

Lake Bonney Information Sheet

Lake Bonney - Water Levels

Lake Bonney in the South East is a coastal lake about 10 km south of Millicent, South Australia. At over 23 km long, it is one of Australia's largest freshwater lakes. The Lake, like most of the South East region, has been extensively altered since European settlement, particularly by the effects of drainage schemes and various land use impacts.

Large volumes of wastewater from pulp and paper mills have, for over 60 years, adversely affected the health of the Lake. Recent technological upgrades and modifications to the mills have significantly improved the quality of wastewater discharged into the Lake. As a result water quality has improved but remains highly coloured.

Lake Bonney's water levels fluctuate seasonally. If the Lake's water level becomes too high, neighbouring low-lying land developed for agriculture is at risk of flooding. To prevent this flooding a regulated outlet that allows water to flow from the Lake to the ocean was constructed in 1972.



A set of guidelines has been developed to determine when the regulated outlet is to be used. The guidelines were developed by the Lake Bonney Management Committee and are based on regular monitoring of Lake water levels and aim to maintain the level within the range of 1.7 – 2.0 metres AHD (Australian Height Datum)

GUIDELINES

1. Lake level is checked monthly.
2. Once the average level reaches 1.7 metres assessments on the hydrological state of the catchment, predicted rainfall and drain flow are made. This includes assessment on rainfall and drain flows in following months and the effect these may have on the levels of the Lake.
3. If the predictions indicate the Lake levels will exceed 2.0 metres under mean rainfall and flow conditions the regulated outlet is opened.
4. Ongoing monitoring will determine when to close the outlet.

The aim is to manage the level of the Lake's water to ensure that the final average level of Lake Bonney is as close to 2.0 m AHD as possible at the end of the season.

Water from Lake Bonney was last released in 1993. The effects from two earlier releases on the marine environment north of Cape Banks were subjected to detailed studies in 1989 and 1991 and both confirmed that there were no significant long term effects on the quality of the receiving environment. Sediments were unaffected by these releases and there were no acute toxicant effects and no evidence of bioaccumulation of organic compounds in marine animals.

In addition the Department of Health has indicated that the water quality of Lake Bonney does not pose a threat to the community and water quality complies with Australian recreational guidelines.

For more information contact:

Brenton Gear

Position

Department for Water Land
and Biodiversity Conservation (DWLBC)

Ph: (08) 8735 1111



**Government
of South Australia**