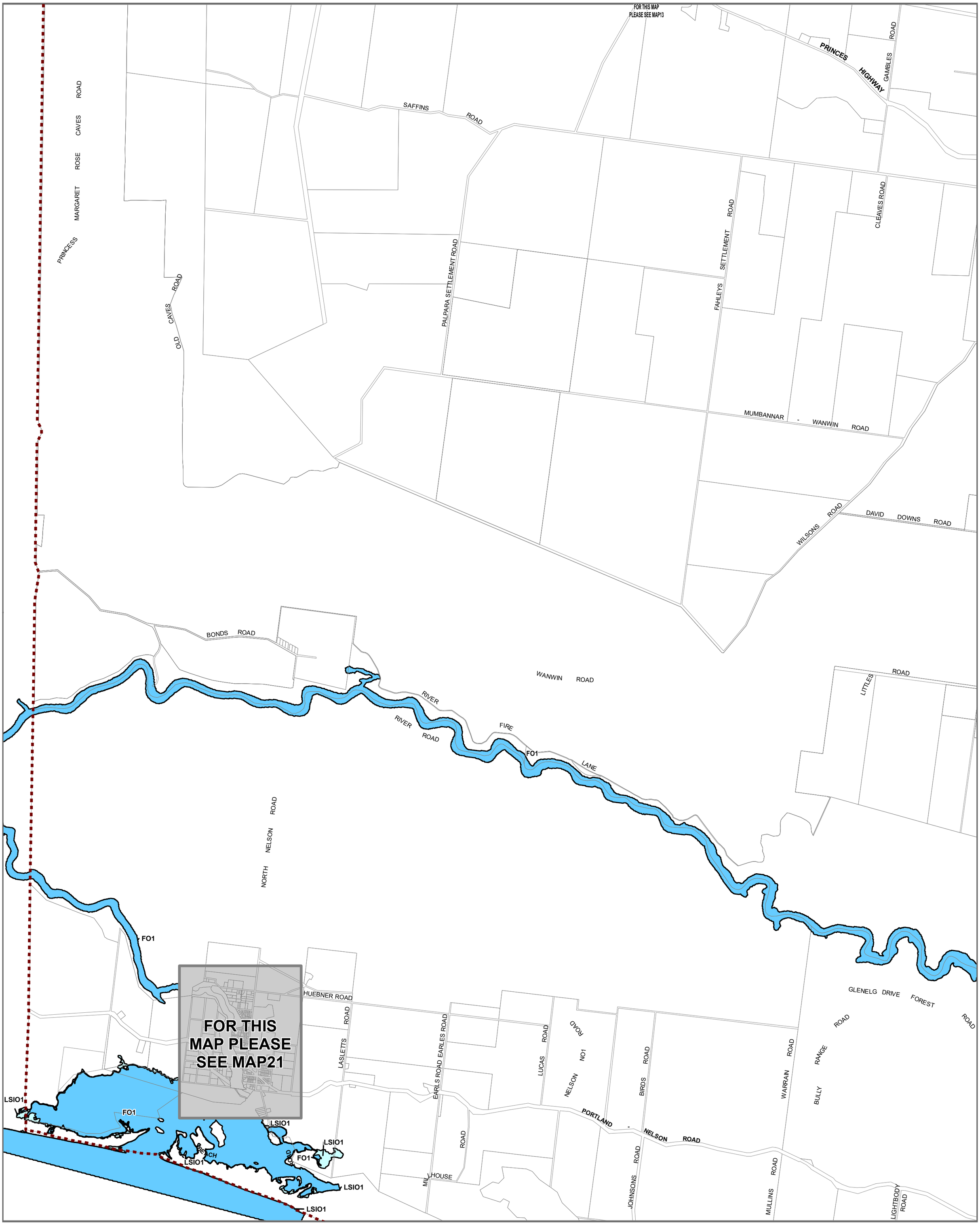


LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 14LSIO-FO

GLENELG PLANNING SCHEME - LOCAL PROVISION

AMENDMENT C115gelg



LEGEND

- FO1 - Floodway Overlay - Schedule 1
- LSIO1 - Land Subject to Inundation Overlay - Schedule 1
- Municipal Boundary

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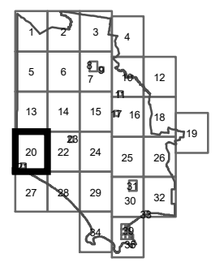
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INDEX TO ADJOINING SCHEME MAPS



LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 20LSIO-FO

GLENELG PLANNING SCHEME - LOCAL PROVISION

AMENDMENT C115gelg



LEGEND

- FO1 - Floodway Overlay - Schedule 1
- LSIO1 - Land Subject to Inundation Overlay - Schedule 1
- Municipal Boundary

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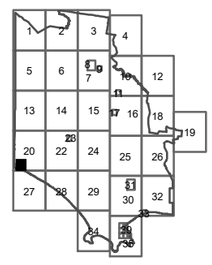
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LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 21LSIO-FO

GLENELG PLANNING SCHEME - LOCAL PROVISION

AMENDMENT C115gelg

FOR THIS MAP PLEASE SEE MAP23

FO1

LSIO1

AIRPORT ROAD
NORTH DARTMOOR ROAD
BOWD N ROAD ROAD
SULLIVANS ROAD
RADJATA ROAD
LINDSAY ROAD
DARTMOOR - CASTERTON ROAD
HAMILTON ROAD
PINE LANE
DARTMOOR - SPENCERS ROAD
CORREA ROAD
WINNAP SIDING ROAD
BOWDS LANE
MCINNES ROAD
SMITHS ROAD
HOSKINS ROAD
BULLS LANE
MARP ROAD
SWANN ROAD
SHANNON LANE
PRINCES HIGHWAY
WILSONS ROAD
WANWIN - MUMBANNAR ROAD
WOODBINE ROAD
COLLIES ROAD
LACEYS LANE
MATENS ROAD
SALMIC ROAD
WILSON LANE
KERR LANE
BUCKNALLS ROAD
LIDDLES LANE
HENKES ROAD
WANWIN ROAD
PRATT ROAD
DRILLING RIG ROAD
BROWNS LANE
CLARKES ROAD
EXCHANGE ROAD
MULLEN ROAD
MCLEANS ROAD
MCPHEES ROAD
LITTLES ROAD
CROZIERS ROAD
BROWN T ROAD
TOWER ROAD E
TOWER ROAD W
NELSON ROAD
WINNAP ROAD
HARRIS ROAD
KENTBRUCK ROAD
INKPOT ROAD
FOREST DRIVE
GLENELG ROAD
AIRSTRIP ROAD
HURDLE FLAT ROAD

LEGEND

- FO1 - Floodway Overlay - Schedule 1
- LSIO1 - Land Subject to Inundation Overlay - Schedule 1
- Municipal Boundary

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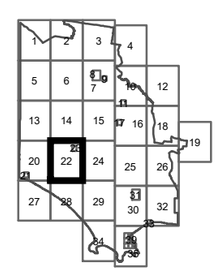
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INDEX TO ADJOINING SCHEME MAPS



LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 22LSIO-FO

GLENELG PLANNING SCHEME - LOCAL PROVISION

AMENDMENT C115gelg



LEGEND

- FO1 - Floodway Overlay - Schedule 1
- LSIO1 - Land Subject to Inundation Overlay - Schedule 1
- Municipal Boundary

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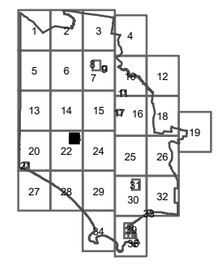
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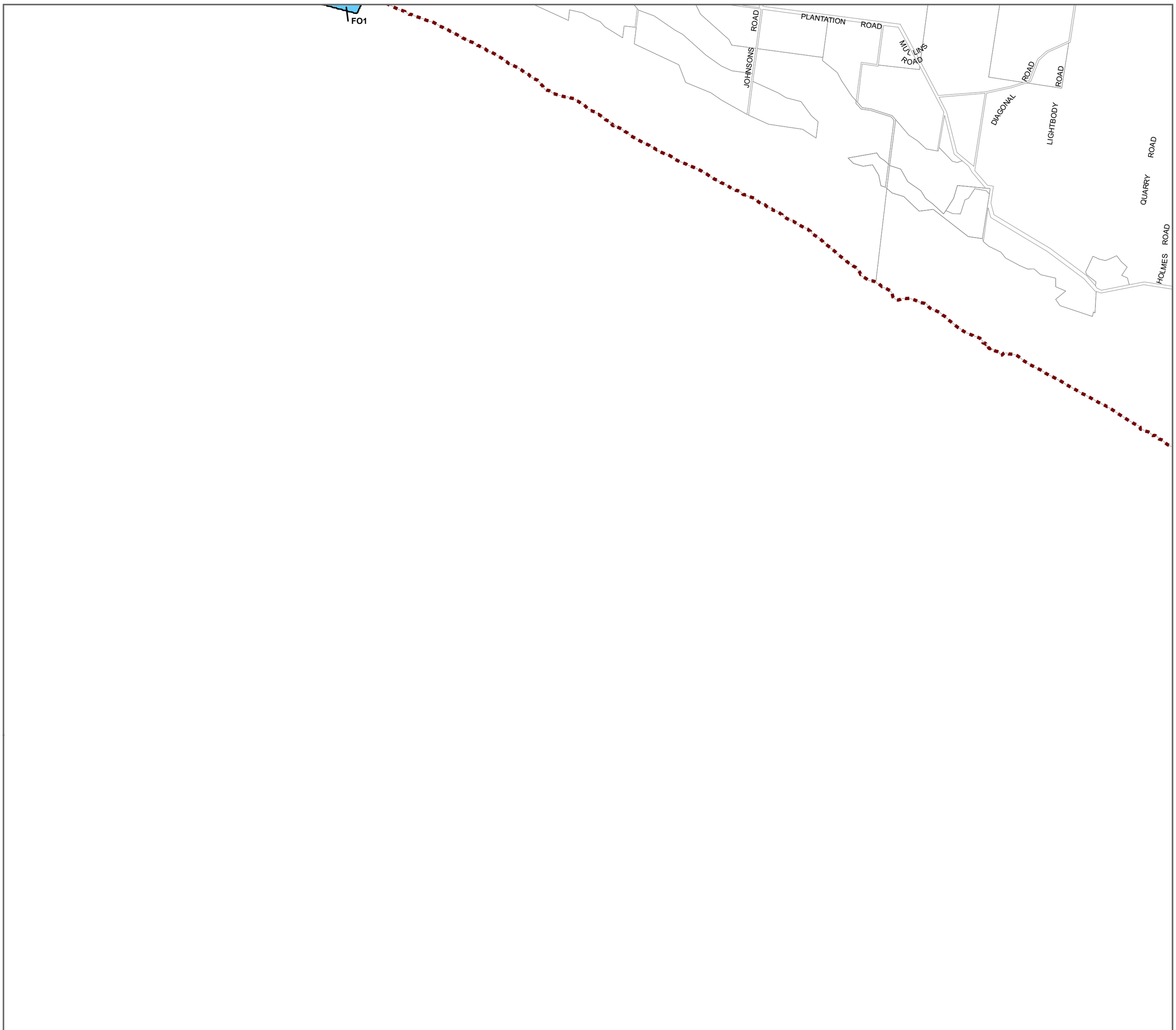
VICTORIA State Government | Department of Transport and Planning

INDEX TO ADJOINING SCHEME MAPS



LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 23LSIO-FO



LEGEND

FO1 - Floodway Overlay - Schedule 1

Municipal Boundary

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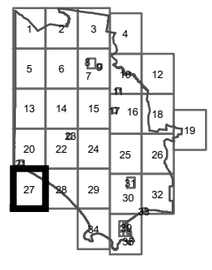
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Australian Map Grid Zone 54

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Print Date: 30/10/2024
Amendment Version: 1

VICTORIA State Government | Department of Transport and Planning

INDEX TO ADJOINING SCHEME MAPS



LAND SUBJECT TO INUNDATION OVERLAY/FLOODWAY OVERLAY

MAP No 27LSIO-FO

02.03 STRATEGIC DIRECTIONS

16/01/2020
C102gelg

02.03-1 Settlement

05/09/2024
C110gelg

Managing growth

The Glenelg Shire Council Strategic Framework Plan (at Clause 02.04) illustrates the hierarchy of towns in the Shire.

Towns within the Glenelg Shire have the capacity to accommodate additional residential development. Some small towns have existing infrastructure to support a larger population but are experiencing limited population growth.

Council seeks to achieve growth by:

- Consolidating development within regional and district towns where there is reticulated infrastructure such as water, sewerage and stormwater drainage.
- Securing the economic future of Portland, Heywood, Casterton, Dartmoor and Nelson by broadening their employment base.
- Facilitating urban growth in and around existing towns and settlements.
- Supporting rural residential development only where it is linked to an existing urban area, where it does not impact on land capability, productive agricultural land use or water quality and where it can be serviced by infrastructure.
- Encouraging land within existing towns to be developed before new land is considered for rezoning to provide housing.
- Supporting rural living housing generally in areas surrounding existing towns.
- Managing urban growth to minimise conflict with surrounding rural areas.
- Managing the interface of rural living areas and agricultural areas to minimise conflict with commercial agricultural operations.

Regional Centre

Portland is the Shire's main population, business and administrative centre. The immediately surrounding areas of Bolwarra, Cashmore, Dutton Way, Gorae and Portland West provide pockets of rural living.

Portland has a number of important industrial areas including the North Portland Industrial Precinct, the Central Portland Employment Precinct, the Madeira Packet Employment Precinct and the Smelter Industrial Precinct. In addition, the Port of Portland is one of four major commercial ports in Victoria and is a major economic driver for the regional centre.

Council seeks to facilitate the development of Portland by:

- Building on the significance of the Portland aluminium smelter as the one remaining aluminium smelter in the State.
- Supporting Portland’s central business district as the primary commercial, community, civic and cultural centre of the Glenelg Shire.
- Improving linkages between the central business district and the Portland foreshore.
- Encouraging re-subdivision of existing rural residential areas within Portland to facilitate better utilisation of infrastructure.
- Retaining Wattle Hill Creek linked to the Fawthrop Lagoon as an open space corridor and buffer between industrial uses and long-term residential uses.

- Encouraging medium density residential development in the central business district.
- Improving pedestrian links between Portland and Lee Breakwater to maximise its features as a major scenic attraction.

District towns

Heywood is located approximately 30 kilometres north of Portland on the Fitzroy River. The town is an important service centre for the surrounding agricultural land and a commuter town of Portland, with a local commercial and industrial base.

Council seeks to facilitate the development of Heywood by:

- Encouraging residential growth to the north of the Fitzroy River (in the vicinity of the Princes Highway) and west of Beavis Street.
- Improving the landscape setting and presentation of private property along Henty Highway.
- Consolidating industrial development adjoining the Princes Highway and Catons Flat Road and north of the town on the south east corner of the Princes Highway and Danger Lane.
- Encouraging industrial development to locate within existing industrial areas along the Princes Highway and the railway other than on isolated sites that can meet buffer distance requirements.

Casterton is located along the Glenelg Highway and is the largest settlement in the northern portion of the Shire. The town is an important regional service centre, supporting a range of health, education, recreation, civic and community facilities.

Casterton's built form is characterised by low density, single-storey development supported by a network of wide linear streets. The town features the Stock Selling Ring historic building and former Railway Station heritage precinct. The Henty Street commercial shopping strip comprises one of the most intact heritage streetscapes in the region.

Council seeks to facilitate the development of Casterton by:

- Strengthening its role as a key service, freight and logistics location.
- Protecting buildings and streetscapes with heritage value or local significance.
- Encouraging tourism and hospitality opportunities to complement accommodation land uses around McPherson Street.
- Encouraging civic and community uses to co-locate on Jackson Street to the east of the railway.
- Strengthening Jackson and Henty Streets as key pedestrian, cycling and community-oriented spines.
- Encouraging development and intensification of the industrial precinct.
- Encouraging residential growth to locate within the residential corridor between Mitchell Street and the Old Mount Gambier Road to the west of town.
- Encouraging housing diversity close to the town centre.
- Limiting housing growth in flood prone affected areas.
- Encouraging medical and aged care facilities, and smaller housing sizes on accessible land within walking distance to community facilities, particularly within the town centre.
- Improving connectivity between the river, recreation areas, residential areas and the town centre.
- Encouraging visual and landscaped connections between Ess Lagoon, Glenelg River and the Railway Reserve Precinct.
- Supporting development of the Railway Reserve in conjunction with the Australian Kelpie Centre for community use, including open space facilities.

Small towns

Bolwarra is a rural living area located north of the entrance to Portland dissected by the Henty and Princes Highways.

Council seeks to facilitate the development of Bolwarra by supporting rural living development.

Narrawong is bisected by Windham Street (Princes Highway) and is located at the mouth of the Surry River between the slopes of Mount Clay and northern end of Portland Bay.

Council seeks to facilitate the development of Narrawong by supporting rural residential development in areas surrounding the town.

Dartmoor is situated on the banks and floodplain of the Glenelg River.

Council seeks to facilitate the development of Dartmoor by:

- Encouraging large lot sizes to cater for rural residential development.
- Encouraging community services and activities, such as child care centres, maternal and child health centres and local medical facilities that link with existing services in Heywood and Portland.
- Supporting the use of the Dartmoor sawmill site.

Merino is located on the Portland-Casterton Road that bisects the town.

Council seeks to facilitate the development of Merino by:

- Encouraging the consolidation of allotments within and on the periphery of the existing settlement area.
- Encouraging development that complements the heritage values of the town.
- Promoting heritage-based tourism.
- Supporting small-scale agriculture or hobby farming as part of rural residential development.

Tyrendarra is located at the eastern gateway of the Shire and serves as the southern gateway to the World and National Heritage listed Budj Bim Cultural Landscape.

Council seeks to facilitate the development of Tyrendarra by facilitating eco-based tourism.

Nelson is located on the mouth of the Glenelg River. The population significantly increases with seasonal visitors in summer and holiday periods.

Council seeks to facilitate the development of Nelson by:

- Supporting holiday accommodation as part of the Great South West Walk.
- Supporting the establishment of community facilities for both aged and preschool needs.

Cape Bridgewater is located approximately 20 kilometres west of Portland. The small town attracts tourists to its picturesque coastal setting with the highest coastal cliffs in Victoria, towering sand dunes, wide beaches and the pristine waters of Bridgewater and Discovery Bays.

Council seeks to facilitate the development of Cape Bridgewater by:

- Containing growth and development within the defined settlement boundary, with capacity to support modest-scale tourism and accommodation opportunities.
- Encouraging development to respond to the low-scale residential character of the town.
- Encouraging development and subdivision that responds to topography, the foreshore, the fragile coastal environment and views to the sea and landscape formations.
- Encouraging view sharing between developments.

Sandford is located 3.5 kilometres south-east of Casterton on the Portland-Casterton Road. The town is located on the Wannon River close to its confluence with the Glenelg River.

Council seeks to facilitate the development of Sandford by supporting the development of the town for tourist and rural living development.

Condah is located to the east of the Hamilton to Portland rail line and west of the Henty Highway.

Council seeks to facilitate the development of Condah by encouraging tourism developments close to nearby national assets such as the Lake Condah Indigenous Protected Area and Budj Bim Cultural Landscape.

Digby is located on the Portland-Casterton Road to the south of the Stokes River.

Council seeks to facilitate the development of Digby by encouraging the development of rural residential development outside the Township Zone through consolidation of fragmented rural lots on the periphery of the town.

02.03-2 Environmental and landscape values

05/09/2024
C110gelg

Biodiversity

Glenelg has a wealth of natural resources of regional, national and international significance including plant and animal species on land, waterways, wetlands and the sea.

The Shire's biodiversity is located across public land and is generally in good condition. Many reserves in the Shire, often wetlands, are known to have highly significant biodiversity levels.

Council seeks to manage biodiversity within the municipality by:

- Protecting and conserving woodlands, waterways, wetlands, intertidal areas, lagoons and coastal areas.
- Protecting native vegetation and retaining habitats for native fauna.

Coastal areas

The Shire's coastal areas are major natural, economic and environmental resources that need to be managed to balance development opportunities while protecting the landscape and environment.

Council seeks to protect coastal areas by:

- Protecting the natural and cultural values of the coast.
- Managing the use and development of the coast in a sustainable manner.
- Protecting fish nursery habitats for future fishing activities.
- Supporting tourism and recreation in coastal areas.
- Encouraging coastal related development that responds to the landscape setting, character and desired future character directions.
- Maintaining locally significant views that contribute to the character of the coast and coastal hinterland region.

Significant environments and landscapes

The Shire's natural landscapes and their hinterlands are highly valued for their visual, environmental and cultural qualities.

The World Heritage listed Budj Bim Cultural Landscape contains one of the world's most extensive and oldest aquaculture systems, developed by the Gunditjmara people. The Budj Bim lava flows provide the basis for this complex aquaculture system, based on deliberate redirection, modification and management of waterways and wetlands.

Strategic directions:

- Protect the Shire's significant landscapes, waterways, wetlands, woodlands and natural environments, including the World Heritage listed Budj Bim Cultural Landscape.

- Protect and enhance the environmental qualities and character of the Budj Bim National Park.
- Encourage development that is subordinate to the natural, visual and environmental landscape character and significance.

02.03-3 Environmental risks and amenity

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Proposed C115gelg

Bushfire

The most significant township interface to bushfire hazards are in the towns of Nelson, Cape Bridgewater, Narrawong, Bolwarra and Digby, all of which have been listed with an 'extreme' rating on the Victorian Fire Risk Register. Other areas close to bushfire hazards include Tyrendarra, Dartmoor and the interface areas of Portland and its surrounds.

Council seeks to manage bushfire risk by:

- Discouraging development in areas prone to bushfire risk.
- Supporting planning and development considerations that minimise the impact of fire.

Floodplains

Parts of Portland, Heywood, Narrawong, Dartmoor, Nelson, Casterton, and Sandford are at the risk of riverine flooding. Some areas are also vulnerable to coastal inundation from storm tide flooding and sea level rise. The proper management of floodplains protects the natural environment and properties located in areas subject to inundation.

Council seeks to address floodplain issues by applying the precautionary principle approach to assess development in areas prone to flooding, sea level rise and landslip.

Soil degradation

Limestone cliffs, steeper earth slopes and coastal dunes along the main rivers and coast are susceptible to erosion as a result of landslip. A significant problem is the existence of slopes in excess of 20 degrees where further development and vegetation removal would compromise land stability.

There are significant environmental risks with increased dry land salinity, pest plant and animal invasion, soil erosion, stream erosion, coastal dune erosion, induced waterlogging, water quality deterioration and loss of flora and fauna diversity throughout the Shire.

Council seeks to address soil degradation by:

- Managing soil degradation arising from contaminated land from industrial and agricultural activities and erosion.
- Ensuring the protection of land susceptible to land slip.

Noise and air quality management

The historical development of Portland has resulted in some industrial and residential areas being located adjacent to each other. As a result, land use conflicts exist throughout Portland's industrial zones. Although greater care is now taken to ensure there are adequate separation distances between industrial and residential areas, protecting the community from the impacts of noise and air pollution, including dust and odour, is a high priority.

Council seeks to address noise and air quality issues by:

- Managing identified separation distances to ensure communities close to established industries and facilities are protected from off-site impacts such as noise, dust and odour.

02.03-4 Natural resource management

05/09/2024
C110gelg

Agriculture

Sustainable land use, land management and the protection of the natural resource asset base are essential to facilitate the continued economic performance of the primary industry sector.

The development of housing that does not relate to or support agricultural production can conflict with agricultural practices. Proposals to excise dwellings or create lots for dwellings in areas where agriculture is the primary purpose need to minimise these types of conflicts.

Council seeks to protect the viability of agricultural land by:

- Supporting the sustainable land use, land management and protection of natural resource assets to build on the continued economic performance of the primary industry sector.
- Protecting large scale rural properties to maximise their capability for agricultural land use.
- Discouraging the development of dwellings, and the excision of existing dwellings, that do not relate to or support agricultural production.
- Ensuring dwellings that are excised, or constructed on an excised lot, are properly sited and designed.
- Minimising the impact of subdivision, use and development of land that will conflict with farming land.

Water

The Shire contains extensive ground water resources in deep and shallow aquifers that are used for stock and domestic supplies.

Council seeks to manage water by:

- Protecting the water quality and potable water supply from the Shire's groundwater sources.
- 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.

02.03-5 Built environment and heritage

05/09/2024
C110gelg

Built environment

The Shire's built environment has been influenced by early settlement, soldier settlement and more recent industrial development. Protecting existing heritage values, and the presentation of the towns from highways and major roads assists in maintaining character.

Council seeks to improve the built environment by:

- Encouraging development at township entrances to be designed and landscaped in a manner that contributes to the appearance and character of the town.
- Supporting development that respects the existing character of towns.

Heritage

The Shire contains natural and cultural heritage which defines its character and contributes to the attraction of the Shire as a desirable place to live, invest and visit. This includes an array of European and Aboriginal heritage features, including some of the State's most important places of cultural and historic significance such as the World Heritage listed Budj Bim Cultural Landscape.

Strategic directions:

- Protect places and areas of natural and cultural heritage.

- Protect and enhance Aboriginal cultural heritage sites and significant cultural landscapes, including the World Heritage listed Budj Bim Cultural Landscape.

02.03-6 Economic development

05/09/2024
C110gelg

Employment and industry

Key industry sectors in the Shire include the Port of Portland, the Portland Aluminium Smelter, renewable energy, timber production and processing, commercial fishing, agribusiness and tourism. The major concentrations of jobs are in manufacturing, agriculture, forestry and fishing, retail, education and training, accommodation and food services.

Industrial development, in particular, is critical to the long-term economic future of the Shire. There is a significant opportunity to reposition Portland's industrial areas to attract new investment and employment. As part of this, the Portland Industrial Land Strategy (2016) (PILS) provides a framework for the future planning of Portland's industrial precincts and environs. The key industrial precincts are: the North Portland Industrial Precinct, the Central Portland Employment Precinct, and the Madeira Packet Employment Precinct.

The **North Portland Industrial Precinct** can support large-scale industries on large allotments. It will encourage industries that have links to the regional economy and cater for industries that require buffer areas to minimise adverse amenity impacts.

The **Central Portland Employment Precinct** provides for light industries to the west of the railway spur and is to provide for a transition to a mix of commercial and residential to the east of the railway spur.

The **Madeira Packet Employment Precinct** provides for light industries and lower-scale commercial uses. The northern area of the precinct is close to the Port and provides an opportunity for existing port-related industries to be retained and future industries to develop. The southern area of the precinct has a number of service industries and lower-scale commercial uses that should be encouraged to remain.

Council will promote employment and industrial growth by:

- Supporting use and development that increases employment in the Shire particularly in Glenelg's key employment/industry sectors.
- Supporting Portland's role as a regional centre that provides State significant industry including the Port of Portland, the Portland aluminium smelter and Industrial 2 zoned land.
- Facilitating the future growth, planning and development of Portland's industrial precincts.

Tourism

Tourism plays a significant role in the local economy. The Shire has a range of attractions including recreational fishing, heritage, eco-tourism, beaches, surfing, trails, national parks, and a series of festivals throughout the year. Portland is developing as a tourism destination and is now seen as the western gateway to the Great Ocean Road and the eastern gateway for the Limestone Coast.

Council seeks to facilitate tourism by:

- Supporting the development of tourism based on attractions including natural features, fishing, local produce, cultural and built heritage, eco-tourism, beaches, surfing, trails and national parks.
- Encouraging development of tourist accommodation.
- Maximising opportunities in niche markets, including fishing and boating, bird watching, adventure groups and cruise ship visitors.
- Supporting opportunities for coastal tourism.

02.03-7 Transport

05/09/2024
C110gelg

Integrated transport

Transport links, particularly to and from Portland, provide much of the basis of the Shire's future economic development opportunities.

Council seeks to improve integrated transport by:

- Supporting bicycle and walking paths to encourage an alternative to private motor vehicle use and promote healthy communities.
- Facilitating road infrastructure for development in rural areas to allow access.
- Preserving disused railway corridors as future options for the re-introduction of passenger rail services.

Ports

The Port of Portland is a deep-water bulk-handling port that is of state and national significance. It handles increasing volumes of commodity exports and is a potential future entry point for tourists.

The Port of Portland will continue to expand its operations and will rely upon links to other transport modes.

Development of the port and related infrastructure will be facilitated by:

- Supporting the Port of Portland to be a national and international gateway for exports.
- Supporting access to the port and its linkages to Heywood.
- Encouraging efficient and safe road and rail access.
- Providing effective land use buffers to the Port of Portland.

Airports

Glenelg has airports at Portland and Casterton and a private airfield at Nelson. The Portland Airport is of strategic importance for the Shire because of its potential to facilitate economic growth and tourism.

Council seeks to manage and develop airports by:

- Encouraging the growth of airports.
- Protecting flight paths around the airports.

02.03-8 Infrastructure

05/09/2024
C110gelg

Open space

Passive recreation is important for the Shire, including camping, nature-based walking and fishing.

Council seeks to improve its open space and recreational opportunities by:

- Supporting the provision of open space and recreation facilities that are able to cater for a wide range of recreational activities.

02.03 STRATEGIC DIRECTIONS

16/01/2020
C102gelg

02.03-1 Settlement

05/09/2024
C110gelg

Managing growth

The Glenelg Shire Council Strategic Framework Plan (at Clause 02.04) illustrates the hierarchy of towns in the Shire.

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- Improving pedestrian links between Portland and Lee Breakwater to maximise its features as a major scenic attraction.

District towns

Heywood is located approximately 30 kilometres north of Portland on the Fitzroy River. The town is an important service centre for the surrounding agricultural land and a commuter town of Portland, with a local commercial and industrial base.

Council seeks to facilitate the development of Heywood by:

- Encouraging residential growth to the north of the Fitzroy River (in the vicinity of the Princes Highway) and west of Beavis Street.
- Improving the landscape setting and presentation of private property along Henty Highway.
- Consolidating industrial development adjoining the Princes Highway and Catons Flat Road and north of the town on the south east corner of the Princes Highway and Danger Lane.
- Encouraging industrial development to locate within existing industrial areas along the Princes Highway and the railway other than on isolated sites that can meet buffer distance requirements.

Casterton is located along the Glenelg Highway and is the largest settlement in the northern portion of the Shire. The town is an important regional service centre, supporting a range of health, education, recreation, civic and community facilities.

Casterton's built form is characterised by low density, single-storey development supported by a network of wide linear streets. The town features the Stock Selling Ring historic building and former Railway Station heritage precinct. The Henty Street commercial shopping strip comprises one of the most intact heritage streetscapes in the region.

Council seeks to facilitate the development of Casterton by:

- Strengthening its role as a key service, freight and logistics location.
- Protecting buildings and streetscapes with heritage value or local significance.
- Encouraging tourism and hospitality opportunities to complement accommodation land uses around McPherson Street.
- Encouraging civic and community uses to co-locate on Jackson Street to the east of the railway.
- Strengthening Jackson and Henty Streets as key pedestrian, cycling and community-oriented spines.
- Encouraging development and intensification of the industrial precinct.
- Encouraging residential growth to locate within the residential corridor between Mitchell Street and the Old Mount Gambier Road to the west of town.
- Encouraging housing diversity close to the town centre.
- Limiting housing growth in flood prone affected areas.
- Encouraging medical and aged care facilities, and smaller housing sizes on accessible land within walking distance to community facilities, particularly within the town centre.
- Improving connectivity between the river, recreation areas, residential areas and the town centre.
- Encouraging visual and landscaped connections between Ess Lagoon, Glenelg River and the Railway Reserve Precinct.
- Supporting development of the Railway Reserve in conjunction with the Australian Kelpie Centre for community use, including open space facilities.

Small towns

Bolwarra is a rural living area located north of the entrance to Portland dissected by the Henty and Princes Highways.

Council seeks to facilitate the development of Bolwarra by supporting rural living development.

Narrawong is bisected by Windham Street (Princes Highway) and is located at the mouth of the Surry River between the slopes of Mount Clay and northern end of Portland Bay.

Council seeks to facilitate the development of Narrawong by supporting rural residential development in areas surrounding the town.

Dartmoor is situated on the banks and floodplain of the Glenelg River.

Council seeks to facilitate the development of Dartmoor by:

- Encouraging large lot sizes to cater for rural residential development.
- Encouraging community services and activities, such as child care centres, maternal and child health centres and local medical facilities that link with existing services in Heywood and Portland.
- Supporting the use of the Dartmoor sawmill site.

Merino is located on the Portland-Casterton Road that bisects the town.

Council seeks to facilitate the development of Merino by:

- Encouraging the consolidation of allotments within and on the periphery of the existing settlement area.
- Encouraging development that complements the heritage values of the town.
- Promoting heritage-based tourism.
- Supporting small-scale agriculture or hobby farming as part of rural residential development.

Tyrendarra is located at the eastern gateway of the Shire and serves as the southern gateway to the World and National Heritage listed Budj Bim Cultural Landscape.

Council seeks to facilitate the development of Tyrendarra by facilitating eco-based tourism.

Nelson is located on the mouth of the Glenelg River. The population significantly increases with seasonal visitors in summer and holiday periods.

Council seeks to facilitate the development of Nelson by:

- Supporting holiday accommodation as part of the Great South West Walk.
- Supporting the establishment of community facilities for both aged and preschool needs.

Cape Bridgewater is located approximately 20 kilometres west of Portland. The small town attracts tourists to its picturesque coastal setting with the highest coastal cliffs in Victoria, towering sand dunes, wide beaches and the pristine waters of Bridgewater and Discovery Bays.

Council seeks to facilitate the development of Cape Bridgewater by:

- Containing growth and development within the defined settlement boundary, with capacity to support modest-scale tourism and accommodation opportunities.
- Encouraging development to respond to the low-scale residential character of the town.
- Encouraging development and subdivision that responds to topography, the foreshore, the fragile coastal environment and views to the sea and landscape formations.
- Encouraging view sharing between developments.

Sandford is located 3.5 kilometres south-east of Casterton on the Portland-Casterton Road. The town is located on the Wannon River close to its confluence with the Glenelg River.

Council seeks to facilitate the development of Sandford by supporting the development of the town for tourist and rural living development.

Condah is located to the east of the Hamilton to Portland rail line and west of the Henty Highway.

Council seeks to facilitate the development of Condah by encouraging tourism developments close to nearby national assets such as the Lake Condah Indigenous Protected Area and Budj Bim Cultural Landscape.

Digby is located on the Portland-Casterton Road to the south of the Stokes River.

Council seeks to facilitate the development of Digby by encouraging the development of rural residential development outside the Township Zone through consolidation of fragmented rural lots on the periphery of the town.

02.03-2 Environmental and landscape values

05/09/2024
C110gelg

Biodiversity

Glenelg has a wealth of natural resources of regional, national and international significance including plant and animal species on land, waterways, wetlands and the sea.

The Shire's biodiversity is located across public land and is generally in good condition. Many reserves in the Shire, often wetlands, are known to have highly significant biodiversity levels.

Council seeks to manage biodiversity within the municipality by:

- Protecting and conserving woodlands, waterways, wetlands, intertidal areas, lagoons and coastal areas.
- Protecting native vegetation and retaining habitats for native fauna.

Coastal areas

The Shire's coastal areas are major natural, economic and environmental resources that need to be managed to balance development opportunities while protecting the landscape and environment.

Council seeks to protect coastal areas by:

- Protecting the natural and cultural values of the coast.
- Managing the use and development of the coast in a sustainable manner.
- Protecting fish nursery habitats for future fishing activities.
- Supporting tourism and recreation in coastal areas.
- Encouraging coastal related development that responds to the landscape setting, character and desired future character directions.
- Maintaining locally significant views that contribute to the character of the coast and coastal hinterland region.

Significant environments and landscapes

The Shire's natural landscapes and their hinterlands are highly valued for their visual, environmental and cultural qualities.

The World Heritage listed Budj Bim Cultural Landscape contains one of the world's most extensive and oldest aquaculture systems, developed by the Gunditjmara people. The Budj Bim lava flows provide the basis for this complex aquaculture system, based on deliberate redirection, modification and management of waterways and wetlands.

Strategic directions:

- Protect the Shire's significant landscapes, waterways, wetlands, woodlands and natural environments, including the World Heritage listed Budj Bim Cultural Landscape.

- Protect and enhance the environmental qualities and character of the Budj Bim National Park.
- Encourage development that is subordinate to the natural, visual and environmental landscape character and significance.

02.03-3 Environmental risks and amenity

~~05/09/2024~~ ~~C110gelg~~Proposed C115gelg

Bushfire

The most significant township interface to bushfire hazards are in the towns of Nelson, Cape Bridgewater, Narrawong, Bolwarra and Digby, all of which have been listed with an 'extreme' rating on the Victorian Fire Risk Register. Other areas close to bushfire hazards include Tyrendarra, Dartmoor and the interface areas of Portland and its surrounds.

Council seeks to manage bushfire risk by:

- Discouraging development in areas prone to bushfire risk.
- Supporting planning and development considerations that minimise the impact of fire.

Floodplains

Parts of Portland, Heywood, Narrawong, ~~Casterton~~Dartmoor, Nelson, Casterton, and Sandford are at the risk of ~~flooding from rivers~~riverine flooding. Some areas are also vulnerable to ~~flooding~~coastal inundation from storm ~~surge~~tide flooding and sea level rise. The proper management of floodplains protects the natural environment and properties located in areas subject to inundation.

Council seeks to address floodplain issues by applying the precautionary principle approach to assess development in areas prone to flooding, sea level rise and landslip.

Soil degradation

Limestone cliffs, steeper earth slopes and coastal dunes along the main rivers and coast are susceptible to erosion as a result of landslip. A significant problem is the existence of slopes in excess of 20 degrees where further development and vegetation removal would compromise land stability.

There are significant environmental risks with increased dry land salinity, pest plant and animal invasion, soil erosion, stream erosion, coastal dune erosion, induced waterlogging, water quality deterioration and loss of flora and fauna diversity throughout the Shire.

Council seeks to address soil degradation by:

- Managing soil degradation arising from contaminated land from industrial and agricultural activities and erosion.
- Ensuring the protection of land susceptible to land slip.

Noise and air quality management

The historical development of Portland has resulted in some industrial and residential areas being located adjacent to each other. As a result, land use conflicts exist throughout Portland's industrial zones. Although greater care is now taken to ensure there are adequate separation distances between industrial and residential areas, protecting the community from the impacts of noise and air pollution, including dust and odour, is a high priority.

Council seeks to address noise and air quality issues by:

- Managing identified separation distances to ensure communities close to established industries and facilities are protected from off-site impacts such as noise, dust and odour.

02.03-4 Natural resource management

05/09/2024
C110gelg

Agriculture

Sustainable land use, land management and the protection of the natural resource asset base are essential to facilitate the continued economic performance of the primary industry sector.

The development of housing that does not relate to or support agricultural production can conflict with agricultural practices. Proposals to excise dwellings or create lots for dwellings in areas where agriculture is the primary purpose need to minimise these types of conflicts.

Council seeks to protect the viability of agricultural land by:

- Supporting the sustainable land use, land management and protection of natural resource assets to build on the continued economic performance of the primary industry sector.
- Protecting large scale rural properties to maximise their capability for agricultural land use.
- Discouraging the development of dwellings, and the excision of existing dwellings, that do not relate to or support agricultural production.
- Ensuring dwellings that are excised, or constructed on an excised lot, are properly sited and designed.
- Minimising the impact of subdivision, use and development of land that will conflict with farming land.

Water

The Shire contains extensive ground water resources in deep and shallow aquifers that are used for stock and domestic supplies.

Council seeks to manage water by:

- Protecting the water quality and potable water supply from the Shire's groundwater sources.
- 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.

02.03-5 Built environment and heritage

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Built environment

The Shire's built environment has been influenced by early settlement, soldier settlement and more recent industrial development. Protecting existing heritage values, and the presentation of the towns from highways and major roads assists in maintaining character.

Council seeks to improve the built environment by:

- Encouraging development at township entrances to be designed and landscaped in a manner that contributes to the appearance and character of the town.
- Supporting development that respects the existing character of towns.

Heritage

The Shire contains natural and cultural heritage which defines its character and contributes to the attraction of the Shire as a desirable place to live, invest and visit. This includes an array of European and Aboriginal heritage features, including some of the State's most important places of cultural and historic significance such as the World Heritage listed Budj Bim Cultural Landscape.

Strategic directions:

- Protect places and areas of natural and cultural heritage.

- Protect and enhance Aboriginal cultural heritage sites and significant cultural landscapes, including the World Heritage listed Budj Bim Cultural Landscape.

02.03-6 Economic development

05/09/2024
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Employment and industry

Key industry sectors in the Shire include the Port of Portland, the Portland Aluminium Smelter, renewable energy, timber production and processing, commercial fishing, agribusiness and tourism. The major concentrations of jobs are in manufacturing, agriculture, forestry and fishing, retail, education and training, accommodation and food services.

Industrial development, in particular, is critical to the long-term economic future of the Shire. There is a significant opportunity to reposition Portland's industrial areas to attract new investment and employment. As part of this, the Portland Industrial Land Strategy (2016) (PILS) provides a framework for the future planning of Portland's industrial precincts and environs. The key industrial precincts are: the North Portland Industrial Precinct, the Central Portland Employment Precinct, and the Madeira Packet Employment Precinct.

The **North Portland Industrial Precinct** can support large-scale industries on large allotments. It will encourage industries that have links to the regional economy and cater for industries that require buffer areas to minimise adverse amenity impacts.

The **Central Portland Employment Precinct** provides for light industries to the west of the railway spur and is to provide for a transition to a mix of commercial and residential to the east of the railway spur.

The **Madeira Packet Employment Precinct** provides for light industries and lower-scale commercial uses. The northern area of the precinct is close to the Port and provides an opportunity for existing port-related industries to be retained and future industries to develop. The southern area of the precinct has a number of service industries and lower-scale commercial uses that should be encouraged to remain.

Council will promote employment and industrial growth by:

- Supporting use and development that increases employment in the Shire particularly in Glenelg's key employment/industry sectors.
- Supporting Portland's role as a regional centre that provides State significant industry including the Port of Portland, the Portland aluminium smelter and Industrial 2 zoned land.
- Facilitating the future growth, planning and development of Portland's industrial precincts.

Tourism

Tourism plays a significant role in the local economy. The Shire has a range of attractions including recreational fishing, heritage, eco-tourism, beaches, surfing, trails, national parks, and a series of festivals throughout the year. Portland is developing as a tourism destination and is now seen as the western gateway to the Great Ocean Road and the eastern gateway for the Limestone Coast.

Council seeks to facilitate tourism by:

- Supporting the development of tourism based on attractions including natural features, fishing, local produce, cultural and built heritage, eco-tourism, beaches, surfing, trails and national parks.
- Encouraging development of tourist accommodation.
- Maximising opportunities in niche markets, including fishing and boating, bird watching, adventure groups and cruise ship visitors.
- Supporting opportunities for coastal tourism.

02.03-7 Transport

05/09/2024
C110gelg

Integrated transport

Transport links, particularly to and from Portland, provide much of the basis of the Shire's future economic development opportunities.

Council seeks to improve integrated transport by:

- Supporting bicycle and walking paths to encourage an alternative to private motor vehicle use and promote healthy communities.
- Facilitating road infrastructure for development in rural areas to allow access.
- Preserving disused railway corridors as future options for the re-introduction of passenger rail services.

Ports

The Port of Portland is a deep-water bulk-handling port that is of state and national significance. It handles increasing volumes of commodity exports and is a potential future entry point for tourists.

The Port of Portland will continue to expand its operations and will rely upon links to other transport modes.

Development of the port and related infrastructure will be facilitated by:

- Supporting the Port of Portland to be a national and international gateway for exports.
- Supporting access to the port and its linkages to Heywood.
- Encouraging efficient and safe road and rail access.
- Providing effective land use buffers to the Port of Portland.

Airports

Glenelg has airports at Portland and Casterton and a private airfield at Nelson. The Portland Airport is of strategic importance for the Shire because of its potential to facilitate economic growth and tourism.

Council seeks to manage and develop airports by:

- Encouraging the growth of airports.
- Protecting flight paths around the airports.

02.03-8 Infrastructure

05/09/2024
C110gelg

Open space

Passive recreation is important for the Shire, including camping, nature-based walking and fishing.

Council seeks to improve its open space and recreational opportunities by:

- Supporting the provision of open space and recreation facilities that are able to cater for a wide range of recreational activities.

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SCHEDULE 1 TO CLAUSE 44.03 FLOODWAY OVERLAY

Shown on the planning scheme map as **FO1**.

FLOODWAYS

1.0 Floodway objectives to be achieved

--/--/----
Proposed C115gelg

Ensure that any development permitted on floodplain land:

- Does not increase the risk to existing residents, property, and community infrastructure from flooding.
- Maintains the free passage and temporary storage of floodwaters.
- 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.

Discourage subdivision of land wholly within the overlay or that would result in the intensification of development in areas affected by flooding and inundation.

2.0 Statement of risk

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Proposed C115gelg

Land within the Floodway Overlay (FO1) is required to provide adequate flood conveyance and storage of flood water during major flood events. This overlay denotes land that is generally the high hazard portion of the floodplain where deep and fast flowing floodwater can be expected.

3.0 Permit requirement

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Proposed C115gelg

A permit is not required to construct a building or construction or carrying out works for:

- Buildings or works consistent with an agreement under Section 173 of the Act prepared in accordance with a condition of permit issued under Clause 44.03-3.
- Buildings or works on land that has been filled in accordance with the requirements of a planning permit issued under Clause 44.03-2 or 44.03-3.
- Bicycle or pedestrian pathways and trails where there is no increase in the natural ground level.
- Works ancillary to an existing building, including landscaping and paths, that do not alter the surface profile by more than 150 millimetres.
- A single rainwater tank not exceeding 5,000 litres ancillary to an existing dwelling.
- A building with a floor area less than 10 square metres not used for accommodation and ancillary to a dwelling where the total area of all existing outbuildings does not exceed 10 square metres.

4.0 Application requirements

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Proposed C115gelg

The following application requirements apply to an application for a permit under Clause 44.03, in addition to those specified in Clause 44.03-4 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A copy of any formal advice received from the Floodplain Management Authority.
- A response to if the proposed development can be located on flood-free land or land with a lesser flood hazard.
- The boundaries, dimensions, orientation, and slope of the site.
- The location, layout, size, and use of existing buildings and works on the site and the adjoining land.
- The location, layout, size, and use of all proposed development.

- The elevations of all proposed buildings with dimensions and drawn to scale.
- The floor levels of all existing and proposed buildings to Australian Height Datum (AHD).
- The existing and proposed ground levels of the site, to AHD, and the difference in levels between the site and surrounding land.
- Details of existing and proposed internal driveways and pathways and their height in relation to the 1 percent Annual Exceedance Probability (AEP) for the site as provided by the Floodplain Management Authority.
- Details of all adjoining roads, internal driveways, and access tracks.
- Details of the measures to be used to reduce the susceptibility of the development to flood damage.

Cut and Fill

- Demonstrate compliance with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012 or as amended. Plans are to show natural ground level to AHD, depths of cut, height of fill, and calculations showing the net level for level cut and fill volume balance.

Fences

- Demonstrate compliance with the Floodplain Management Authority Guidelines Fencing in flood-prone areas 2021, or as amended, or evidence demonstrating that the fence will not significantly obstruct flood flows.

Subdivision

- A plan indicating the location of any existing buildings.
- Subdivision applications for land that is partly within the UFZ, FO, or LSIO are to demonstrate that:
  - There is an adequate building envelope on each lot (formally defined on the plan of subdivision) outside of the FO and 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.

Flood Risk Report

- Unless the Floodplain Management Authority has advised otherwise in writing, any application that is not consistent with the Glenelg Shire Local Floodplain Development Plan is to be accompanied by a Flood Risk Report consistent with the requirements set out under Clause 44.03-4 of the Glenelg Planning Scheme.

5.0 Decision guidelines

--/--/----
Proposed C115gelg

The following decision guidelines apply to an application for a permit under Clause 44.03, in addition to those specified in Clause 44.01 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the proposed development can be located on flood-free land or land with a lesser flood hazard.
- Whether the flow of flood waters across the subject land and downstream of the land are affected.
- Whether there is an unacceptable risk to the safety of persons on the land.

Dwellings/Extension to a dwelling:

- Whether the dwelling can be located on land outside of the overlay
- Whether the dwelling/extension is constructed with an open style foundation to allow automatic entry and exit of water.
- Whether the finished floor level is above the Nominal Flood Protection Level (NFPL).
- Whether the longest length of the dwelling/extension is parallel to the dominant direction of water flow.
- Whether the dwelling is sited on land where the 1 percent Annual Exceedance Probability (AEP) depth is less than 500 mm above the natural surface level
- Whether the accessway to the dwelling from a main road has a 1 percent AEP depth not more than 500 mm.
- Whether water resistant materials have been used up to NFPL.
- Whether the relevant performance criteria in the Local Floodplain Development Plan Incorporated Document can be met.

Buildings other than a dwelling:

- Whether the building is located on the highest available natural ground.
- Whether the building is constructed not to disrupt flood water flow.
- Whether the building is constructed on stumps to allow automatic entry and exit of water.
- Whether the longest length of the building is parallel to the dominant direction of water flow.
- Whether the building is 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.
- Whether the cladding to the subfloor structure has openings, or of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
- Whether the areas to be filled are limited to as near as possible to the building exterior.

Fences

- Whether the fence is of permeable construction so as to not unduly divert or obstruct floodwater.
- Whether there is potential for the fence to trap debris.

Earthworks

- Whether the earthworks reduce the capacity of the floodplain to store and convey floodwater.
- Whether the earthworks divert or impede the flow of floodwater.
- Whether the excavated material is to be removed off-site and away from land.
- Whether the surface level of land surrounding a dam or pool, including embankments, cause a net decrease in flood storage volume.

Chemical storage

- Whether the storage of chemicals will be kept at a height of at least 1 metre above the NFPL.

Water tanks

- Whether water tanks exceeding 10,000 litres capacity are proposed underground.
- Whether water tanks less than 10,000 litres are raised on a stump and bearer tank stand to a height of at least 300 mm above the NFPL or placed underground.
- Whether fill/pads are as close as possible to the footprint of any on-ground water tanks.

- Whether multiple on-ground water tanks are proposed in a continuous line parallel to the direction of flood water flow.
- Whether on-ground water tanks are secured in place to prevent floatation and transport downstream.

Subdivision

- Whether any new lot is proposed with sufficient land outside the Urban Floodway Zone, Floodway Overlay, and Land Subject to Inundation Overlay.

20/01/2023
C106gelg

SCHEDULE 1 TO CLAUSE 44.03 FLOODWAY OVERLAY

Shown on the planning scheme map as **FO1**.

FLOODWAYS

1.0 Floodway objectives to be achieved

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg

Ensure that any development permitted on floodplain land:

~~None specified.~~

- Does not increase the risk to existing residents, property, and community infrastructure from flooding.
- Maintains the free passage and temporary storage of floodwaters.
- 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.

Discourage subdivision of land wholly within the overlay or that would result in the intensification of development in areas affected by flooding and inundation.

2.0 Statement of risk

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg

~~None specified.~~ Land within the Floodway Overlay (FO1) is required to provide adequate flood conveyance and storage of flood water during major flood events. This overlay denotes land that is generally the high hazard portion of the floodplain where deep and fast flowing floodwater can be expected.

3.0 Permit requirement

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg

A permit is not required ~~for the following buildings and works~~to construct a building or construction or carrying out works for:

- Buildings or works consistent with an agreement under Section 173 of the Act prepared in accordance with a condition of permit issued under Clause 44.03-3.
- ~~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.~~

  Buildings or works on land that has been filled in accordance with the requirements of a planning permit issued under Clause 44.03-2 or 44.03-3.
- ~~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.~~
  Bicycle or pedestrian pathways and trails 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;~~
  Works ancillary to an existing building, including landscaping and paths, 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.~~
- ~~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 single rainwater tank not exceeding 5,000 litres ancillary to an existing dwelling.
- ~~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 building with a floor area less than 10 square metres not used for accommodation and ancillary to a dwelling where the total area of all existing outbuildings does not exceed 10 square metres.
- ~~A lighting pole.~~

4.0 Application requirements

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg ~~None specified.~~ The following application requirements apply to an application for a permit under Clause 44.03, in addition to those specified in Clause 44.03-4 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A copy of any formal advice received from the Floodplain Management Authority.
- A response to if the proposed development can be located on flood-free land or land with a lesser flood hazard.
- The boundaries, dimensions, orientation, and slope of the site.
- The location, layout, size, and use of existing buildings and works on the site and the adjoining land.
- The location, layout, size, and use of all proposed development.
- The elevations of all proposed buildings with dimensions and drawn to scale.
- The floor levels of all existing and proposed buildings to Australian Height Datum (AHD).

- The existing and proposed ground levels of the site, to AHD, and the difference in levels between the site and surrounding land.
- Details of existing and proposed internal driveways and pathways and their height in relation to the 1 percent Annual Exceedance Probability (AEP) for the site as provided by the Floodplain Management Authority.
- Details of all adjoining roads, internal driveways, and access tracks.
- Details of the measures to be used to reduce the susceptibility of the development to flood damage.

Cut and Fill

- Demonstrate compliance with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012 or as amended. Plans are to show natural ground level to AHD, depths of cut, height of fill, and calculations showing the net level for level cut and fill volume balance.

Fences

- Demonstrate compliance with the Floodplain Management Authority Guidelines Fencing in flood-prone areas 2021, or as amended, or evidence demonstrating that the fence will not significantly obstruct flood flows.

Subdivision

- A plan indicating the location of any existing buildings.
- Subdivision applications for land that is partly within the UFZ, FO, or LSIO are to demonstrate that:
  - There is an adequate building envelope on each lot (formally defined on the plan of subdivision) outside of the FO and 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.

Flood Risk Report

- Unless the Floodplain Management Authority has advised otherwise in writing, any application that is not consistent with the Glenelg Shire Local Floodplain Development Plan is to be accompanied by a Flood Risk Report consistent with the requirements set out under Clause 44.03-4 of the Glenelg Planning Scheme.

5.0 Decision guidelines

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg ~~None specified.~~ The following decision guidelines apply to an application for a permit under Clause 44.03, in addition to those specified in Clause 44.01 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the proposed development can be located on flood-free land or land with a lesser flood hazard.
- Whether the flow of flood waters across the subject land and downstream of the land are affected.
- Whether there is an unacceptable risk to the safety of persons on the land.

Dwellings/Extension to a dwelling:

- Whether the dwelling can be located on land outside of the overlay
- Whether the dwelling/extension is constructed with an open style foundation to allow automatic entry and exit of water.

- Whether the finished floor level is above the Nominal Flood Protection Level (NFPL).
- Whether the longest length of the dwelling/extension is parallel to the dominant direction of water flow.
- Whether the dwelling is sited on land where the 1 percent Annual Exceedance Probability (AEP) depth is less than 500 mm above the natural surface level
- Whether the accessway to the dwelling from a main road has a 1 percent AEP depth not more than 500 mm.
- Whether water resistant materials have been used up to NFPL.
- Whether the relevant performance criteria in the Local Floodplain Development Plan Incorporated Document can be met.

Buildings other than a dwelling:

- Whether the building is located on the highest available natural ground.
- Whether the building is constructed not to disrupt flood water flow.
- Whether the building is constructed on stumps to allow automatic entry and exit of water.
- Whether the longest length of the building is parallel to the dominant direction of water flow.
- Whether the building is 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.
- Whether the cladding to the subfloor structure has openings, or of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
- Whether the areas to be filled are limited to as near as possible to the building exterior.

Fences

- Whether the fence is of permeable construction so as to not unduly divert or obstruct floodwater.
- Whether there is potential for the fence to trap debris.

Earthworks

- Whether the earthworks reduce the capacity of the floodplain to store and convey floodwater.
- Whether the earthworks divert or impede the flow of floodwater.
- Whether the excavated material is to be removed off-site and away from land.
- Whether the surface level of land surrounding a dam or pool, including embankments, cause a net decrease in flood storage volume.

Chemical storage

- Whether the storage of chemicals will be kept at a height of at least 1 metre above the NFPL.

Water tanks

- Whether water tanks exceeding 10,000 litres capacity are proposed underground.
- Whether water tanks less than 10,000 litres are raised on a stump and bearer tank stand to a height of at least 300 mm above the NFPL or placed underground.
- Whether fill/pads are as close as possible to the footprint of any on-ground water tanks.
- Whether multiple on-ground water tanks are proposed in a continuous line parallel to the direction of flood water flow.
- Whether on-ground water tanks are secured in place to prevent floatation and transport downstream.

Subdivision

- Whether any new lot is proposed with sufficient land outside the Urban Floodway Zone, Floodway Overlay, and Land Subject to Inundation Overlay.

20/01/2023
C106gelg

SCHEDULE 1 TO CLAUSE 44.04 LAND SUBJECT TO INUNDATION OVERLAY

Shown on the planning scheme map as **LSIO1**.

LAND SUBJECT TO INUNDATION

1.0 Land subject to inundation objectives to be achieved

--/--/----
Proposed C115gelg

Ensure that any development permitted on floodplain land:

- Does not increase the risk to existing residents, property, and community infrastructure from flooding.
- Maintains the free passage and temporary storage of floodwaters.
- 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.

Discourage subdivision of land wholly within flood overlays or that would result in the intensification of development in areas affected by flooding and inundation.

2.0 Statement of risk

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Proposed C115gelg

The Land Subject to Inundation Overlay (LSIO1) 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.

3.0 Permit requirement

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Proposed C115gelg

A permit is not required to construct a building or construction or carrying out works for:

- Buildings or works consistent with an agreement under Section 173 of the Act prepared in accordance with a condition of a planning permit issued under Clause 44.04-3.
- Buildings or works on land that has been filled in accordance with the requirements of a planning permit issued under Clause 44.04-2 or 44.04-3.
- Bicycle or pedestrian pathways and trails where there is no increase in the natural ground level.
- Works ancillary to an existing building, including landscaping and paths, that do not alter the natural ground level more than 150 millimetres.
- A single rainwater tank not exceeding 5,000 litres ancillary to an existing dwelling.
- A building with a floor area less than 10 square metres not used for accommodation and ancillary to a dwelling where the total area of all existing outbuildings does not exceed 10 square metres.
- An open-sided pergola, carport, or verandah ancillary to a dwelling or a small second dwelling and the natural ground level is not altered more than 150 millimetres.
- A shelter structure that is open on all sides and the natural ground level is not altered more than 150 millimetres.
- A deck attached to an existing dwelling with the finished floor level raised on stumps at least 300mm above natural ground level.
- An extension to an existing building to add an additional storey where the building footprint is not increased.
- A disabled access ramp.

4.0 Application requirements

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Proposed C115gelg

The following application requirements apply to an application for a permit under Clause 44.04, in addition to those specified in Clause 44.04-4 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A copy of any formal advice received from the Floodplain Management Authority.
- A response to if the proposed development can be located on flood-free land or land with a lesser flood hazard.
- The boundaries, dimensions, orientation, and slope of the site.
- The location, layout, size, and use of existing buildings and works on the site and the adjoining land.
- The location, layout, size, and use of all proposed development.
- The elevations of all proposed buildings with dimensions and drawn to scale.
- The floor levels of all existing and proposed buildings to Australian Height Datum (AHD).
- The existing and proposed ground levels of the site, to AHD, and the difference in levels between the site and surrounding land.
- Details of existing and proposed internal driveways and pathways and their height in relation to the Nominal Flood Protection Level (NFPL) for the site.
- Details of all adjoining roads, internal driveways, and access tracks.
- Details of the measures to be used to reduce the susceptibility of the development to flood damage.

Cut and Fill

- Demonstrate compliance with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012, or as amended. Plans are to show natural ground level to AHD, depths of cut, height of fill, and calculations showing the net level for level cut and fill volume balance.

Fences

- Demonstrate compliance with the Floodplain Management Authority Guidelines Fencing in flood-prone areas 2021, or as amended, or evidence demonstrating that the fence will not significantly obstruct flood flows.

Subdivision

- A plan indicating the location of any existing buildings.
- Subdivision applications for land that is partly within the UFZ, FO, or LSIO are to demonstrate that:
- There is an adequate building envelope on each lot (formally defined on the plan of subdivision) outside of the FO and 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.

5.0 Decision guidelines

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Proposed C115gelg

The following decision guidelines apply to an application for a permit under Clause 44.03, in addition to those specified in Clause 44.01 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the flow of flood waters across the subject land and downstream of the land are affected.
- Whether there is an unacceptable risk to the safety of persons on the land.

Dwellings/Extension to a dwelling:

- Whether the dwelling can be located on land outside of the overlay.
- Whether the dwelling/extension is constructed with an open style foundation to allow automatic entry and exit of water.
- Whether the finished floor level is above the Nominal Flood Protection Level (NFPL).
- Whether the longest length of the dwelling/extension is parallel to the dominant direction of water flow.
- Whether the dwelling is sited on land where the 1 percent Annual Exceedance Probability (AEP) depth is less than 500 mm above the natural surface level
- Whether the accessway to the dwelling from a main road has a 1 percent AEP depth not more than 500 mm.
- Whether water resistant materials have been used up to NFPL.
- Whether the relevant performance criteria in the Local Floodplain Development Plan Incorporated Document can be met.

Buildings other than a dwelling:

- Whether the building is located on the highest available natural ground.
- Whether the building is constructed not to disrupt flood water flow.
- Whether the building is constructed on stumps to allow automatic entry and exit of water.
- Whether the longest length of the building is parallel to the dominant direction of water flow.
- Whether the building is 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.
- Whether the cladding to the subfloor structure has openings, or of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
- Whether the areas to be filled are limited to as near as possible to the building exterior.

Fences

- Whether the fence is of permeable construction so as to not unduly divert or obstruct floodwater.
- Whether there is potential for the fence to trap debris.

Earthworks

- Whether the earthworks reduce the capacity of the floodplain to store and convey floodwater.
- Whether the earthworks divert or impede the flow of floodwater.
- Whether the excavated material is to be removed off-site and away from land.
- Whether the surface level of land surrounding a dam or pool, including embankments, cause a net decrease in flood storage volume.

Chemical storage

- Whether the storage of chemicals will be kept at a height of at least 1 metre above the NFPL.

Water tanks

- Whether water tanks exceeding 10,000 litres capacity are proposed underground.

- Whether water tanks less than 10,000 litres are raised on a stump and bearer tank stand to a height of at least 300 mm above the NFPL or placed underground.
- Whether fill/pads are as close as possible to the footprint of any on-ground water tanks.
- Whether multiple on-ground water tanks are proposed in a continuous line parallel to the direction of flood water flow.
- Whether on-ground water tanks are secured in place to prevent floatation and transport downstream.

Subdivision

- Whether any new lot is proposed with sufficient land outside of the Urban Floodway Zone, Floodway Overlay, and Land Subject to Inundation Overlay.

20/01/2023
C106gelg

SCHEDULE 1 TO CLAUSE 44.04 LAND SUBJECT TO INUNDATION OVERLAY

Shown on the planning scheme map as **LSIO1**.

LAND SUBJECT TO INUNDATION

1.0 Land subject to inundation objectives to be achieved

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg

Ensure that any development permitted on floodplain land:

~~None specified.~~

- Does not increase the risk to existing residents, property, and community infrastructure from flooding.
- Maintains the free passage and temporary storage of floodwaters.
- 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.

Discourage subdivision of land wholly within flood overlays or that would result in the intensification of development in areas affected by flooding and inundation.

2.0 Statement of risk

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg

~~None specified.~~ The Land Subject to Inundation Overlay (LSIO1) 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.

3.0 Permit requirement

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg

A permit is not required ~~for the following buildings or works~~to construct a building or construction or carrying out works for:

- Buildings or works consistent with an agreement under Section 173 of the Act prepared in accordance with a condition of a planning permit issued under Clause 44.04-3.
- ~~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.~~

  Buildings or works on land that has been filled in accordance with the requirements of a planning permit issued under Clause 44.04-2 or 44.04-3.
- ~~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.~~
  Bicycle or pedestrian pathways and trails 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.~~
  Works ancillary to an existing building, including landscaping and paths, that do not alter the natural ground level 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.~~
- ~~Routine and maintenance works that do not affect the height, length or location of a levee or embankment.~~
  A single rainwater tank not exceeding 5,000 litres ancillary to an existing dwelling.
- ~~A domestic rainwater tank of 4,500 litres capacity or less.~~
  A building with a floor area less than 10 square metres not used for accommodation and ancillary to a dwelling where the total area of all existing outbuildings does not exceed 10 square metres.
- An open-sided pergola, carport, or verandah ancillary to a dwelling or a small second dwelling and the natural ground level is not altered more than 150 millimetres.
- ~~An agricultural shed or hay shed that is open on all sides with a floor level at natural surface.~~
  A shelter structure that is open on all sides and the natural ground level is not altered more than 150 millimetres.
- A deck attached to an existing dwelling with the finished floor level raised on stumps at least 300mm above natural ground level.
- ~~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.~~

  An extension to an existing building to add an additional storey where the building footprint is not increased.
- ~~A lighting pole.~~
  A disabled access ramp.

4.0 Application requirements

28/05/2021 --/--/----
C99gelgProposed C115gelg ~~None specified.~~ The following application requirements apply to an application for a permit under Clause 44.04, in addition to those specified in Clause 44.04-4 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A copy of any formal advice received from the Floodplain Management Authority.
- A response to if the proposed development can be located on flood-free land or land with a lesser flood hazard.
- The boundaries, dimensions, orientation, and slope of the site.
- The location, layout, size, and use of existing buildings and works on the site and the adjoining land.
- The location, layout, size, and use of all proposed development.
- The elevations of all proposed buildings with dimensions and drawn to scale.
- The floor levels of all existing and proposed buildings to Australian Height Datum (AHD).
- The existing and proposed ground levels of the site, to AHD, and the difference in levels between the site and surrounding land.
- Details of existing and proposed internal driveways and pathways and their height in relation to the Nominal Flood Protection Level (NFPL) for the site.
- Details of all adjoining roads, internal driveways, and access tracks.
- Details of the measures to be used to reduce the susceptibility of the development to flood damage.

Cut and Fill

- Demonstrate compliance with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012, or as amended. Plans are to show natural ground level to AHD, depths of cut, height of fill, and calculations showing the net level for level cut and fill volume balance.

Fences

- Demonstrate compliance with the Floodplain Management Authority Guidelines Fencing in flood-prone areas 2021, or as amended, or evidence demonstrating that the fence will not significantly obstruct flood flows.

Subdivision

- A plan indicating the location of any existing buildings.
- Subdivision applications for land that is partly within the UFZ, FO, or LSIO are to demonstrate that:
- There is an adequate building envelope on each lot (formally defined on the plan of subdivision) outside of the FO and 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.

5.0 Decision guidelines

28/05/2021 --/--/----
C99gelgProposed C115gelg ~~None specified.~~ The following decision guidelines apply to an application for a permit under Clause 44.03, in addition to those specified in Clause 44.01 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the flow of flood waters across the subject land and downstream of the land are affected.
- Whether there is an unacceptable risk to the safety of persons on the land.

Dwellings/Extension to a dwelling:

- Whether the dwelling can be located on land outside of the overlay.
- Whether the dwelling/extension is constructed with an open style foundation to allow automatic entry and exit of water.
- Whether the finished floor level is above the Nominal Flood Protection Level (NFPL).
- Whether the longest length of the dwelling/extension is parallel to the dominant direction of water flow.
- Whether the dwelling is sited on land where the 1 percent Annual Exceedance Probability (AEP) depth is less than 500 mm above the natural surface level
- Whether the accessway to the dwelling from a main road has a 1 percent AEP depth not more than 500 mm.
- Whether water resistant materials have been used up to NFPL.
- Whether the relevant performance criteria in the Local Floodplain Development Plan Incorporated Document can be met.

Buildings other than a dwelling:

- Whether the building is located on the highest available natural ground.
- Whether the building is constructed not to disrupt flood water flow.
- Whether the building is constructed on stumps to allow automatic entry and exit of water.
- Whether the longest length of the building is parallel to the dominant direction of water flow.
- Whether the building is 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.
- Whether the cladding to the subfloor structure has openings, or of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
- Whether the areas to be filled are limited to as near as possible to the building exterior.

Fences

- Whether the fence is of permeable construction so as to not unduly divert or obstruct floodwater.
- Whether there is potential for the fence to trap debris.

Earthworks

- Whether the earthworks reduce the capacity of the floodplain to store and convey floodwater.
- Whether the earthworks divert or impede the flow of floodwater.
- Whether the excavated material is to be removed off-site and away from land.
- Whether the surface level of land surrounding a dam or pool, including embankments, cause a net decrease in flood storage volume.

Chemical storage

- Whether the storage of chemicals will be kept at a height of at least 1 metre above the NFPL.

Water tanks

- Whether water tanks exceeding 10,000 litres capacity are proposed underground.

- Whether water tanks less than 10,000 litres are raised on a stump and bearer tank stand to a height of at least 300 mm above the NFPL or placed underground.
- Whether fill/pads are as close as possible to the footprint of any on-ground water tanks.
- Whether multiple on-ground water tanks are proposed in a continuous line parallel to the direction of flood water flow.
- Whether on-ground water tanks are secured in place to prevent floatation and transport downstream.

Subdivision

- Whether any new lot is proposed with sufficient land outside of the Urban Floodway Zone, Floodway Overlay, and Land Subject to Inundation Overlay.

28/05/2021
C99gelg

SCHEDULE TO CLAUSE 37.03 URBAN FLOODWAY ZONE

1.0 Application requirements

--/--/----
Proposed C115gelg

The following application requirements apply to an application for a permit under Clause 37.03, in addition to those specified in Clause 37.03 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A copy of any formal advice received from the Floodplain Management Authority.
- A response to if the proposed development can be located on flood-free land or land with a lesser flood hazard.
- The boundaries, dimensions, orientation, and slope of the site.
- The location, layout, size, and use of existing buildings and works on the site and the adjoining land.
- The location, layout, size, and use of all proposed development.
- The elevations of all proposed buildings with dimensions and drawn to scale.
- The floor levels of all existing and proposed buildings to Australian Height Datum (AHD).
- The existing and proposed ground levels of the site, to AHD, and the difference in levels between the site and surrounding land.
- Details of existing and proposed internal driveways and pathways and their height in relation to the 1 percent Annual Exceedance Probability (AEP) for the site as provided by the Floodplain Management Authority.
- Details of all adjoining roads, internal driveways, and access tracks.
- Details of the measures to be used to reduce the susceptibility of the development to flood damage.

Cut and Fill

- Demonstrate compliance with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012 or as amended. Plans are to show natural ground level to AHD, depths of cut, height of fill, and calculations showing the net level for level cut and fill volume balance.

Fences

- Demonstrate compliance with the Floodplain Management Authority Guidelines Fencing in flood-prone areas 2021, or as amended, or evidence demonstrating that the fence will not significantly obstruct flood flows.

Subdivision

- A plan indicating the location of any existing buildings.
- Subdivision applications for land that is partly within the UFZ, FO, or LSIO are to demonstrate that:
  - There is an adequate building envelope on each lot (formally defined on the plan of subdivision) outside of the UFZ and where the 1 percent AEP inundation depth is determined to be less than 300 mm.
  - Access to the building envelope does not traverse land where the 1 percent AEP 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 during a 1 percent AEP flood event.

Flood Risk Report

- Unless the Floodplain Management Authority has advised otherwise in writing, any application that is not consistent with the Glenelg Shire Local Floodplain Development Plan is to be accompanied by a Flood Risk Report consistent with the requirements set out under Clause 37.03-4 of the Glenelg Planning Scheme.

2.0 Decision guidelines

--/--/----
Proposed C115gelg

The following decision guidelines apply to an application for a permit under Clause 37.03, in addition to those specified in Clause 37.03-6 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the proposed development can be located on flood-free land or land with a lesser flood hazard.
- Whether the flow of flood waters across the subject land and downstream of the land are affected.
- Whether there is an unacceptable risk to the safety of persons on the land.

Replacement dwelling:

- Whether the dwelling can be located on land outside of the zone.
- Whether the dwelling is constructed with an open style foundation to allow automatic entry and exit of water.
- Whether the cladding to the subfloor structure has openings, or of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
- Whether the finished floor level is above the Nominal Flood Protection Level (NFPL).
- Whether the longest length of the dwelling is parallel to the dominant direction of water flow.
- Whether the performance criteria in the Local Floodplain Development Plan Incorporated Document can be met.

Replacement building other than dwelling:

- Whether the building is located on the highest available natural ground.
- Whether the building is constructed not to disrupt flood water flow.
- Whether the building is constructed with an open style foundation to allow automatic entry and exit of water.
- Whether the longest length of the building is parallel to the dominant direction of water flow.
- Whether the building is designed to minimise damage caused by flooding to the structure and its contents.
- Whether the cladding to the subfloor structure has openings, or of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
- Whether the areas to be filled are limited to as near as possible to the building exterior.

Fences

- Whether the fence is of permeable construction so as to not unduly divert or obstruct floodwater.
- Whether there is potential for the fence to trap debris.

Earthworks

- Whether the earthworks reduce the capacity of the floodplain to store and convey floodwater.
- Whether the earthworks divert or impede the flow of floodwater.
- Whether the excavated material is to be removed off-site and away from land.
- Whether the surface level of land surrounding a dam or pool, including embankments, cause a net decrease in flood storage volume.

Chemical storage

- Whether the storage of chemicals will be kept at a height of at least 1 metre above the NFPL.

Water tanks

- Whether water tanks exceeding 10,000 litres capacity are proposed underground.
- Whether water tanks less than 10,000 litres are raised on a stump and bearer tank stand to a height of at least 300 mm above the NFPL or placed underground.
- Whether fill/pads are as close as possible to the footprint of any on-ground water tanks.
- Whether multiple on-ground water tanks are proposed in a continuous line parallel to the direction of flood water flow.
- Whether on-ground water tanks are secured in place to prevent floatation and transport downstream.

Subdivision

- Whether any new lot is proposed with sufficient land outside the Urban Floodway Zone, Floodway Overlay, and Land Subject to Inundation Overlay.

3.0 Signs

--/--/----
Proposed C115gelg

Land	Sign Category
None specified	

28/05/2021
C99gelg

SCHEDULE TO CLAUSE 37.03 URBAN FLOODWAY ZONE

1.0 Application requirements

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg~~None specified.~~ The following application requirements apply to an application for a permit under Clause 37.03, in addition to those specified in Clause 37.03 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A copy of any formal advice received from the Floodplain Management Authority.
- A response to if the proposed development can be located on flood-free land or land with a lesser flood hazard.
- The boundaries, dimensions, orientation, and slope of the site.
- The location, layout, size, and use of existing buildings and works on the site and the adjoining land.
- The location, layout, size, and use of all proposed development.
- The elevations of all proposed buildings with dimensions and drawn to scale.
- The floor levels of all existing and proposed buildings to Australian Height Datum (AHD).
- The existing and proposed ground levels of the site, to AHD, and the difference in levels between the site and surrounding land.
- Details of existing and proposed internal driveways and pathways and their height in relation to the 1 percent Annual Exceedance Probability (AEP) for the site as provided by the Floodplain Management Authority.
- Details of all adjoining roads, internal driveways, and access tracks.
- Details of the measures to be used to reduce the susceptibility of the development to flood damage.

Cut and Fill

- Demonstrate compliance with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012 or as amended. Plans are to show natural ground level to AHD, depths of cut, height of fill, and calculations showing the net level for level cut and fill volume balance.

Fences

- Demonstrate compliance with the Floodplain Management Authority Guidelines Fencing in flood-prone areas 2021, or as amended, or evidence demonstrating that the fence will not significantly obstruct flood flows.

Subdivision

- A plan indicating the location of any existing buildings.
- Subdivision applications for land that is partly within the UFZ, FO, or LSIO are to demonstrate that:
  - There is an adequate building envelope on each lot (formally defined on the plan of subdivision) outside of the UFZ and where the 1 percent AEP inundation depth is determined to be less than 300 mm.
  - Access to the building envelope does not traverse land where the 1 percent AEP 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 during a 1 percent AEP flood event.

Flood Risk Report

- Unless the Floodplain Management Authority has advised otherwise in writing, any application that is not consistent with the Glenelg Shire Local Floodplain Development Plan is to be accompanied by a Flood Risk Report consistent with the requirements set out under Clause 37.03-4 of the Glenelg Planning Scheme.

2.0 Decision guidelines

~~28/05/2024~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg~~None specified.~~ The following decision guidelines apply to an application for a permit under Clause 37.03, in addition to those specified in Clause 37.03-6 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the proposed development can be located on flood-free land or land with a lesser flood hazard.
- Whether the flow of flood waters across the subject land and downstream of the land are affected.
- Whether there is an unacceptable risk to the safety of persons on the land.

Replacement dwelling:

- Whether the dwelling can be located on land outside of the zone.
- Whether the dwelling is constructed with an open style foundation to allow automatic entry and exit of water.
- Whether the cladding to the subfloor structure has openings, or of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
- Whether the finished floor level is above the Nominal Flood Protection Level (NFPL).
- Whether the longest length of the dwelling is parallel to the dominant direction of water flow.
- Whether the performance criteria in the Local Floodplain Development Plan Incorporated Document can be met.

Replacement building other than dwelling:

- Whether the building is located on the highest available natural ground.
- Whether the building is constructed not to disrupt flood water flow.
- Whether the building is constructed with an open style foundation to allow automatic entry and exit of water.
- Whether the longest length of the building is parallel to the dominant direction of water flow.
- Whether the building is designed to minimise damage caused by flooding to the structure and its contents.
- Whether the cladding to the subfloor structure has openings, or of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
- Whether the areas to be filled are limited to as near as possible to the building exterior.

Fences

- Whether the fence is of permeable construction so as to not unduly divert or obstruct floodwater.
- Whether there is potential for the fence to trap debris.

Earthworks

- Whether the earthworks reduce the capacity of the floodplain to store and convey floodwater.
- Whether the earthworks divert or impede the flow of floodwater.
- Whether the excavated material is to be removed off-site and away from land.
- Whether the surface level of land surrounding a dam or pool, including embankments, cause a net decrease in flood storage volume.

Chemical storage

- Whether the storage of chemicals will be kept at a height of at least 1 metre above the NFPL.

Water tanks

- Whether water tanks exceeding 10,000 litres capacity are proposed underground.
- Whether water tanks less than 10,000 litres are raised on a stump and bearer tank stand to a height of at least 300 mm above the NFPL or placed underground.
- Whether fill/pads are as close as possible to the footprint of any on-ground water tanks.
- Whether multiple on-ground water tanks are proposed in a continuous line parallel to the direction of flood water flow.
- Whether on-ground water tanks are secured in place to prevent floatation and transport downstream.

Subdivision

- Whether any new lot is proposed with sufficient land outside the Urban Floodway Zone, Floodway Overlay, and Land Subject to Inundation Overlay.

3.0 Signs

~~28/05/2021~~ ~~--/--/----~~
~~C99gelg~~Proposed C115gelg

Land	Sign Category
None specified	

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 C115gelg

- 1, 1ESO, 1BMO
- 2, 2ESO, 2HO, 2LSIO-FO, 2BMO
- 3, 3ESO, 3HO, 3LSIO-FO, 3BMO
- 4, 4ESO, 4BMO
- 5, 5ESO, 5BMO
- 6, 6ESO, 6LSIO-FO, 6BMO
- 7, 7AEO, 7DDO, 7DPO, 7ESO, 7HO, 7LSIO-FO, 7PAO, 7BMO
- 8, 8DDO, 8DPO, 8EAO, 8ESO, 8HO, 8LSIO-FO, 8BMO
- 9, 9ESO, 9HO, 9LSIO-FO, 9BMO
- 10, 10ESO, 10HO, 10LSIO-FO, 10BMO
- 11, 11EAO, 11ESO, 11HO
- 12, 12ESO
- 13, 13BMO, 13ESO
- 14, 14ESO, 14HO, 14LSIO-FO, 14BMO
- 15, 15ESO, 15HO, 15LSIO-FO, 15BMO
- 16, 16BMO, 16ESO
- 17, 17HO, 17BMO, 17ESO, 17EAO
- 18, 18HO, 18BMO
- 19, 19BMO
- 20, 20ESO, 20HO, 20SLO, 20BMO, 20LSIO-FO
- 21, 21ESO, 21SLO, 21BMO, 21EAO, 21LSIO-FO
- 22, 22ESO, 22HO, 22BMO, 22LSIO-FO
- 23, 23ESO, 23HO, 23BMO, 23EAO, 23LSIO-FO
- 24, 24ESO, 24BMO
- 25, 25ESO, 25HO, 25BMO, 25DPO
- 26, 26ESO, 26BMO, 26EAO, 26LSIO-FO
- 27, 27ESO, 27SLO, 27BMO, 27LSIO-FO
- 28, 28ESO, 28HO, 28BMO, 28LSIO-FO
- 29, 29ESO, 29BMO, 29LSIO-FO
- 30, 30DPO, 30ESO, 30HO, 30LSIO-FO, 30BMO, 30SCO
- 31, 31DPO, 31ESO, 31HO, 31BMO, 31LSIO-FO, 31SCO
- 32, 32DPO, 32ESO, 32HO, 32LSIO-FO, 32BMO, 32EAO, 32RO
- 33, 33DPO, 33ESO, 33LSIO-FO, 33BMO, 33SCO, 33EAO
- 34, 34AEO, 34DDO, 34ESO, 34HO, 34SLO, 34BMO, 34SCO
- 35, 35AEO, 35DDO, 35DPO, 35ESO, 35HO, 35LSIO-FO, 35SLO, 35BMO, 35SCO

- 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

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:

~~29/06/2023~~ --/--/----
~~C104gelg~~Proposed C115gelg

- 1, 1ESO, 1BMO
- 2, 2ESO, 2HO, 2LSIO-FO, 2BMO
- 3, 3ESO, 3HO, 3LSIO-FO, 3BMO
- 4, 4ESO, 4BMO
- 5, 5ESO, 5BMO
- 6, 6ESO, 6LSIO-FO, 6BMO
- 7, 7AEO, 7DDO, 7DPO, 7ESO, 7HO, 7LSIO-FO, 7PAO, 7BMO
- 8, 8DDO, 8DPO, 8EAO, 8ESO, 8HO, 8LSIO-FO, 8BMO
- 9, 9ESO, 9HO, 9LSIO-FO, 9BMO
- 10, 10ESO, 10HO, 10LSIO-FO, 10BMO
- 11, 11EAO, 11ESO, 11HO
- 12, 12ESO
- 13, 13BMO, 13ESO
- 14, 14ESO, 14HO, 14LSIO-FO, 14BMO
- 15, 15ESO, 15HO, 15LSIO-FO, 15BMO
- 16, 16BMO, 16ESO
- 17, 17HO, 17BMO, 17ESO, 17EAO
- 18, 18HO, 18BMO
- 19, 19BMO
- 20, 20ESO, 20HO, 20SLO, 20BMO, 20LSIO-FO
- 21, 21ESO, 21SLO, 21BMO, 21EAO, 21LSIO-FO
- 22, 22ESO, 22HO, 22BMO, 22LSIO-FO
- 23, 23ESO, 23HO, 23BMO, 23EAO, 23LSIO-FO
- 24, 24ESO, 24BMO
- 25, 25ESO, 25HO, 25BMO, 25DPO
- 26, 26ESO, 26BMO, 26EAO, 26LSIO-FO
- 27, 27ESO, 27SLO, 27BMO, 27LSIO-FO
- 28, 28ESO, 28HO, 28BMO, 28LSIO-FO
- 29, 29ESO, 29BMO, 29LSIO-FO
- 30, 30DPO, 30ESO, 30HO, 30LSIO-FO, 30BMO, 30SCO
- 31, 31DPO, 31ESO, 31HO, 31BMO, 31LSIO-FO, 31SCO
- 32, 32DPO, 32ESO, 32HO, 32LSIO-FO, 32BMO, 32EAO, 32RO
- 33, 33DPO, 33ESO, 33LSIO-FO, 33BMO, 33SCO, 33EAO
- 34, 34AEO, 34DDO, 34ESO, 34HO, 34SLO, 34BMO, 34SCO

- 35, 35AEO, 35DDO, 35DPO, 35ESO, 35HO, 35LSIO-FO, 35SLO, 35BMO, 35SCO
- 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

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SCHEDULE TO CLAUSE 72.04 INCORPORATED DOCUMENTS

1.0 Incorporated documents

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Proposed C115gelg

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, May 2025	**C115gelg**
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**
Tyrendarra Town Area Restructure Plan (RO1), December 2021	**C106gelg**
3013 Henty Highway, Heywood - Service Station Signage, August 2020	**C104gelg**
315 Dutton Way, Bolwarra - Yumbah Aquaculture Facility (Department of Transport and Planning, March 2024)	**C109gelg**

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SCHEDULE TO CLAUSE 72.04 INCORPORATED DOCUMENTS

1.0 Incorporated documents

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~~C109gelg~~Proposed C115gelg

Name of document	Introduced by:
Australian Standard AS2021-2015, Acoustics – Aircraft Noise Intrusion – Building Siting and Construction, Standards Australia Limited, 2015	**VC107**
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Glenelg Planning Scheme Heritage Overlay Permit Exemptions & Application Requirements, Incorporated Plan, June 2013	**C55(Part 1)**
Glenelg Shire Local Floodplain Development Plan, ~~March 2022~~May 2025	~~**C108gelg**~~**C115gelg**
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**
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Tyrendarra Town Area Restructure Plan (RO1), December 2021	**C106gelg**
3013 Henty Highway, Heywood - Service Station Signage, August 2020	**C104gelg**
315 Dutton Way, Bolwarra - Yumbah Aquaculture Facility (Department of Transport and Planning, March 2024)	**C109gelg**

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SCHEDULE TO CLAUSE 72.08 BACKGROUND DOCUMENTS

1.0 Background documents

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Proposed C115gelg

Name of background document	Amendment number - clause reference
Floodplain Management Authority Guidelines for Floodplain Cut and Fill (Glenelg Hopkins CMA, 2012)	37.03, 44.03, 44.04
Floodplain Management Authority Guidelines Fencing in flood-prone areas (Glenelg Hopkins CMA, 2021)	37.03, 44.03, 44.04
Dartmoor and Nelson Flood Study (Venant Solutions, 2024)	02.03-3, 44.03, 44.04
Glenelg Shire Open Space Strategy 2019-2040 (Tredwell Management Services and Myers Planning Group, 2019)	19.02-6L
Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study (2017)	44.03, 44.04
Portland Strategic Framework Plan (2020)	02.04, 15.01-1L-02, 15.01-2L-02
Portland Rural Living Assessment (2020)	Schedule 1 to 35.03, Schedule 2 to 35.06
Rural Land Strategy (2019)	14.01-1L, 17.04-1L
Portland Industrial Land Strategy (2016)	02.03-6, 13.07-1L
Recreation and Open Space Strategy (2007)	02.03-8
Roadside Vegetation management Plan (2014)	02.03-2
Coastal Spaces Landscape Assessment Study (2006)	02.03-2, 12.05-2L
Glenelg Coastal Action Plan (2004 as amended in 2012)	02.03-2, 12.05-1L
Glenelg Environment Strategy 2010-2020 (2010)	02.03-2
Bridgewater Bay Foreshore Master Plan (2014)	02.03-2, 12.05-1L
Narrawong Coastal Engineering Study (2011)	02.03-2, 12.05-1L
Portland Bay Coastal Infrastructure Plan (2007)	02.03-2, 12.05-1L
Coastal Spaces - Inundation and Erosion - Coastal Engineering Study (2010)	02.03-3
Glenelg Shire Municipal Fire Management Plan 2014-2017	02.03-3
Glenelg Flood Investigations (2008)	02.03-3
Portland Flood Study Implementation Works (2011)	02.03-3
Casterton Flood Investigations - Floodplain Management Report (2011)	02.03-3
Surry River Estuary Flood Study – Study Report (2008)	02.03-3
Domestic Wastewater Management Plan 2022-2027 (RMCG, 2022)	19.03-3L
Glenelg Hopkins - Regional Catchment Strategy - 2013-2019	02.03-2
Recommended separation distances for industrial residual air emissions (Publication 1518 March 2013)	02.03-3
Guidelines - Noise from Industry in Regional Victoria (Publication 1411 October 2011)	02.03-3
Portland Urban Conservation Study (1981)	02.03-1
Glenelg Shire Heritage Study- An Environmental History Stage 1 (2002)	02.03-5

Name of background document	Amendment number - clause reference
Glenelg Shire Heritage Study - Stage Two (a) (2006)	02.03-5
Portland Heritage Gaps Study (2017)	02.03-5, 15.03-1L
Glenelg Shire - Business Retention and Expansion Program - Regional Economy and Strategy Report (2010)	02.03-6
Glenelg Tourism Strategy (2015)	02.03-6
Port of Portland Land Use Strategy (2009)	02.03-6
Glenelg Transport Strategy (2008)	02.03-7
Portland Airport Masterplan 2009-2013 (2009)	02.03-7, 18.04-1L
Casterton Aerodrome Masterplan (2013)	02.03-7, 18.04-1L
Glenelg Sustainable Settlement Strategy (2012)	02.03-1
Portland Integrated Growth Plan (2011)	02.03-1
Portland Bay Coastal Infrastructure Plan (2007)	02.03-7
Casterton Active Transport Strategy (2010)	02.03-7
Heywood Active Transport Strategy (2010)	02.03-7
Casterton Urban Design Framework – ‘Embraced by the Glenelg River’ (2010)	02.03-1
Cape Bridgewater Structure Plan (2018)	02.03-1, 11.03-6L
Casterton Structure Plan (2018)	02.03-1
Infrastructure Design Manual (Local Government Infrastructure Design Association, 2022)	19.03-2L

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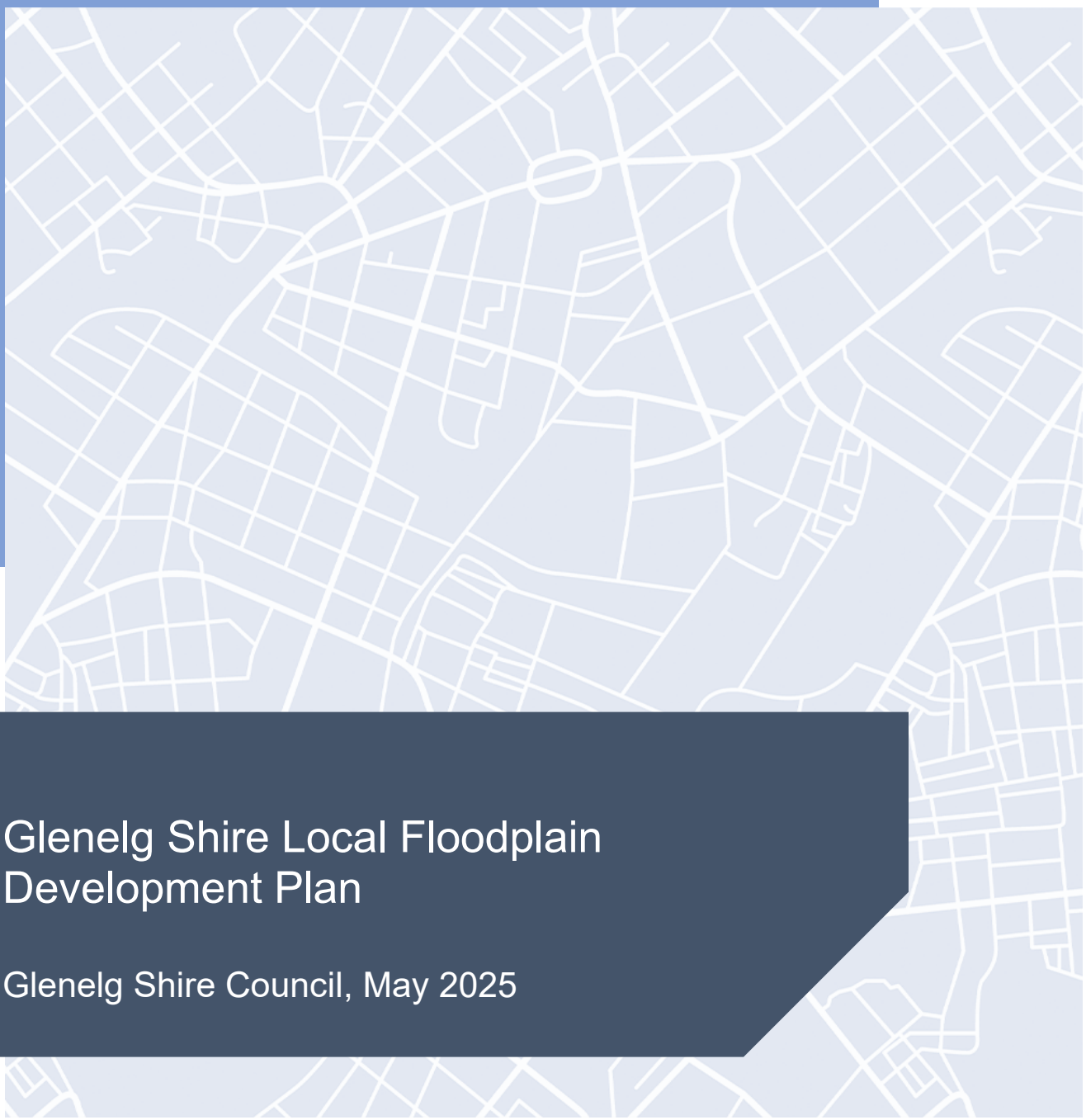
SCHEDULE TO CLAUSE 72.08 BACKGROUND DOCUMENTS

1.0 Background documents

~~05/09/2024~~ ~~--/--/----~~
~~C110gelg~~Proposed C115gelg

Name of background document	Amendment number - clause reference
Floodplain Management Authority Guidelines for Floodplain Cut and Fill (Glenelg Hopkins CMA, 2012)	37.03, 44.03, 44.04
Floodplain Management Authority Guidelines Fencing in flood-prone areas (Glenelg Hopkins CMA, 2021)	37.03, 44.03, 44.04
Dartmoor and Nelson Flood Study (Venant Solutions, 2024)	02.03-3, 44.03, 44.04
Glenelg Shire Open Space Strategy 2019-2040 (Tredwell Management Services and Myers Planning Group, 2019)	19.02-6L
Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study (2017)	44.03, 44.04
Portland Strategic Framework Plan (2020)	02.04, 15.01-1L-02, 15.01-2L-02
Portland Rural Living Assessment (2020)	Schedule 1 to 35.03, Schedule 2 to 35.06
Rural Land Strategy (2019)	14.01-1L, 17.04-1L
Portland Industrial Land Strategy (2016)	02.03-6, 13.07-1L
Recreation and Open Space Strategy (2007)	02.03-8
Roadside Vegetation management Plan (2014)	02.03-2
Coastal Spaces Landscape Assessment Study (2006)	02.03-2, 12.05-2L
Glenelg Coastal Action Plan (2004 as amended in 2012)	02.03-2, 12.05-1L
Glenelg Environment Strategy 2010-2020 (2010)	02.03-2
Bridgewater Bay Foreshore Master Plan (2014)	02.03-2, 12.05-1L
Narrawong Coastal Engineering Study (2011)	02.03-2, 12.05-1L
Portland Bay Coastal Infrastructure Plan (2007)	02.03-2, 12.05-1L
Coastal Spaces - Inundation and Erosion - Coastal Engineering Study (2010)	02.03-3
Glenelg Shire Municipal Fire Management Plan 2014-2017	02.03-3
Glenelg Flood Investigations (2008)	02.03-3
Portland Flood Study Implementation Works (2011)	02.03-3
Casterton Flood Investigations - Floodplain Management Report (2011)	02.03-3
Surry River Estuary Flood Study – Study Report (2008)	02.03-3
Domestic Wastewater Management Plan 2022-2027 (RMCG, 2022)	19.03-3L
Glenelg Hopkins - Regional Catchment Strategy - 2013-2019	02.03-2
Recommended separation distances for industrial residual air emissions (Publication 1518 March 2013)	02.03-3
Guidelines - Noise from Industry in Regional Victoria (Publication 1411 October 2011)	02.03-3
Portland Urban Conservation Study (1981)	02.03-1

Name of background document	Amendment number - clause reference
Glenelg Shire Heritage Study- An Environmental History Stage 1 (2002)	02.03-5
Glenelg Shire Heritage Study - Stage Two (a) (2006)	02.03-5
Portland Heritage Gaps Study (2017)	02.03-5, 15.03-1L
Glenelg Shire - Business Retention and Expansion Program - Regional Economy and Strategy Report (2010)	02.03-6
Glenelg Tourism Strategy (2015)	02.03-6
Port of Portland Land Use Strategy (2009)	02.03-6
Glenelg Transport Strategy (2008)	02.03-7
Portland Airport Masterplan 2009-2013 (2009)	02.03-7, 18.04-1L
Casterton Aerodrome Masterplan (2013)	02.03-7, 18.04-1L
Glenelg Sustainable Settlement Strategy (2012)	02.03-1
Portland Integrated Growth Plan (2011)	02.03-1
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Casterton Active Transport Strategy (2010)	02.03-7
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Cape Bridgewater Structure Plan (2018)	02.03-1, 11.03-6L
Casterton Structure Plan (2018)	02.03-1
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Glenelg Shire Local Floodplain Development Plan

Glenelg Shire Council, May 2025

GLENELG PLANNING SCHEME

Incorporated Document

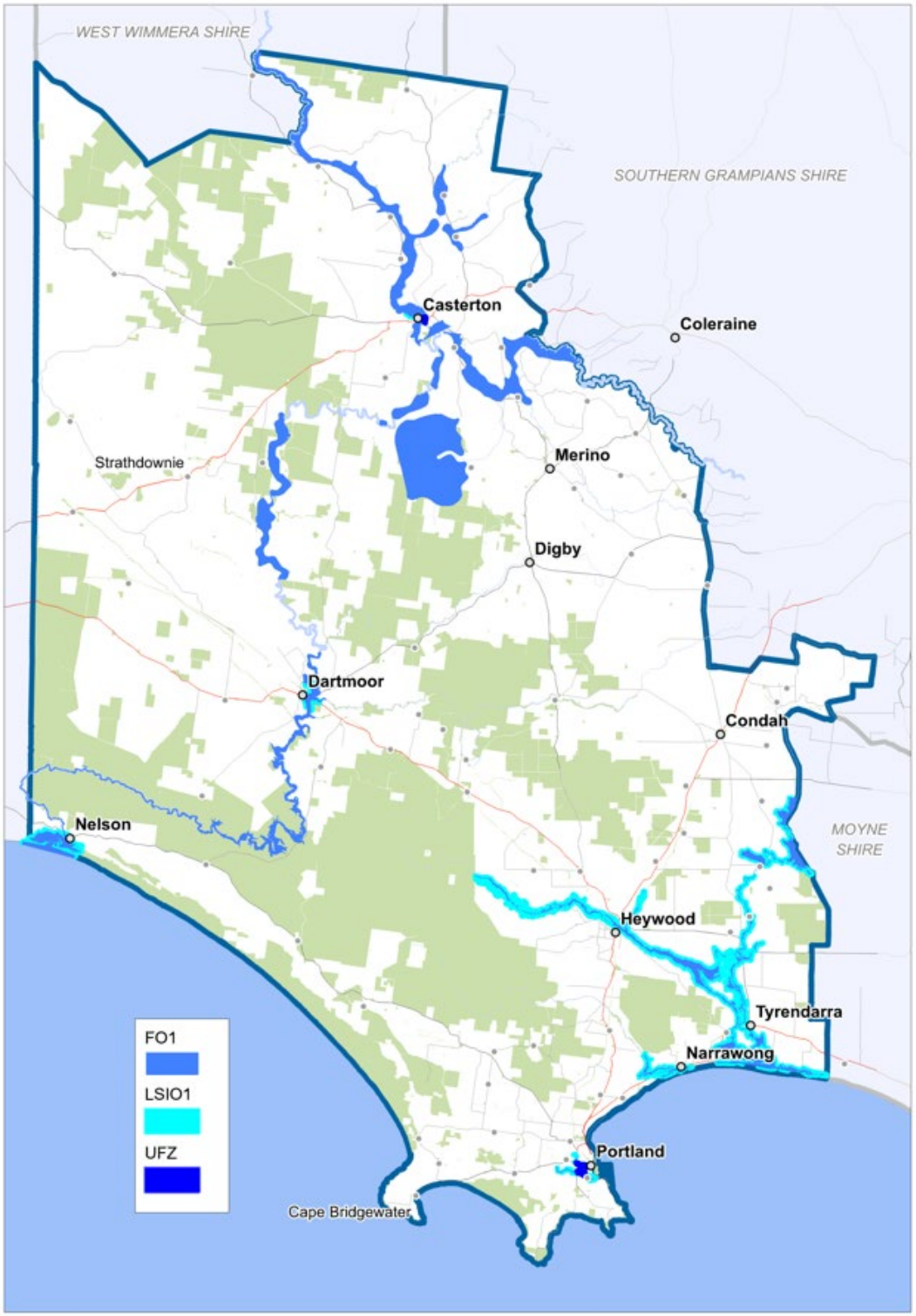
This document is an incorporated document in the Glenelg Planning Scheme pursuant to section 6(2)(j) of the *Planning and Environment Act 1987*

1.0 INTRODUCTION

This document is an Incorporated Document in the schedule to Clause 72.04 - Incorporated Documents of the Glenelg Planning Scheme (scheme).

2.0 LAND DESCRIPTION

This document applies to all land in the Urban Floodway Zone (UFZ), Floodway Overlay (FO), and Land Subject to Inundation Overlay (LSIO) as shown within the Glenelg municipal area on the map below.



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3.0 GLOSSARY AND ABBREVIATIONS

For this document, a term and abbreviation (if applicable) are listed in the first column of the following table with the meaning set out beside that term in the second column:

Average Exceedance Probability (AEP)	AEP is the probability or risk of a flood of a given size occurring or being exceeded in any given year. For example, a 90 percent AEP flood has a high probability of occurring or being exceeded and would be a relatively small flood event. A 1 percent AEP flood has a low probability of occurring or being exceeded and would be a relatively large flood event. It has a 1 percent chance of occurring in any given year.
Australian Height Datum (AHD)	AHD is the official vertical height datum for Australia, to which all height measurements are referred.
Average Recurrence Interval (ARI)	A 1 percent AEP event would formerly have been known as a 100-year Average Recurrence Interval (ARI) event. ARI indicates the average or expected period between flood events of a nominated flood size. However, AEP gives a more accurate indication of the risk level on a year-by-year basis.
Catchment Management Authority (CMA)	The relevant CMA for a specified region, as established under the *Catchment and Land Protection Act 1994.* The Floodplain Management Authority function is delegated to a CMA under the *Water Act 1989*.
Floodplain Management Authority	In Victoria, the Floodplain Management Authority function is delegated to a CMA under the *Water Act 1989.*
Floodway Overlay (FO)	The FO at Clause 44.03 within the Glenelg Planning Scheme denotes floodway land. FO land is required to provide adequate flood conveyance and storage of flood water during major flood events. FO land is generally the high hazard portion of the floodplain where deep and fast flowing floodwater can be expected.
Freeboard	A factor of safety above planned for flood levels, typically used in relation to the setting of floor levels. It is usually expressed as a height above the level of the planned for flood event.
Intergovernmental Panel on Climate Change (IPCC)	Intergovernmental Panel on Climate Change, a United Nations body for assessing the science related to climate change.
Land Subject to Inundation Overlay (LSIO)	The LSIO at Clause 44.04 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.

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Nominal Flood Protection Level (NFPL)	NFPL is the flood protection level adopted by the Floodplain Management Authority and Glenelg Shire Council. The NFPL is the 1 percent AEP flood level plus a nominated freeboard.
Non-habitable building	A building that is not used for accommodation or regular human occupancy.
Planned for Flood Event	An estimate of flood magnitude generally based on a statistical analysis of flood and/or rainfall data with a climate change consideration to the horizon of 2100, which is attributed with a probability of occurrence defined as an AEP. It should be noted that 1 percent AEP flood events within the Glenelg Shire Planning Scheme are not climate adjusted except for the Dartmoor and Nelson Flood Study.
Urban Floodway Zone (UFZ)	The UFZ at Clause 37.03 within the Glenelg Planning Scheme denotes floodway land. UFZ land is required to provide adequate flood conveyance and storage of flood water during major flood events. UFZ land is generally the high hazard portion of the floodplain where deep and fast flowing floodwater can be expected.

4.0 APPLICATION OF PLANNING SCHEME PROVISIONS

This plan has been prepared under the Glenelg Planning Scheme.

The plan establishes minimum design and 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 Surry 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.
- Urban and rural areas of Dartmoor and Nelson 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 Planning Scheme must be consistent with the performance criteria established by this plan.

In addition to the decision guidelines in Clauses 37.03-6, 44.03-7, 44.04-8 and Clause 65, the responsible authority must also consider the performance criteria of this plan as appropriate.

5.0 PURPOSE

The purpose of this incorporated document is to guide applications for and the assessment of those application for the use and/or development of the land generally in accordance with purposes of the:

- UFZ (Clause 37.03)
- FO (Clause 44.03)
- LSIO (Clause 44.04)

in the Glenelg Planning Scheme. The planning controls ensure that risks associated with the use and development of floodplain land in a changing climate are recognised and responded to appropriately via the planning permit application process.

The Urban Floodway Zone (UFZ), Floodway Overlay (FO), and Land Subject to Inundation Overlay (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 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 incompatible uses, including residential, commercial, and industrial uses.

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.

5.1 Flood History

One major flood event has been recorded in the Glenelg Shire. This occurred in March 1946 and impacted most significantly on Casterton. It also affected Heywood, Portland, Narrawong, Dartmoor, and Nelson. 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 the 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 during the 1 in 100-year Average Exceedance Probability (AEP) event exceeds 2m in a majority of the 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 been approximated a 50-year ARI event according to the state of the climate at that time.

Flooding in Casterton is associated with the Glenelg River. Several significant floods have been recorded, including events in 1893, 1906, 1946, 1950, 1975, 1983, 1991, 1992, 1996, 2008, 2010, 2011, and 2016. 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 and the Southern Ocean. The impact of the 1946 Surry River flood at Narrawong was not documented in any detail. Stream flow was not recorded at that time. The August 2013 Surry River flood flow (coincided with flooding in Portland) is the largest river flow yet 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. The June 2014 storm tide is the largest ocean driven event yet recorded at Narrawong, however this event was not large enough to cause any significant impacts.

Flooding at Heywood is associated with the Fitzroy River. The 1946 event is thought to have been the largest since European settlement however no reliable records have been found to prove this. The largest flood with reliable records occurred in October 1975.

Flooding at Dartmoor is associated with the Glenelg River. Dartmoor was affected by significant flood events in 1883, 1894, 1906, 1935, 1939, 1942, 1946, 1983 and as recently as 2016. The March 1946 flood of the Glenelg River is the largest flood yet recorded at Dartmoor. In that flood the railway bridge was four feet underwater. The highway bridge was also underwater, and the river is recorded to have risen more than 50 feet. The second largest flood occurred in 1960 and 1983 is the third largest flood event on record.

Flooding at Nelson can be caused by the Glenelg River or by large storm tide events in the Southern Ocean or a combination of both river and storm tide events happening at the same time. The 1946 Glenelg River flood event is also the largest riverine flood known to have passed down the river at Nelson. The 1946 flood cut out the sand bar at the river mouth near Nelson. Tons of debris had to be released from the old bridge and was swept out to sea. It is noted that

discoloured water could be seen for 2 miles out to sea.

The June 2014 storm tide is the largest ocean driven event recorded at Nelson, Portland and Narrawong. This event was not large enough to cause any significant impacts.

5.2 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 to Portland Court area when floods approach the 50-year ARI event.

The effects of flooding on Narrawong, Dartmoor, and Nelson are limited.

At Narrawong, 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 because 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.

The largest portion of damages from riverine events at Dartmoor and Nelson affect buildings, roads, and other infrastructure. The agricultural damages are relatively small due to the large proportion of public land (lower Glenelg National Park) abutting the Glenelg River, the confined nature of the floodplain limiting the significant inundation of agricultural land, and the nature of the agricultural uses.

For storm tide events at Nelson roads and other infrastructure are almost the sole source of tangible damage.

5.3 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)
- *Fitzroy River, Darlot Creek and Heywood Regional Floodplain Mapping Study* (Water Technology, 2017)

- *Dartmoor and Nelson Flood Study* (Venant Solutions, 2024)

The flood studies covering Portland, Narrawong, and Nelson have also investigated the impacts of rising mean sea level on future riverine and coastal storm tide 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 tide flooding and a combination of the two. The sea level rise currently accounted for in the Glenelg Planning Scheme include 0.2 metres for Portland, 0.8 metres for Narrawong, and 1.2 metres for Nelson. The differences in the sea level rise reflect the age of the planning controls for Portland and Narrawong which need to be updated as climate change knowledge improves.

The Australian Rainfall and Runoff (ARR) guidelines provide the best practice techniques for flood estimation within Australia. Version 4.2 of ARR released late 2024 identified that historical observations used for flood estimation are no longer considered to be a suitable basis for determining planned for flood events without adjustment for climate change. It should be noted that 1 percent AEP flood events within the Glenelg Shire Planning Scheme are not climate adjusted except for the Dartmoor and Nelson Flood Study.

6.0 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 in a changing climate.
- Ensure that any use and development permitted on land affected by the planned for flood event:
    - 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 and undue increase in future flood damage costs.

7.0 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 in the floodplain, or manipulation of floodplain topography, within the UFZ unless it can be demonstrated that balanced cut and fill can be achieved consistent with the key principles of the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012 or as amended.
- Discourage the construction of private levees within the UFZ.
- With the exception of normal residential gardening activities, discourage filling in the floodplain, or manipulation of the floodplain topography, in all areas within the FO and LSIO unless it can be demonstrated that balanced cut and fill can be achieved consistent with the key principles of the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012 or as amended.
- 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, to minimise erosion of stream banks and verges during large floods and maintain natural drainage function, stream habitat, wildlife corridor, and landscape values.

8.0 PERFORMANCE CRITERIA

8.1 Urban Floodway Zone (UFZ)

A building may only be constructed on land in this zone, subject to a planning permit, if it is to replace 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.

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- the safety of persons on the land (having regard to flood depth, the velocity of flood waters, and the means of access available to non-flood prone land).

Any replacement dwelling should propose to:

- be located outside of the UFZ if possible.
- be constructed with an open style foundation on stumps to allow automatic entry and exit of water up to the 1 percent AEP flood event.
- have its lowest floor level finished above the Nominal Flood Protection Level (NFPL).
- be aligned with its longest axis parallel to the dominant direction of flood water flow.
- If less than 50 percent of an existing dwelling has been damaged or destroyed:
- a replacement ground floor area may be considered with a floor level matching that of the existing building; and
- the replacement floor area may be up to 20 square metres greater than the damaged or destroyed ground floor area of the original building.

8.2 Floodway Overlay (FO) and Land Subject to Inundation Overlay (LSIO)

Buildings

Applications for new or replacement buildings and works, including outbuildings and sheds, with floor areas exceeding 10 square metres within the FO, and 20 square metres within the LSIO should propose:

- New buildings on the highest available natural ground level.
- New or replacement buildings constructed to not disrupt flood water flow.
- Buildings constructed on stumps to allow automatic entry and exit of water up to the 1 percent AEP flood event unless the Floodplain Management Authority has advised otherwise in writing.
- New dwellings sited on land where 1 percent AEP flood depth is less than 500mm above the natural surface level, and have an accessway to the dwelling from a main road that has an AEP depth not more than 500mm.
- The finished floor level in a new dwelling above NFPL.

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- New or replacement buildings 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 the Floodplain Management Authority has advised in writing that an alternative alignment is acceptable.
- Dwellings using 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 with openings, or be of an open style, to allow automatic entry and exit of flood water up to the 1 percent AEP flood event.
    - Minimal building fill pads limited to as near as possible to the building exterior.
    - Building fill pads constructed in accordance with the balanced cut and fill principles of the Floodplain Management Authority Guidelines for Floodplain Cut and Fill 2012, or as amended, unless the Floodplain Management Authority has advised otherwise in writing.

Fences

- Fences should be designed and constructed to minimise the effects of flooding. Fences should be a permeable construction to not unduly divert or obstruct floodwater. 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 is to be given to flood depth and flow velocity to ensure that the proposed fence is consistent with the Floodplain Management Authority Guidelines Fencing in flood-prone areas 2021, or as amended.

8.3 Extensions to existing dwellings in the Urban Floodway Zone, Floodway Overlay, and Land Subject to Inundation Overlay

Extensions are to be constructed on stumps to allow automatic entry and exit of

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water up to the 1 percent AEP flood event unless it can be demonstrated that this requirement cannot be achieved.

Extensions should be aligned with their longest axis parallel to the direction of flood water flow.

The finished floor level of extensions should be finished above the NFPL. Where an existing dwelling has a floor level below the NFPL an extension may acceptable provided that the total floor area of all extensions does not exceed:

- 20 square metres within the UFZ or FO.
- 40 square metres within the LSIO.

8.4 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 2012, or as amended.

8.5 Subdivision in the Urban Floodway Zone, Floodway Overlay and Land Subject to Inundation Overlay

Subdivision applications for land that is partly within the UFZ or FO are not to create new lots wholly within the UFZ or FO area.

8.6 Chemical Storage in the Urban Floodway Zone, Floodway Overlay and Land Subject to Inundation Overlay

Vessels, containers, or tanks for bulk storage of hazardous chemicals such as fuels, oils, herbicides, insecticides should not be proposed on land in the UFZ or FO.

If proposed to be located on land within the LSIO a suitably engineered structure raised a minimum of 1 metre above the NFPL is required.

8.7 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 (for example when trapped against bridges or fences). The following guidelines apply:

- Within the LSIO tank pads are to be limited to as close as possible to the footprint of the on-ground water tanks.
- Within the UFZ or FO water tanks exceeding 10,000 litres capacity should be proposed underground. Water tanks less than 10,000 litres should be proposed to be raised on a stump and bearer tank stand to a height of at least 300mm above the NFPL or placed underground.

Where the above is accepted by the Floodplain Management Authority as impractical then:

- Fill/pads must be restricted as close as possible 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 must be secured in place to prevent floatation and transport downstream.

9.0 APPLICATION REQUIREMENTS

Every application to construct a building, 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 is to be consistent with the following application requirements:

Applicants may attach a formal advice letter from the Floodplain Management Authority in support of their application.

All applications are to be accompanied by plans and supporting documents, including photographs, and the following information:

- If 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 the adjoining land.
- Location, layout, size, and use of all proposed development.
- Elevations of all proposed buildings with dimensions and drawn to scale.

- Floor levels of all existing and proposed buildings to Australian Height Datum (AHD).
- Relevant existing and proposed ground levels of the site, to AHD, 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 NFPL for the site.
- Adjoining roads, internal driveways, and access tracks.
- Details of the measures to be used to reduce the susceptibility of the development to flood damage.
- A response to the relevant decision guidelines under Clauses 37.03-6, 44.03-7, 44.04-8, and 65 of the Planning Scheme and the relevant Performance Criteria listed above.

Cut and Fill

- For proposals involving cut-and-fill earthworks, compliance with the Floodplain Management Authority Guidelines for Floodplain Cut and Fill, 2012, or as amended, is required. Plans are to show natural ground level to AHD, depths of cut, height of fill, and calculations showing the net level for level cut and fill volume balance.

Fences

- For fences, compliance with the Floodplain Management Authority Guidelines Fencing in flood-prone areas 2021, or as amended, or evidence demonstrating that the fence will not significantly obstruct flood flows.

Subdivision

- A plan indicating the location of any existing buildings.
- Subdivision applications for land that is partly within the UFZ, FO, or LSIO are to demonstrate that:
    - There is an adequate building envelope on each lot (formally defined on the plan of subdivision) where the inundation depth is determined to be less than 300mm.
    - Access to the building envelope does not traverse land where the inundation depth is determined to be more than 300mm.

- 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.

9.1 Flood Risk Report

Unless the Floodplain Management Authority has advised otherwise in writing, any application that is not consistent with the Glenelg Shire Local Floodplain Development Plan is to be accompanied by a Flood Risk Report consistent with the requirements set out under Clause 37.03-4 and Clause 44.03-4 of Glenelg Planning Scheme.

10.0 REFERENCES

Building Code of Australia – Australian Building Codes Board - Construction of Buildings in Flood Hazard Areas – Information Handbook and Standard.

Casterton Flood Investigations (CARDNO, 2011)

Dartmoor and Nelson Flood Studies (Venant Solutions, 2024)

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

Floodplain Management Authority Guidelines for Floodplain Cut and Fill (Glenelg Hopkins CMA, 2012).

Floodplain Management Authority Guidelines Fencing in flood-prone areas (Glenelg Hopkins CMA, 2021).

Floodplain Management in Australia – Best Practice Principles and Guidelines, Standing Committee on Agriculture and Resource Management [SCARM Report 73] (CSIRO, 2000).

Guidelines for Coastal Catchment Management Authorities: Assessing Development in Relation to Sea Level Rise (Department of Sustainability and Environment, June 2012)

Portland Flood Study (CARDNO, 2011)

Planning Practice Note 11 – Applying for a Planning Permit under the flood provisions.

Planning Practice Note 12 – Applying the Flood Provisions in Planning Schemes – A guide for councils.

Surry River Estuary Flood Study (Water Technology, 2008)

END OF DOCUMENT

COUNCIL POLICY

TITLE:	GIFTS, BENEFITS AND HOSPITALITY - COUNCILLORS
ID NUMBER:	CPO-CEO-CS-007 DocSetID1134387
DEPARTMENT:	CEO
UNIT:	CEO
RESPONSIBLE OFFICER:	Chief Executive Officer

ADOPTED DATE AND BY WHOM:	
EXPIRY DATE:	
REVIEW DATE:	*This policy will be reviewed every four years or as required by any legislative or council changes.*

AVAILABILITY:	Organisation wide	Yes ☐	No ☒
	Public	Yes ☒	No ☐
	Internet	Yes ☒	No ☐
ADVISE AVAILABILITY:	Media Release	Yes ☐	No ☒
	Sou Wester (Responsible Officer to prepare article)	Yes ☐	No ☒

1. References (if applicable)

- Section 137 and 138 *Local Government Act 2020 (Councillor Gift Policy)*
- Section 58 *Local Government Act 2020 – (Public Transparency Principles)*
- *Local Government (Governance & Integrity) Regulations 2020*
- Model Councillor Code of Conduct (Doc Set ID 3254643)
- Council Policy – Public Transparency Policy (Doc Set ID 2714387)
- Declaration of Gifts, Benefits & Hospitality Form – Councillors (DocSetID 1007480)
- Gift Register – Gifts, Benefits and Hospitality – Councillors (DocSetID 2579671)
- Template letter advice return of gift, benefit and hospitality – (DocSetID 2579623)
- Public Interest Disclosure (Whistleblower) Procedures - (DocSetID: 2580165)

Disclosures about improper conduct or detrimental action by Councillors must be made to IBAC or to the Victorian Ombudsman.

2. Purpose

The purpose of this Policy is to outline the Glenelg Shire's position on elected Councillors responding to offers of gifts, benefits and hospitality.

This Policy supports Councillors to avoid conflicts of interest and maintain high levels of integrity, accountability and public trust.

Council has issued this policy to support behaviours that are consistent with the Model Councillor Code of Conduct.

3. Scope

This policy applies to Councillors when:

- offered a gift, benefit or hospitality;
- declaring the offer of a gift, benefit or hospitality; and
- deciding the treatment of the gift, benefit or hospitality.

For the purpose of this policy, a reference to a gift, benefit or hospitality does not include a donation or contribution to a Council election candidate fund that is subject to the provisions of the Section 309 of the *Local Government Act 2020* in relation to Council elections.

4. Council Policy

In accordance with Section 138(1) of the *Local Government Act 2020* a Council must adopt a Councillor Gift Policy.

Section 138(2) of the Act states a Councillor Gift Policy must include –

1. procedures for maintenance of a gift register; and
2. any other matters prescribed by the regulations.

Council is committed to being open and transparent in its operations to ensure that it minimises the risk of being placed in a compromising position that may have an adverse affect on its public reputation or image and the promotion of trust within the community.

Councillors must:

- at all times be ethical, fair and honest in the conduct of official duties;
- not fraudulently receive a gift, benefit or hospitality;
- ensure that the methods and processes they use to arrive at decisions are beyond reproach and can withstand audit processes and proper scrutiny;
- not seek, solicit, or use their position with Council to obtain gifts, benefits or hospitality from external organisations or individuals;
- ensure that a person, company or organisation is not placed in a position in which they feel obliged to offer gifts, benefits or hospitality to secure or retain council business;
- not accept a gift (of any amount) if doing so presents a conflict of interest (real, perceived or otherwise); and
- report attempts, or perceived attempts, of bribery to the CEO or Public Interest Disclosure Co-ordinator at pid@glenelg.vic.gov.au

The GIFT Test can be a useful resource when making a determination on whether to accept or decline a gift:

G	Giver	Who is providing the gift, benefit, or hospitality and what is their relationship to me? Does my role require me to select contractors, award grants, regulate industries or determine government policies? Could the person or organisation benefit from a decision I make?
I	Influence	Are they seeking to gain an advantage or influence my decisions or actions? Has the gift, benefit or hospitality been offered to me publicly or privately? Is it a courtesy or a token of appreciation or valuable non-token offer? Does its timing coincide with a decision I am about to make?
F	Favour	Are they seeking a favour in return for the gift, benefit, or hospitality? Has the gift, benefit or hospitality been offered honestly? Has the person or organisation made several offers over the last 12 months? Would accepting it create an obligation to return a favour?
T	Trust	Would accepting the gift, benefit or hospitality diminish public trust? How would the public view acceptance of this gift, benefit, or hospitality? What would my colleagues, family, friends, or associates think?

4.1 Gift Value ($20 and above)

The preferred corporate standard is that any offer of a gift, benefit or hospitality, irrespective of value, should be politely declined in the first instance.

In such circumstances, where it would appear not to be polite, or considered offensive, such as cultural sensitivities, then it is reasonable for representatives of Council to accept official gifts on behalf of Council. This includes ceremonial gifts.

All official gifts received of a nominal value above $20 are to be declared and reported to the CEO in respect of the Mayor and Councillors.

The gift may be considered the property of Council, and where suitable, the gift will be displayed in an appropriate and secure location for public viewing.

The offer of monetary gifts, including gift cards (of any amount) must never be accepted.

4.2 Anonymous Gift Value Threshold

In accordance with section 137 of the Act 'Anonymous gift not to be accepted':

(1) Subject to subsection (2), a Councillor must not accept directly or indirectly, a gift for the benefit of the Councillor the amount or value of which is equal to or exceeds the gift disclosure threshold ($500) unless –

(a) The name and address of the person making the gift are known to the Councillor; or

(b) At the time when the gift is made –
   i. The Councillor is given the name and address of the person making the gift; and
   ii. The Councillor reasonably believes that the name and address so given are the true name and address of the person making the gift.

(2) If the name and address of the person making the gift are not known to the Councillor for whose benefit the gift is intended, the Councillor is not in breach of subsection (1) if the Councillor disposes of the gift to the Council within 30 days of the gift being received.

(3) In addition to the penalty specified in subsection (1), a Councillor who is found guilty of a breach of that subsection must pay to the Council the amount or value of the gift accepted in contravention of that subsection.

The offer of monetary gifts, including gift cards (of any amount) must never be accepted.

4.3 Biannual Personal Interest Return – recording of gifts that equal or exceed the threshold

In accordance with Section 134 of the *Local Government Act* 2020 and Section 9(k) of the *Local Government Governance and Integrity Regulations 2020*, Councillors must lodge a biannual Personal Interest Return. Councillors are required to provide details of any gift they have received in the period since they last lodged an interest return, where the value equals or exceeds $500 or the gifts in form of goods or services and multiple gifts equal or exceed that amount.

Councillors are not required to include gifts from family members or any gifts they may have declared in an election campaign donation return under section 306 of the *Local Government Act 2020.*

Councillors are not required to include reasonable hospitality they have received at an event or function attended in an official capacity as either a Councillor or member of a delegated committee.

4.4 Councillor Gift, Benefit and Hospitality Register

All offers of gifts, benefits and hospitality, which have been:

- accepted;
- returned; or
- declined

regardless of value, must be recorded in the Councillor Gift, Benefit and Hospitality Register.

Where a gift has been accepted, returned or declined by a Councillor, the Councillor must complete a Declaration of Gifts, Benefits and Hospitality Form – Councillors (Appendix 1), within 10 days of receiving, returning or declining the gift. Completed forms (along with gift, if accepted) are to be provided to the CEO.

The EA to the CEO is also responsible for completing the Councillor Gift, Benefit and Hospitality Register. The Councillor Gift Register is available for public inspection on Council's website (updated quarterly).

4.5 Treatment of gifts, benefits and hospitality

Gift Accepted

When a gift is accepted due to cultural or ceremonial reasons, the gift will be retained by Council, unless otherwise determined by the CEO and recorded in the Gift Register.

Gift Returned

When a gift is accepted due to cultural or ceremonial reasons, or received not in person, the gift may be returned, to be determined by the CEO and recorded in the Gift Register.

Gift Declined

The preferred corporate standard, is that any offer of a gift, benefit or hospitality, irrespective of value, should be politely declined in the first instance, and recorded in the Gift Register.

5. Records Management

All Council records created and managed as a result of implementing this policy and procedure will be managed in accordance with the Council's records management policy.

The records management policy assigns responsibilities for records management to employees, supervisors, volunteers and other specific positions.

No Council records are to be destroyed without consideration of the requirements of the Act(s) that govern the functions relevant to this policy. Prior to destruction, advice must be sought from the records management unit, with consideration to the requirements of the appropriate Retention and Disposal Authority (RDA).

6. Victorian State Legislation Copyright Acknowledgement

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7. Document History

Version	Issue Date
1	22 November 2011
2	28 April 2015
3	23 February 2021
4	TBC

Appendix 1

DECLARATION OF GIFTS, BENEFITS AND HOSPITALITY FORM - COUNCILLORS

Councillors should carefully consider whether they accept any gift, benefit or hospitality.

Councillors must declare any gift, benefit or hospitality with a nominal value of $20 and above. This declaration must be completed within 10 days of receipt of gift. All declarations must be submitted to councillor.support@glenelg.vic.gov.au for processing.

RECIPIENT DETAILS

COUNCILLOR NAME:	

Unless otherwise determined, all gifts remain the property of Council. The Mayor in the case of Councillors, and the Chief Executive Officer in the case of the Mayor may exercise their discretion to make a determination on the retention, use or allocation of any items or services received by the recipient.

Details – Recipient to complete (Additional pages and documentation can be attached)

Name of Donor			
Donor address and contact information			
Description of gift, benefit or hospitality			
Estimated value		Date Received:	
Has the gift been acknowledged in writing to the donor	☐ Yes ☐ No		

I certify that to the best of my knowledge and belief, this declaration contains all the information available at the time the declaration is given and it is correct.

Recipient signature:		**Date:**	

Gift Allocation – Recipient to complete

☐ Gift to be retained and pooled for Council use ☐ Gift to be returned to donor

☐ Gift to be retained by individual ☐ Other (explain below)

Instructions/Comments (if applicable) – CEO or Mayor to complete

CEO (in case of Mayor) instructions/comment			
CEO Signature:		Date:	
Mayor (in case of Crs) instructions/comment			
Mayor's signature:		Date:	

Declaration forms are to be submitted via email to councillor.support@glenelg.vic.gov.au for processing. Completed forms are to be saved in SharePoint by the Executive Assistant to the CEO. The Executive Assistant to the CEO is also responsible for completing the gift register located in ECM DocSetID: 2579671.

Definitions

Act	*Local Government Act 2020*
benefit	Is something which is believed to be of value to the receiver, including access to a sporting, cultural or social event, preferential treatment (queue jumping), and access to discounts and loyalty programs. While their value may sometimes be difficult to quantify in dollars, they may be highly valued by the intended recipient and therefore used to influence their behaviour.
gift disclosure threshold	In the case of a Council, other than the City of Melbourne City Council, $500 or a higher amount or value prescribed by the regulations.
Councillor Gift Register	A register of all declarable gifts, benefits and hospitality, including those accepted, returned or declined and is available on Council's website
hospitality	Is the friendly reception and treatment of guests. It is hospitable to offer light refreshments in the course of a business meeting or as part of a conference program. Hospitality can range from offers of light refreshment at a business meeting to restaurant meals and sponsored travel and accommodation.
monetary gifts	Are cash, gift cards, cheque, direct deposits or other financial facility that will financially benefit the receiver.
official/Ceremonial gifts	Are gifts presented to the Council and include gifts received from an International Visitor Exchange Council, organisations or corporations that are bestowing a corporate or ceremonial gift (plaques, plates, vases, trophies and artwork) or souvenir.
value	Is the face value or estimated retail value.