

Lake Mokoan Decommissioning Project
Planning Scheme Incorporated Document

1 Introduction

This document is an incorporated document in the schedule to Clause 81.01 of the Greater Shepparton Planning Scheme.

Pursuant to Clause 52.03 of the planning scheme, the land identified in this document may be developed and used for the purposes identified in accordance with the specific controls contained in the document despite any prohibition or restriction that would otherwise apply to those purposes under the provisions of the scheme.

2 Description of the Land

All land in the City of Greater Shepparton required for the construction of the Lake Mokoan Decommissioning Project. Appendix A outlines the areas required for Lake Mokoan Decommissioning Project.

3 This Document Allows

This Incorporated Document allows the use and development of land for a minor utility installation and utility installation to be undertaken by Goulburn-Murray Water for the purposes of constructing and maintaining the Lake Mokoan Decommissioning Project. The table included in Appendix B provides an overview of the extent of development and works required.

This document also exempts the Lake Mokoan Decommissioning Project from the requirement for planning permits for vegetation removal that may be required by the planning scheme.

4 Condition

The use and development must be consistent with an Environmental Management Plan (EMP) that has been approved by the Secretary, (or delegate) Department of Sustainability and Environment.

No use or development for any stage of the Lake Mokoan Decommissioning Project may take place until an EMP has been approved and endorsed for that particular stage of the Lake Mokoan Decommissioning Project.

The EMP must consider the following issues:

4.1 INTRODUCTION

The Lake Mokoan Decommissioning Project will decommission Lake Mokoan as a water storage and rehabilitate the affected area and surrounds to a wetlands complex. The project has a number of major components, namely:

- A replacement supply to properties currently diverting water from Lake Mokoan;
- ‘Offsets’ in the Goulburn-Broken system to maintain reliability of water supply to existing Broken River irrigators; and,
- Decommissioning of Lake Mokoan as water storage by breaching the dam wall and modification of the inlet and outlet control structures and channels.

It is anticipated that the decommissioning of Lake Mokoan will deliver 44,000ML in water savings, generate environmental flows in the Broken, Goulburn, Murray and Snowy Rivers whilst maintaining irrigators’ reliability of supply and delivering increased efficiencies for water supply.

The construction and use of infrastructure associated with the Lake Mokoan Decommissioning Project is defined as a ‘utility installation’ or ‘minor utility station’ in the Victorian Planning Provisions. In some instances a planning permit is required for the use and development of these utilities in the planning schemes affected by the Lake Mokoan Decommissioning Project. Additionally, planning permits are required for the clearance of native vegetation necessary for the construction of the project.

Whilst the construction of the Lake Mokoan Decommissioning Project does not require broad approval under the Planning and Environment Act 1987, it is appropriate that there is an opportunity to examine, document and consult on the localized environmental issues that may arise through the construction phases of the project. This can be achieved through the preparation of an EMP.

The Minister for Planning has determined that the Lake Mokoan Decommissioning Project does not require assessment under the Environmental Effects Act 1978 on the basis that an EMP is to be prepared by the proponent for each stage of the project.

4.2 REQUIREMENTS FOR AN ENVIRONMENTAL MANAGEMENT PLAN

4.2.1 Requirement for an EMP

An EMP is to be prepared, approved and endorsed for each stage of the Lake Mokoan Decommissioning Project in the accordance with the following requirements, before construction of the relevant stage commences.

An EMP must meet the requirements of section 4.3 of this document.

4.2.2 Purpose of an EMP

The purpose of the EMP for each stage of the Lake Mokoan Decommissioning Project is to identify and set out ways to avoid or minimise the potential environmental and related impacts of the construction of the Lake Mokoan Decommissioning Project, and in particular:

- (a) to establish a management mechanism which ensures that the Lake Mokoan Decommissioning Project is designed and implemented in an environmentally sustainable manner;
- (b) to protect the environment and heritage resources and values of any significant locations within the pipeline route and its environs;
- (c) to protect the amenity of sensitive uses adjoining the pipelines route from construction activities;
- (d) to provide auditing and reporting procedures for environmental compliance; and,
- (e) to facilitate the efficient construction of the Lake Mokoan Decommissioning Project.

4.2.3 Consultation

In preparing the EMP, the proponent must consult with the following bodies:

- (a) the Department of Sustainability and Environment and any relevant peak community groups endorsed by the Department;
- (b) the Department of Planning and Community Development;
- (c) the relevant local government authorities; and

- (d) any relevant State Government department or agency; and
- (e) any relevant water drainage or sewerage authority.

4.2.4 Approval of an EMP

The Decommissioning EMP must be approved by the Secretary of the Department of Sustainability and Environment (or Delegate). Approvals of the individual (sub program) EMPs shall be obtained from senior DSE delegates for the Secretary.

In deciding whether or not to approve or endorse an EMP, the following criteria must be considered:

- (a) the likely effect of the proposed buildings and works and construction activities on:
 - i. native flora and fauna including any threatened or endangered species or habitats, migratory bird species, potential wildlife corridors;
 - ii. water quality and aquatic species near any waterway crossings or adjoining waterways or wetlands;
 - iii. the heritage values of any building structure or place;
 - iv. any Aboriginal cultural or archaeological values or sites, identified in consultation with relevant Aboriginal organisations;
 - v. the natural and cultural landscape of the locality;
 - vi. the flooding and natural drainage characteristics of the area;
 - vii. the amenity of the locality by virtue of noise, vibration, and dust;
 - viii. contaminated land and the need for remediation;
 - ix. the spread of pest plants and pathogens;
 - x. the potential permanent effect on the values or qualities of the pipeline corridor or its environs due to the storage of plant, equipment and materials during construction; and
 - xi. any other matter which the Lake Mokoan Decommissioning Project may impact upon.
- (b) the decision criteria of any overlay in the planning scheme affecting the site, notwithstanding that the Lake Mokoan Decommissioning Project does not require a planning permit;
- (c) the views of any other relevant State Government department or agency, the relevant local government authority or authorities; and any relevant water drainage or sewerage authority; and
- (d) the effect of any qualifications or other comments made in the peer review and validation (section 4.3.2).

The approval or endorsement of an EMP may be subject to conditions.

The Secretary, Department of Sustainability and Environment (or delegate) may amend an EMP and may require further consultation.

Where there is a dispute between the proponent and a person or agency required to be consulted under section 4.2.3, the Secretary, Department of Sustainability and Environment or delegated nominee may seek an evaluation of the issues and a recommendation from an independent person before making a decision.

4.3 ENVIRONMENTAL MANAGEMENT PLAN

4.3.1 Structure

At a minimum, an EMP must contain the following parts.

- (a) **Area:** This part must describe the area of land to which the EMP applies.
- (b) **Existing conditions analysis:** This part must describe the existing conditions of the pipeline route and environs that are likely to be affected by the proposed buildings and works and construction activities including:
 - i. location, size, number and species of indigenous plants of trees and shrubs to be removed or lopped, as well as the composition and area of other indigenous vegetation strata;
 - ii. drainage patterns and frequency of inundation;
 - iii. all significant environmental or heritage features which may be affected by the proposed buildings and works and construction activities; and
 - iv. any statutory controls including planning scheme overlays or other similar provisions that would apply if it were not for the exemption from the need for a planning permit for the construction of a building or the construction or carrying out of works for a minor utility installation provided for in Clause 62.02 of the relevant planning scheme.
- (c) **Proposed works:** This part must describe the nature of the proposed construction of the Lake Mokoan Decommissioning Project and associated buildings and works including drawings to a suitable scale and supporting documentation which sets out:
 - a. proposed buildings and works including pipeline construction works, vegetation removal, pumping stations and water storages;
 - b. proposed rehabilitation and landscaping works; and
 - c. proposed staging and construction and commissioning timeframes.
- (d) **Planning, heritage and environmental issues and analysis:** This part must provide an analysis of all relevant planning, environmental and heritage issues and any application requirement and decision guideline that would apply if it were not for the exemption from the need for a planning permit for the construction of a building or the construction or carrying out of works for a minor utility installation or utility installation provided for in Clause 62.02 of the relevant planning scheme. This part must comply with the requirements of Victoria's Native Vegetation Management – A Framework for Action.

Further, this part – or supporting information to this part - must provide sufficient information to enable reasonable confidence on the part of the decision-maker with respect to the likely effect of the proposed buildings and works and construction activities on the following matters:

- i. native flora and fauna including any threatened or endangered species or habitats, migratory bird species, potential wildlife corridors;
- ii. water quality and aquatic species near any waterway crossings or adjoining waterways or wetlands;
- iii. the heritage values of any building structure or place;
- iv. any Aboriginal cultural or archaeological values or sites, identified in consultation with relevant Aboriginal organisations;
- v. the natural and cultural landscape of the locality; and
- vi. the flooding and natural drainage characteristics of the area;

- vii. the amenity of the locality by virtue of noise, vibration and dust;
 - viii. contaminated land and the need for remediation;
 - ix. the spread of pest plants and pathogens;
 - x. the potential permanent effect on the values or qualities of the pipeline corridor or its environs due to the storage of plant, equipment and materials during construction; and
 - xi. any other matter which the Lake Mokoan Decommissioning Project may impact upon.
- (e) **Consultation:** This part must include documented evidence of the outcomes of the consultations undertaken under section 4.2.3 (including full details of any unresolved or disputed matters). It must also include a description of the consultation process.
- (f) **Management and mitigation measures:** An EMP should specify all the environmental management activities, mitigation and control measures that will be used to prevent or minimise environmental impacts. The EMP must also assign responsibility for control measures to specific positions of personnel and provide timeframes for their implementation (section 4.3.3).

This part must set out in full the management and mitigation measures for each item identified above and must clearly demonstrate how:

- i. the proponent will carry out the construction of the Lake Mokoan Decommissioning Project to avoid or reduce impacts to acceptable levels;
- ii. nominated site-specific measures will avoid or reduce impacts to acceptable levels; and
- iii. the construction management guidelines (as set out below) that will avoid or reduce impacts to acceptable levels.

The following paragraphs provide specific details which must be provided or considered, as appropriate, in this part of an EMP.

- iv. Environmental actions.
The management and mitigation measures must detail each potential environmental impact;
the environmental objective;
the proposed mechanisms for environmental monitoring during works and prevention of environmental risks;
the responsibility for implementing the proposed actions; and
the timeframe for the proposed actions.
- v. Construction guidelines.
The management and mitigation measures must contain guidelines to be followed by the proponent for the known repetitive activities involved in the proposed construction of the Lake Mokoan Decommissioning Project and associated buildings and works. The construction guidelines must provide for environmental care training of contractors involved in the construction of the Lake Mokoan Decommissioning Project to ensure awareness of environmental issues and approved construction processes.
- vi. Emergencies
The management and mitigation measures must include:
an identification of reasonably likely environmental emergency scenarios;
and for each of those scenarios, an appropriate contingency plan or

procedure to manage the potentially significant environmental consequences.

4.3.2 Peer Review and Validation

The proponent must ensure that:

- (a) the EMP for each stage is subjected to peer review by an appropriately qualified person, the selection of whom is endorsed by the Secretary, Department of Sustainability and Environment, or delegated nominee, and;
- (b) that person provides a peer review statement of validation and explanatory report (the Peer Review Report and Statement) for the EMP when it is submitted to the Secretary, Department of Sustainability and Environment.

‘Appropriately qualified person’ means a person with qualifications and experience in environmental assessment, environmental auditing, or environmental management.

The Statement must indicate that he/she is satisfied that:

- (a) the proposed works are adequately described to permit an assessment of environmental and other issues;
- (b) the assessment of impacts has adequately addressed all material issues;
- (c) the management and mitigation measures are appropriate;
- (d) the reporting and responsibility structure is adequate;
- (e) an appropriate consultation process has been carried out; and
- (f) the conclusions are practicable.

The Statement must be supported by an Explanatory Report justifying the conclusions, identifying any residual issues and making appropriate recommendations.

4.3.3 Implementation, Performance Monitoring and Reporting

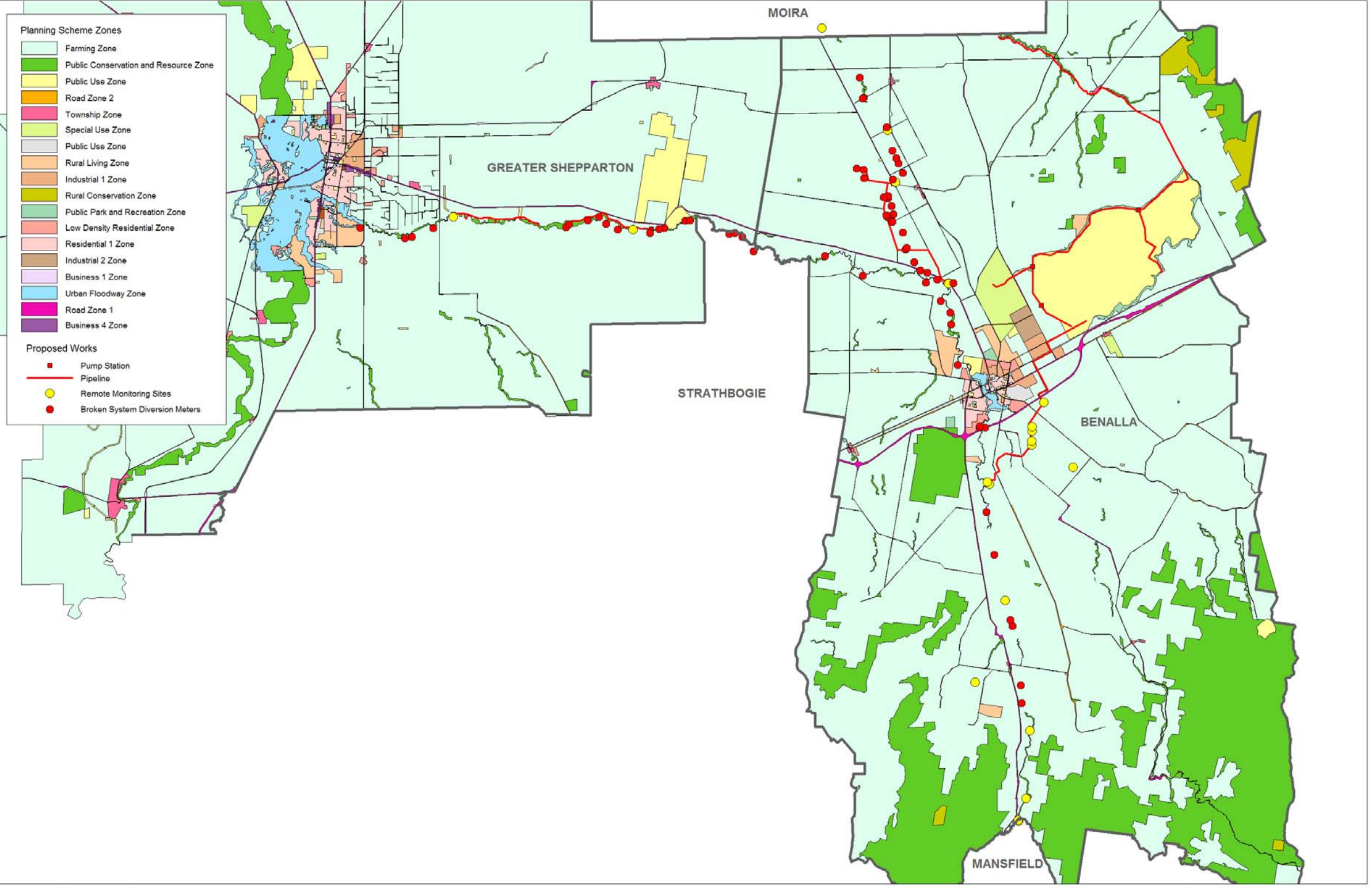
The EMP must clearly articulate responsibility for its implementation. The EMP must also contain a monitoring program to assess the achievement of the objectives of the EMP and the achievement of the management and mitigation measures identified above.

- (a) **Implementation and Responsibility:** This section should provide a clear organisation structure for the implementation of the Lake Mokoan Decommissioning Project including the positions of personnel responsible for environmental management. A description of the roles and responsibilities of personnel and subcontractors should be provided. This should include the process(es) to be used to engage with key stakeholders in environmental management during the implementation phase of the EMP.
- (b) **Monitoring:** This section should explain how environmental management activities and outcomes will be monitored.
- (c) **Auditing:** This section should describe the program and procedures for periodic auditing of the EMP’s implementation and effectiveness.
- (d) **Corrective Action:** The EMP should define procedures for dealing with non-compliance with environmental management controls, environmental incidents and emergencies.

(e) Reporting: This part must provide a description of the reporting requirements and timeframes for reporting for the project and include a list of reports to be prepared for:

- Construction monitoring
- Post-construction environmental outcomes and land rehabilitation
- Non-compliance and corrective action
- Auditing.
- Document control procedures.
- Personnel responsible for preparing the reports.
- Timeframes for preparation of reports and submission to the Secretary, Department of Sustainability and Environment as a record of completion.

Appendix A - Infrastructure Location Maps



Lake Mokoan Decommissioning Works
Overview of Works

This map contains data derived in part or wholly from sources other than Beca, and therefore, no representations or warranties are made by Beca as to the accuracy or completeness of this information.

Appendix B - Overview of works

Activity		Relevant Planning Authority	Zones & Overlays	
Lake Mokoan – Decommissioning				
10 metre wide breach in dam wall		Benalla	PUZ1	
Filling/part filling Inlet Channel between south side of Hume Freeway Lake Mokoan (drainage function retained)		Benalla	PUZ1	
			PUZ4	
			RDZ1	
			RFO	
			DDO1	
Supply to Lake diverters				
Channel Deepening within bed of existing Outlet Channel. Commencing at the toe of existing Lake Mokoan embankment and extending downstream to but not including the Old Thoona Road, a distance of approximately 5170m.		Benalla	FZ	
			PUZ1	
			SUZ1	
			RDZ1	
			RFO	
Balancing storage at northeast corner of lake bed.		Benalla	PUZ1	
Construction of pump station near dam wall		Benalla	FZ	
Underground pipeline along northern edge of basin (just below existing Lake Mokoan Full Supply Level)		Benalla	PUZ1	
			PPRZ	
Pipeline supply to landholders west of dam wall (4 landholders) following route along toe of Lake Mokoan embankment		Benalla	PUZ1	
Pipeline to southern side of existing Lake Mokoan, expected to follow old Boggy Bridge Road alignment		Benalla	PUZ1	
			PPRZ	
Offset Measures				
Remote control and monitoring of Lake Nillahcootie Operations	Lake Nillahcootie Valve Chamber – Upgrade existing outlet valve hydraulics from manually hydraulic hand pump to Supervisory Control And Data Acquisition control. Installation of a SCADA system to provide remote control and monitoring of existing and new features at Nillahcootie and the new gauging station site.		Mansfield	PUZ1
				ESO2
	Installation of new Broken River stream gauging site (750m downstream of spillway) including associated Willow removal and excavation to create 4WD access		Benalla	FZ
Dynamic real-time monitoring of irrigation diversion flow metres – replacement of approximately 70 existing diversion flow metres.		Benalla, Greater Shepparton, Strathbogie	FZ	
			PCRZ	
			RDZ1	
			PUZ2	
			RLZ	
			LDRZ	
			FO	
			LSIO	
VPO				
Rain Rejection / Re-regulation Storage along the Mokoan Inlet Channel includes:	Broken River Weir Bypass Structure –Provide remote control and monitoring of gates on existing bypass structure. Possible redesign of rock weir structure, including possible installation of a suitable fishway structure	Benalla	FZ	

Activity		Relevant Planning Authority	Zones & Overlays	
	Hollands Creek Weir Bypass Structure -Increase capacity of outlet, including possible replacement of existing bypass structure. Provide remote control and monitoring of gates on existing/new bypass structure. Possible redesign of rock weir structure, including possible installation of a suitable fishway structure Provision of flow monitoring station, immediately downstream of bypass structure	Benalla	PUZ1	
	Inlet Channel Regulator #1 - Provide remote control and monitoring of gates on existing channel flow regulating structure	Benalla	FZ	
	Inlet Channel Regulator #2 - New regulating structure, located within the existing Inlet channel, upstream of the Hollands Weir pool.	Benalla	PUZ1	
	Inlet Channel Regulator #3 - Provide remote control and monitoring of gates on existing channel flow regulating structure	Benalla	FZ	
Remote monitoring of existing and new catchment stream gauging stations.	Existing Sites	Lake Nillahcootie Head Gauge	Mansfield	PUZ1 ESO2
		Moorngag	Benalla	FZ
		Broken River Weir	Benalla	FZ
		Broken River Weir Bypass Structure	Benalla	FZ
		Hollands Creek @ Kilferra	Benalla	FZ
		Hollands Creek Weir Bypass Structure	Benalla	PUZ1
		Casey's Weir	Benalla	RDZ1
		Broken Creek Off-take @ Casey's Weir	Benalla	RDZ1
		Wanggarandal	Moira	FZ RFO
		Goorambat Town Weir - Replace existing gate. Provide access to the gate. Relocate pump station pipework to upstream of the weir.	Benalla	FZ
	Flynn's Weir - Seal 2 bays. 3 bays with regulating structures. Replace existing drop bars. Upgrade walkway. Possible construct Fish Passage	Benalla	FZ	
	New Sites	Broken River - Lima Creek Lima Park	Benalla	FZ
		EGM Siphon @ Broken River	Greater Shepparton	FZ RFO
Broken River - 750 m downstream of Lake Nillahcootie		Benalla	FZ	
Pump station and pipeline from EGM for irrigation supply (includes through to	Pump Stations	Greater Shepparton	FZ FO	
			FZ PCRZ PUZ5	
	Pipeline	Greater Shepparton	FZ PCRZ PUZ5	

Activity		Relevant Planning Authority	Zones & Overlays	
Gowangardie Weir)			FO	
			LSIO	
Piped supply to Major Creek area (3 properties)		Benalla	FZ	
Off-line storage within Broken Creek system (near Trewin's Weir; incl. inlet channel, inlet structure, outlet pump station, outlet channel)		Benalla	FZ	
Thoona Pipeline				
Thoona Pipeline – Pipeline from north eastern point of Lake Mokoan to Thoona township		Benalla	FZ	
			PCRZ	
			PPRZ	
			PUZ1	
			RDZ2	
Pipeline to supply upper Broken Creek – Casey Weir along Benalla – Tocumbal Road.		Benalla	RDZ1	
			RDZ2	
			FZ	
			RFO	
Broken System Diversion Metres				
Repair, upgrade or replace infrastructure required for remotely controlling and monitoring the structures and flows in the Broken System.	DV.6068 - BROKEN (NILL - CASEYS)	Benalla	FZ	
	DV.6075 - BROKEN (NILL - CASEYS)	Benalla	FZ	
	DV.6105 - BROKEN (NILL - CASEYS)	Benalla	FZ	
	DV.6110 - BROKEN (NILL - CASEYS)	Benalla	FZ	
	DV.6120 - BROKEN (NILL - CASEYS)	Benalla	FZ	
	DV.6145 - BROKEN (NILL - CASEYS)	Benalla	FZ	
	DV.6210 - BROKEN (NILL - CASEYS)	Benalla	LDRZ	
	DV.6215 - BROKEN (NILL - CASEYS)	Benalla	RDZ1	
	DV.6220 - BROKEN (NILL - CASEYS)	Benalla	LDRZ	
	DV.6280 - BROKEN (NILL - CASEYS)		Benalla	FZ
				RFO
	DV.6305 - BROKEN (CASEYS - G'RV)		Benalla	FZ
				RFO
	DV.6315 - BROKEN (CASEYS - G'RV)		Benalla	FZ
				RFO
	DV.6330 - BROKEN (CASEYS - G'RV)		Benalla	FZ
				RFO
	DV.6337 - BROKEN (CASEYS - G'RV)		Benalla	FZ
				RFO
	DV.6367 - BROKEN (CASEYS - G'RV)		Benalla	FZ
RFO				
DV.6375 - BROKEN (CASEYS - G'RV)		Benalla	PCRZ	
			VPO	
DV.6412 - BROKEN (CASEYS - G'RV)		Strathbogie	FZ	
			FO	
DV.6420 - BROKEN (CASEYS - G'RV)		Strathbogie	FZ	
			FO	
DV.6455 - BROKEN (CASEYS - G'RV)		Greater Shepparton	PUZ2	
			FO	

Activity		Relevant Planning Authority	Zones & Overlays
	DV.6465 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
			FO
	DV.6470 - BROKEN (CASEYS - G'RV)	Greater Shepparton	PCRZ
			FO
	DV.6475 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
	DV.6500 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
			LSIO
	DV.6505 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
			LSIO
	DV.6510 - BROKEN (NILL - CASEYS)	Greater Shepparton	FZ
			FO
	DV.6530 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
	DV.6605 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
			FO
	DV.6610 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
			LSIO
	DV.6615 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
			FO
	DV.6645 - BROKEN (CASEYS - G'RV)	Greater Shepparton	RLZ
			FO
	DV.7005 - BROKEN CREEK UPPER	Benalla	FZ
			RFO
	DV.7010 - BROKEN CREEK UPPER	Benalla	RDZ1
	DV.7015 - BROKEN CREEK UPPER	Benalla	FZ
	DV.7020 - BROKEN (CASEYS - G'RV)	Benalla	FZ
			RFO
	DV.7040 - BROKEN CREEK UPPER	Benalla	FZ
			RFO
	DV.7057 - BROKEN CREEK UPPER	Benalla	FZ
			RFO
	DV.7060 - BROKEN CREEK UPPER	Benalla	FZ
			RFO
	DV.7070 - BROKEN CREEK UPPER	Benalla	FZ
			RFO
	DV.7073 - BROKEN CREEK UPPER	Benalla	FZ
	DV.7075 - BROKEN CREEK UPPER	Benalla	FZ
			RFO
	DV.7080 - BROKEN CREEK UPPER	Benalla	FZ
	DV.7090 - BROKEN CREEK UPPER	Benalla	FZ
	DV.7095 - BROKEN CREEK UPPER	Benalla	FZ
DV.7100 - BROKEN CREEK UPPER	Benalla	FZ	
DV.7110 - BROKEN CREEK UPPER	Benalla	FZ	
DV.7115 - BROKEN CREEK UPPER	Benalla	FZ	
DV.7140 - BROKEN CREEK UPPER	Benalla	FZ	
DV.7160 - BROKEN CREEK UPPER	Benalla	FZ	
DV.7195 - BROKEN CREEK UPPER	Benalla	FZ	
DV.7310 - MAJOR CREEK	Benalla	FZ	

Activity		Relevant Planning Authority	Zones & Overlays
	DV.7320 - MAJOR CREEK	Benalla	FZ
	DV.7330 - MAJOR CREEK	Benalla	FZ
	DV.6345 - BROKEN (CASEYS - G'RV)	Benalla	FZ
	DV.6410 - BROKEN (CASEYS - G'RV)	Strathbogie	FZ
			FO
	DV.6415 - BROKEN (CASEYS - G'RV)	Strathbogie	FZ
			FO
	DV.6445 - BROKEN (CASEYS - G'RV)	Greater Shepparton	FZ
			LSIO
	DV.6495 - BROKEN (CASEYS - G'RV)	Greater Shepparton	PCRZ
			FO
	DV.6520 - BROKEN (CASEYS - G'RV)	Greater Shepparton	PCRZ
			FO
	DV.7105 - BROKEN CREEK UPPER	Benalla	FZ
	DV.7085 - BROKEN CREEK UPPER	Benalla	FZ
	DV.7170 - BROKEN CREEK UPPER	Benalla	FZ
	DV.7180 - BROKEN CREEK UPPER	Benalla	FZ
	DV.7300 - MAJOR CREEK	Benalla	FZ