

MID-MURRAY STORAGE PROJECT

MARCH 2007



PROJECT OVERVIEW

USING WATER BETTER

The Mid-Murray Storage Project will allow Victoria to contribute up to 19,000 megalitres of water annually for environmental flows in the Snowy River.

The Mid-Murray Storage Project is a fundamental component of the *Mokoan - Return to Wetlands Project* and is funded through the Victorian Government's *Our Water Our Future* action plan to secure Victoria's water future. The Mid-Murray Storage Project involves increasing the use of the existing storage capacity of Lake Boga, Lake Charm and Kangaroo Lake.

Healthy rivers are the lifeblood of Victoria and underpin our communities, economy and environment. Increase in "through flows" for the Kerang Lakes provides economic, social and environmental benefits for the region.

The reintroduction of Lake Boga will secure opportunities for recreation, tourism and the regional economy.

The Mid-Murray Storage Project will support a viable irrigation system, maintaining the current reliability and improving farm profitability.

Future management of the Mid-Murray storages will be assured through the development of appropriate management plans, with the primary management objective of these storages being to capture, store and release water.

Overall improved water quality in the lakes is a further bonus from this project.

This project introduces opportunities for broadening the beneficiaries' base and cost sharing for the Torrumbarry Area Common Distribution Works and the Little Murray Weir.

Ability to manage flooding through the lakes system will be maintained at equivalent or better capacity than is the case now.

Photo courtesy of John Ginnivan

LOCAL BENEFITS...

- Economic, social and environment benefits for the region
- Improved opportunities for recreation, tourism and the regional economy
- Viable irrigation system, maintaining current reliability and improving farm profitability
- Capture, store and release water when needed
- Overall improved water quality in the Lakes
- Broaden the beneficiaries' base and cost sharing
- Securing the future viability of Lake Boga

Clockwise from top left: Yachting on Lake Boga, Walking at Kangaroo Lake, Fishing at Lake Charm, Grape growing at Kangaroo Lake. Photo's courtesy of Tom Lowe



... RESULTS STATEWIDE

- Victoria is doing its part in restoring the Snowy River
- Meeting National commitments to the Snowy and the Murray
- Creating sustainable, healthy river systems for Australia's future generations



NORTH CENTRAL
Catchment Management Authority



Department of
Sustainability
and Environment



MID-MURRAY STORAGE PROJECT



BACKGROUND

The Mid-Murray Storage Project is a major component of the *Mokoan - Return to Wetlands* Project.

Following a comprehensive 18-month study and extensive community consultation, in June 2004 the Victorian Government announced that Lake Mokoan would return to a natural wetland.

The landmark decision - part of the Government's *Our Water Our Future* action plan - represents one of the largest wetland rehabilitation projects in Australia and is the first time a Victorian Government has decommissioned a major storage.

Rehabilitating the Mokoan wetland system will make available 44,000 megalitres of water each year to improve the health of the Broken, Goulburn, Snowy and Murray Rivers as part of Victoria's commitments to the Snowy and Living Murray Projects.

While implementing these initiatives the Government remains committed to maintaining the current level of reliability for irrigators.

The Mid Murray Storage Project is a major component of the *Mokoan - Return to Wetlands* Project.



THE NEED FOR THE PROJECT

Implementation of the decommissioning works to reduce losses at Lake Mokoan and elsewhere in the Broken River system will result in significant additional flows to the Murray River. Decommissioning Lake Mokoan allows Victoria to provide significant contributions to its commitments to the Living Murray Initiative and to the return of flows to the Snowy River.

Future water trade, increased mid-summer water use due to changes in crop types and environmental flow requirements, will add to difficulties associated with the supply system constraints, particularly the Barmah Choke. If this occurs it will result in future demand shortfalls particularly in the Sunraysia region, which will in turn result in production losses, and may constrain future development.

These issues point to the need for a Mid-Murray storage system to:

- Harvest some of the water savings generated at Lake Mokoan, enabling a reduction in releases from the Snowy Scheme to the River Murray, and allowing increased flows to the Snowy River; and
- Reduce potential demand shortfalls in the Sunraysia Region resulting from system constraints, particularly the Barmah Choke.

For background details and current information on Lake Mokoan decommissioning, visit:
www.lakemokoan.com

MID-MURRAY STORAGE SCHEME OPERATION

The three lakes would generally be filled during the period from May to November each year. It is envisaged that flows would be discharged from Lakes Boga and Charm during the peak irrigation demand months of January and February. This would maximise their potential to assist in overcoming any downstream supply shortfalls brought about capacity constraints further up the River Murray.

Because Lake Kangaroo is already part of the Torrumbarry Irrigation System, it must be held at a relatively high level during February to enable it to supply Torrumbarry system demands. Discharges from Lake Kangaroo, when operated as part of a Mid-Murray storage would then generally occur during the later months of the irrigation season, generally March and April.

More detail will be provided in later fact sheets specific to each Lake.

No. 7 Channel Offtake at Kangaroo Lake at Kangaroo Lake. Photo courtesy of Tom Lowe

The Mid-Murray Storage Project will capture a portion of the flow saved from decommissioning Lake Mokoan, and store this water in Lake Boga, Lake Charm and Kangaroo Lake.



Goulburn-Murray Water staff surveying channel bank at Lake Boga. Photo courtesy of Tom Lowe

WORKS REQUIRED

The Mid-Murray Storage Project will capture a portion of the flow saved by decommissioning Lake Mokoan, and store this water Lake Boga, Lake Charm and Kangaroo Lake. To allow effective release of the captured unregulated flow back in the river Murray, Lake Boga needs a new outlet channel.

New or enhanced channels are also required to ensure the Mid-Murray Storage Project does not change flooding patterns associated with flows from the Avoca River and Loddon River.

The major works on ground will be the construction of an outfall channel from Lake Boga to discharge into the Little Murray River and the construction of works to increase the discharge capacity from Kangaroo Lake to the Avoca Outfall.

Investigation of options to outfall water from Lake Boga considered channels to the Little Murray River and the River Murray, passing under the Little Murray weir pool. Based on environmental, heritage, planning, geotechnical and costing assessments a channel supplying water to the Little Murray River was preferred.

Affected landowners have been consulted on the options, and advised why the preferred option was chosen.

The proposed works will affect a limited number of landowners downstream of Kangaroo Lake and farming enterprises downstream of Lake Boga.

SUPPORTING STUDIES

- A Planning Review and Environmental and Heritage Assessment of the two Lake Boga Outfall options has been undertaken by an external consultant.
- A soil survey has been undertaken to better understand sandy ground conditions.
- The site survey and geo-technical investigation along the No. 7 channel to the Avoca Outfall has been completed.

Victoria is doing its part in restoring the Snowy River

MID-MURRAY STORAGE PROJECT

FREQUENTLY ASKED QUESTIONS

Q

What is *Our Water Our Future* ?

A

Our Water Our Future is a Victorian Government initiative to secure water for Victoria's future through a series of projects, including *Mokoan - Return to Wetlands*. The Mid-Murray Storage Project is a fundamental component of the *Mokoan - Return to Wetlands* Project.

They are both important elements of initiatives to improve river health and to meet Federal and other inter-governmental commitments to the River Murray and Snowy River.

Q

What consultation has occurred on the project?

A

The Lake Boga community was consulted regarding the proposal to secure water for the Lake. During the investigation for the potential for utilizing Lake Boga as a Mid-Murray Storage, a Project Committee and Reference Group was set up and this included landholders with interests also in Lake Charm and Kangaroo Lake. Initially Lake Charm was not considered as it was thought that water savings could be captured in Lake Boga and Kangaroo Lake. Following completion of the consultants study it was found that Lake Charm was a required component to meet the Snowy River flow requirement

Q

Why was the Lake Boga Outfall Option to the Little Murray River chosen?

A

The work undertaken by Goulburn-Murray Water and its consultants identified that the Lake Boga Outfall Option to the Little Murray River presented the lowest risk to the environment, cultural heritage and overall the lowest cost.

The option to supply water to the River Murray required complicated and risky works to pass water underneath the Little Murray weir pool.

Goulburn-Murray Water is now working closely with landowners along the chosen option to resolve any service impacts.

Q

How can I find out more information about the Mid-Murray Storage project?

A

The project's website can be found at www.lakemokoan.com/midmurray. Interested groups and individuals can register their interest to receive newsletters and fact sheets at regular intervals to keep informed of the progress of the project by providing their details in person at the Goulburn-Murray Water Kerang Office, or sending their name and mailing address to email address: midmurraysp@g-mwater.com.au

PROJECT TEAM

The delivery of the Mokoan - Return to Wetlands Project is being undertaken as a partnership between the Department of Sustainability and Environment, North Central Catchment Management Authority, Goulburn-Broken Catchment Management Authority and Goulburn-Murray Water. David Jeffery of Goulburn-Murray Water is the Project Director for the Mokoan - Return to Wetlands Project. David is based in Benalla and his role is to coordinate all agency involvement to ensure the effective delivery of the Government's decision and commitments in relation to Mokoan.

Geordie McKinlay, at Goulburn-Murray Water's Kerang office, is the Project Manager for the Mid-Murray Storage Project. Geordie's role is to ensure the project is completed safely, on time, on budget, to a high standard, and with minimal disruption to the community.



(top) David Jeffery, (bottom) Geordie McKinlay