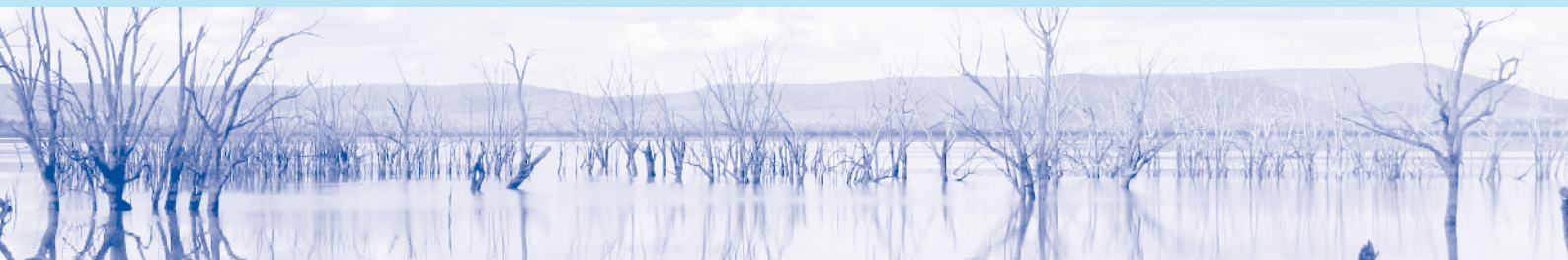


FACT SHEET

LAKE MOKOAN ASSET DECOMMISSIONING



Produced by Goulburn-Murray Water

LAKE MOKOAN ASSET DECOMMISSIONING

As part of the Victorian Government's decision to decommission Lake Mokoan, Goulburn-Murray Water, the current manager of the storage and its associated assets, has started to consider the future use of those assets after decommissioning.

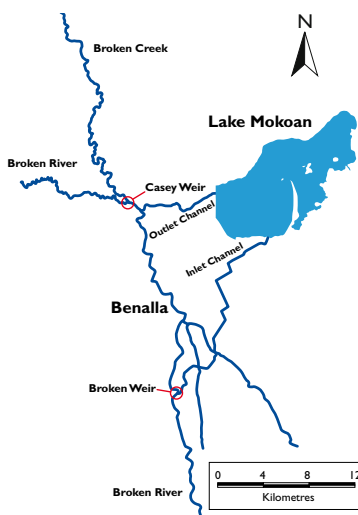
WHAT IS INVOLVED IN DECOMMISSIONING LAKE MOKOAN?

Decommissioning involves ceasing the transfer of water into Lake Mokoan via the inlet channel. This transfer is currently achieved by diversion of flows at the Broken River Weir and the Hollands Creek Weir. Decommissioning also involves breaching the Dam embankment and modifying the outlet structure to allow the future wetland to overflow more naturally into the outlet channel (former Stockyard Creek).

In 2005 GHD Consultants undertook a broad desktop assessment to identify the more than 300 assets which form the current Lake Mokoan scheme and to consider future options for each asset, ranging from whether they needed to be retained, removed or rendered inoperable. Factors taken into account in the assessment included potential impacts on drainage, access, public safety, the environment and the future management of the land in question.

The preliminary investigation also included a hydrological and hydraulic investigation, which considered a number of options for breaching the dam wall.

Major structures considered in the investigation included all structures along the inlet and outlet channels and also the dam embankment.



Lake Mokoan embankment

WHAT ARE THE KEY CONSIDERATIONS IN DETERMINING THE DECOMMISSIONING OPTIONS?

Key considerations related to the inlet channel include the need to modify or remove the diversion structures, which divert water from the Broken River or Hollands Creek into the channel. The works on the diversion structures depend on whether the inlet channel is to be used in part for storage of water as a component of a future Broken supply system.

A further consideration is breaching of the Lake Mokoan embankment and modification to the outlet works and the impact that this will have on the outlet channel capacity. The prevention of unacceptable levels of flooding both upstream and downstream of the breached embankment is also an important consideration.

The outlet channel function needs to be retained to carry water from the future wetland to the Broken River at Casey's Weir.

Other assets such as bridges, creek crossings and drainage structures would be retained, modified or removed depending on the need.

Other considerations are:

- impacts on the environment, health and safety, social and economic issues;
- impacts on drainage patterns; and
- responsibility for future management of any retained or modified assets.

FACT SHEET

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LAKE MOKOAN ASSET DECOMMISSIONING

HOW COULD OPERATION OF THE INLET CHANNEL CHANGE?

If diversion of water from the Broken River and tributaries was to cease, the diversion structures would be made inoperable and all control equipment would be removed, including diversion weirs. An appropriate cross-sectional shape for the redundant inlet channel will need to be determined, which could allow local drainage water to continue to be discharged to either Hollands Creek or to the Mokoan Wetland area.

If the inlet channel is to be used as re-regulating or rain rejection storage, diversion structures would be retained or modified to allow for occasional inflow and outflow of irrigation water. This option could see the section of the inlet channel from the Broken River to a point upstream of the Hume Freeway used as a temporary storage. The section of the inlet channel downstream of the freeway could be reshaped and used to carry local drainage only.

Creek crossings of the existing channel would be retained in their current form.

Selected drains would be retained in their current form and others rendered inoperable where not required and not practical to remove.

HOW COULD OPERATION OF THE OUTLET CHANNEL CHANGE?

The outlet channel would need to be retained in approximately its current form and capacity. The channel banks may be flattened where appropriate to allow for more effective vegetation protection and improved long term stability.

All drainage structures, including the Kennedy's Creek inlet structure would need to be retained largely in their current form



Lake Mokoan inlet channel

HOW COULD OPERATION OF THE DAM WALL AND THE OUTLET WORKS CHANGE?

The future wetland will spill more naturally via a sill made by a breach in the Mokoan embankment (dam wall). The current outlet tower and conduit are not required for future control of spill operations however, retention of the outlet conduit may provide future benefits for Winton Wetland rehabilitation. Options for the future of the outlet conduit are the subject of further assessment.



Lake Mokoan outlet

FURTHER STUDY

To refine the options available, Goulburn-Murray Water with GHD Consultants is undertaking further engineering studies to assess drainage patterns, access, and other service requirements along each of the inlet and outlet channel alignments and the dam wall.

WHAT INPUT WILL AFFECTED LANDOWNERS HAVE?

The options considered to date are feasible from a technical perspective, however broader consultation is now required to allow this aspect of Lake Mokoan decommissioning to proceed further.

This process will require consultants to visit each of the landowners adjacent to the inlet and outlet channels and the embankment to identify any issues which need to be taken into account in development a final draft Asset Decommissioning Package.

Refinement of options will also include discussions with council and other road, rail, communications, power and emergency service agencies.