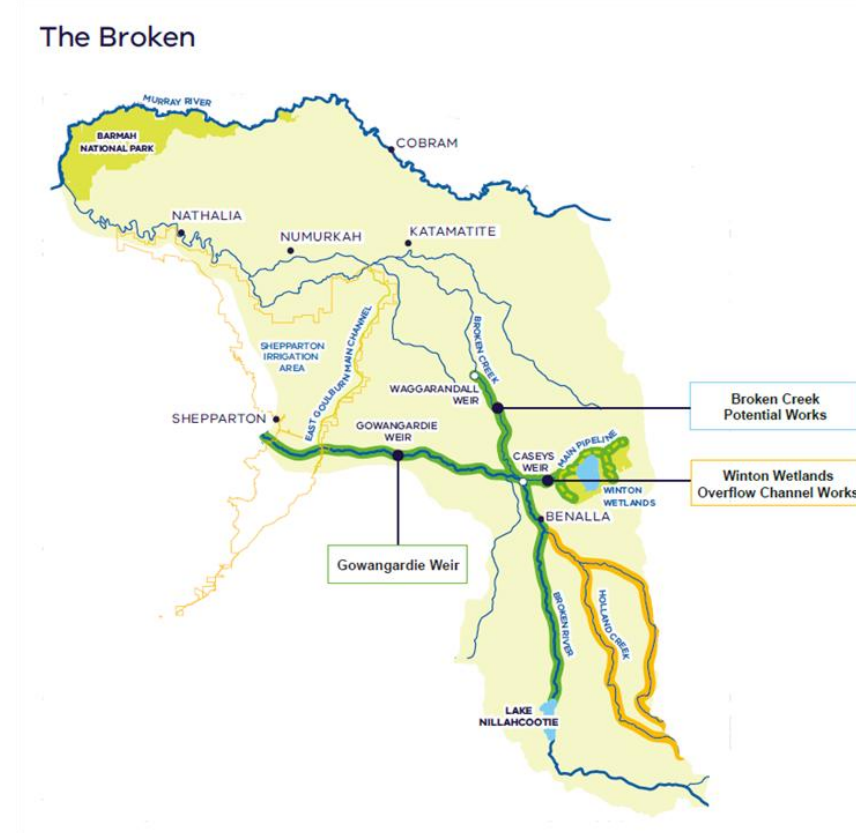


Business Case Proposal Summary

- The proposal aims to recover more than 3,700ML LTDLE for the Commonwealth Environmental Water Holder for an estimated investment of \$60 million.
- If funded the project would be delivered by the Resilient Water Program (a division of Goulburn-Murray Water).
- The proposal aligns with the Victorian government's principles for further water recovery as outlined in the Planning our Basin Future Together Prospectus. These principles aim to ensure water recovery benefits Victorian waterways and landscapes and supports a sustainable future for irrigators and communities.
- Key elements of the proposal outlined on the following slides are:
 - Water acquisition
 - Fish passage at Gowangardie Weir
 - Winton Wetlands Inlet Channel works
 - Broken Creek management
 - Stock and Domestic Reserve
 - Traditional Owner Outcomes
 - Future Watering Strategies
 - On-farm support
- The Business case proposal includes options that are cost effective, delivers on objectives and offers benefits for the long-term sustainability of the catchment.
- Options to reconfigure service arrangements within the system through the installation of new pipelines have not been included in the business case proposal after detailed design, costings and stakeholder consultation determined they would not be viable in the long-term.



Water Acquisition

- Voluntary acquisition of more than 6,300ML HRWS and 1,150ML LRWS (3,724 ML LTDLE) in the Broken system to be provided to the Commonwealth Environmental Water Holder for environmental use.
- The table below summarises current water holdings in the Broken System and the expected volumes following delivery of this project:

	Private (ML)	Water Authorities (ML)	Environment (ML)
Current HRWS	15,974	1,144	624
Current LRWS	3,215.8	65.4	23.1
Post-Project HRWS	10,537.5	314	6,890.5
Post-Project LRWS	2,061.6	65.4	1,177.3

Expected Benefits:

- *Increased volume of held environmental water in the Broken system (from around 3% to 30% of total entitlement) help to meet minimum critical flow requirements and improve river health*
- *Strategic water recovery towards the Murray-Darling Basin Plan objectives reduces the scale of open-tender purchases and associated socio-economic impacts*
- *Enables planning and transition support to be provided in a targeted way*

Fish Passage at Gowangardie Weir

- Gowangardie Weir to be removed or modified to allow fish passage between the Goulburn River and Lake Nillahcootie
- Treatment of weir to be determined along with required approvals (weir under existing Heritage Overlay)
- Assistance will be offered to address impacts to service arrangements for affected diverters (e.g. alteration of pumps)
- Restoration process will be implemented following weir removal or modification in consultation with Yorta Yorta Nation Aboriginal Corporation
- Strategies to be developed to mitigate the impacts of works (including potential impacts to flora and fauna and silt management)

Expected Benefits:

- *Increased native fish movement between the Goulburn River and the Broken River*
- *Natural recolonisation of the Broken River upstream of Gowangardie Weir by native species, such as the silver perch and trout cod*
- *Greater native fish species diversity, larger population sizes and increased health and resilience of native fish populations in the Broken River and Goulburn River*
- *Increased benefits of environmental water management*
- *Improved overall health of river ecosystem*



Gowangardie weir is the last key barrier to fish migration on the Broken River downstream of Lake Nillahcootie. (Image credit: Resilient Water Program)

Winton Wetlands Inlet Channel Works

- The Winton Wetlands Inlet channel feeds water to the existing pipeline, which supplies Mokoan diverters
- The channel is shallow and full of silt meaning water quality is poor
- During high rainfall the channel floods and reduces water quality in the Broken River
- A targeted scheme of works to prevent silt build up will improve water quality and level of service for Mokoan diverters, this may include:
 - improvement works in the inlet channel including de-silting and re-profiling
 - installation of works to protect existing assets such as rock-armouring and beaching
 - removal of the redundant measuring weir which obstructs flows

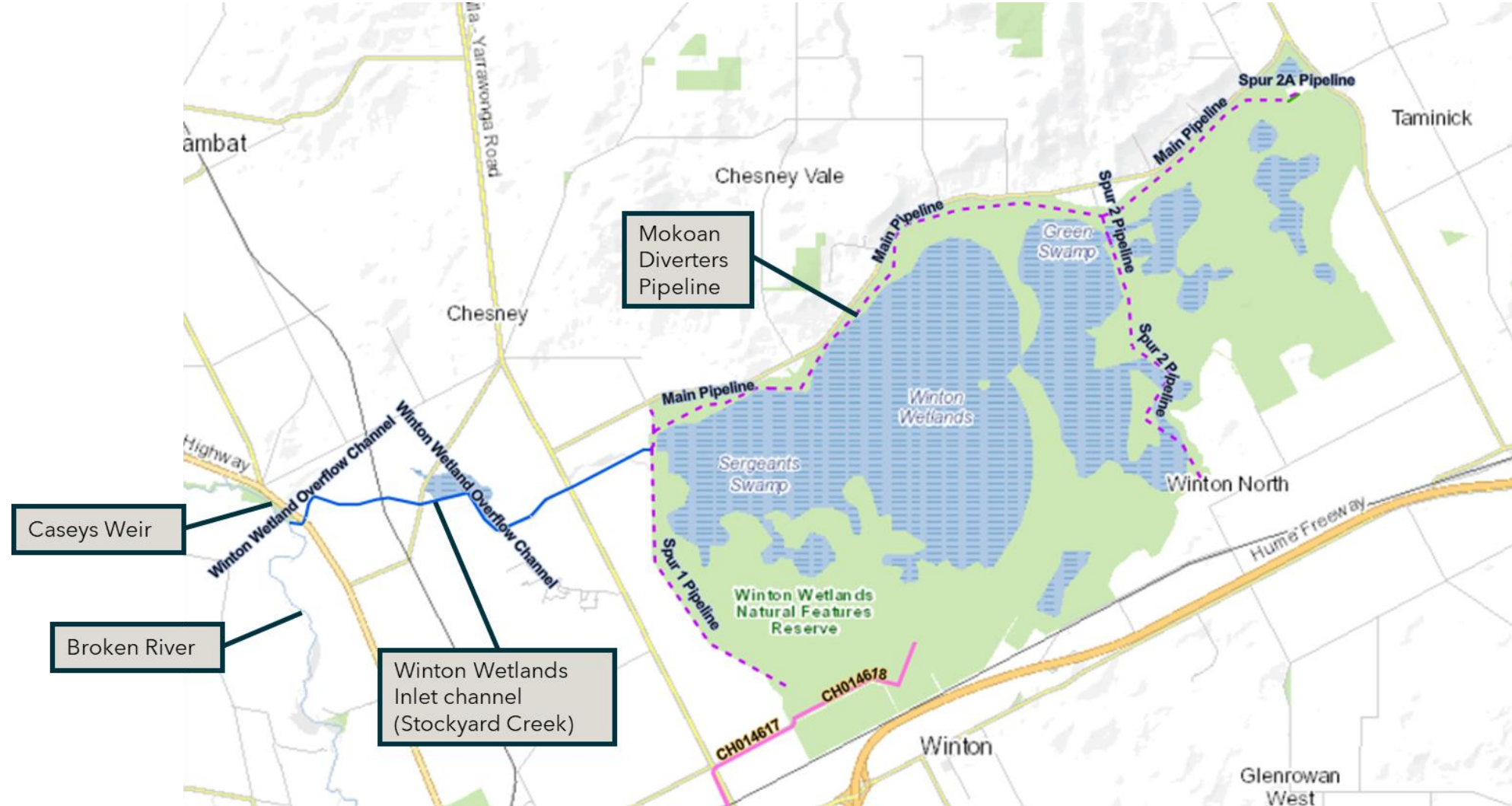
Expected Benefits:

- *Improved water quality in the Broken River*
- *Improved service for Mokoan pipeline diverters*



Winton Wetlands Inlet Channel (Image source: Resilient Water Program)

Winton Wetlands Inlet Channel Map



Broken Creek Management

- The upper Broken Creek is a regulated system that services irrigation and stock and domestic water users.
- Improved management of the Broken Creek will ensure that the system is operated within the requirements of the Broken System Bulk Entitlement.
- This process will be implemented in consultation with the community and look at opportunities to reduce losses and improve the efficiency of current water management arrangements.
- This may include modification works at Casey's Weir and other existing assets within Broken Creek to increase operational flexibility and variability of flows.

Expected Benefits:

- *Reduced Broken system losses and increased efficiency in supply to Broken Creek customers*
- *Increased water availability for all water users in the system through reduced losses*
- *Greater flexibility for environmental water use in Broken Creek*
- *Improved ecological outcomes for the Broken Creek*



Broken Creek from Goorambat Bushland Reserve (Image credit: Resilient Water Program)

Stock and Domestic Reserve

- Customers within the Broken System have consistently raised concerns about access to stock and domestic (D&S) water in years of low and/or late allocations.
- A recommendation of the Broken Review was to investigate a system reserve that supports access to water for critical D&S needs in dry conditions.
- The intention of a D&S reserve would be to provide small volumes of water to meet critical D&S needs in very dry years where there may be low or zero allocations to high reliability water shares.
- The characteristics of a D&S reserve and how it could be established and operated will be investigated as part of the delivery of the Project.
- This will include consultation with entitlement holders on any proposed changes.

Expected Benefits:

- *Increased water security to support critical D&S needs in very dry years*
- *Increased resilience to drought for D&S users*

Traditional Owner Outcomes

- Cultural significance assessments to be undertaken by Yorta Yorta Nation Aboriginal Corporation.
- River and Creek restoration works to be overseen by Yorta Yorta National Aboriginal Corporation.
- Future watering proposals and restoration works within the Broken System will be informed by cultural significance assessments undertaken
- 100ML of water recovery (Broken HRWS) and 50% of any over recovery will be set aside for Taungurung Land and Waters Council and Yorta Yorta National Aboriginal Corporation for their self-determined use.

Expected Benefits:

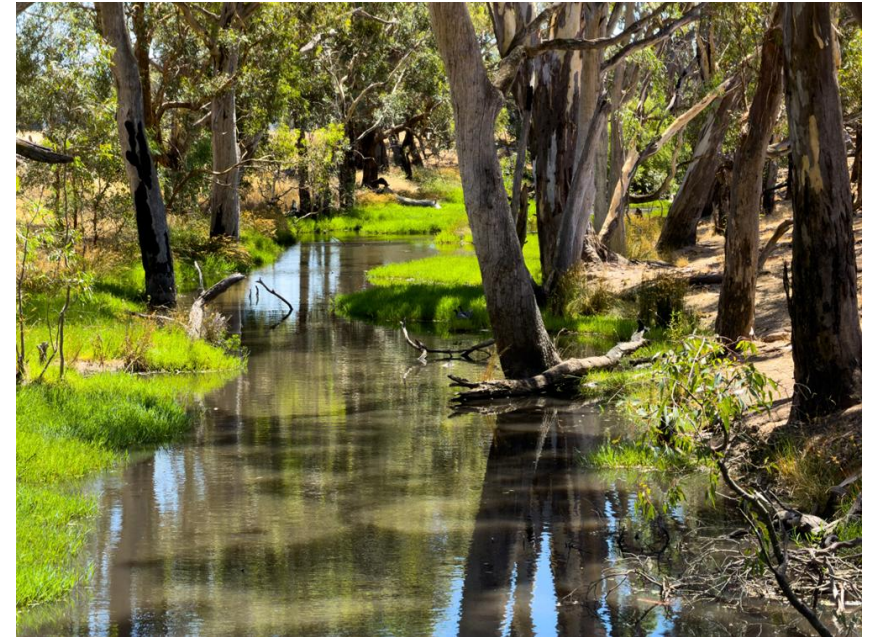
- Provided Traditional Owners' self-determined involvement in water access and management
- Preservation and restoration of cultural values in the Broken system

Future Water Strategies

- Development of strategies to maximise the benefits of environmental water held in the Broken System
- Strategies will inform future seasonal watering proposals prepared by the Goulburn Broken Catchment Management Authority in consultation with the community
- More information on these processes is available at [How is water for the environment managed?](#) on Goulburn Broken CMA's website

Expected Benefits:

- Effective use of environmental water that aligns with regional priorities and seasonal conditions
- Supports cultural values by providing opportunity to partner with Traditional Owners in planning and delivery of environmental watering actions



Broken Creek (Image credit: Resilient Water Program)

On-Farm Support

- Targeted on-farm extension support program to be implemented during project delivery
- Goulburn Broken CMA and Agriculture Victoria will work with farmers who have decided to transition away from irrigated agriculture and those who have decided to remain the system

Expected Benefits:

- Supported transition away from irrigation
- Support farmers to manage risk and increase resilience in a drying climate