

Regulating water  
on the floodplain of  
Murray Sunset National Park

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# The Living Murray Initiative

- In response to declining health in the River Murray system, the Murray Darling Basin Commission (MDBC) established the Living Murray program in 2002.
- The program, funded by the NSW, VIC, SA, ACT & Australian governments, is one of the world's most significant river restoration projects.
- Initial action to protect and improve the health of the River Murray started with the 'First Step' decision, the focus of which lies in achieving environmental benefits for 6 icon sites along the river.
- Parks Victoria has an interest in 4 of these sites.



SOUTH AUSTRALIA

Chowilla Floodplain (including Lindsay-Wallpolla) ④

The Great Anabranch of the Darling River

Darling River

NEW SOUTH WALES

③

Hattah Lakes

River Murray

②

Gunbower, Koondrook-Perricoota Forests

Edward River

Wakool River

Barmah-Millewa Forest ①

Murrumbidgee River

⑤

Murray Mouth, Coorong & Lower Lakes

VICTORIA

Goulburn River

Mitta Mitta River

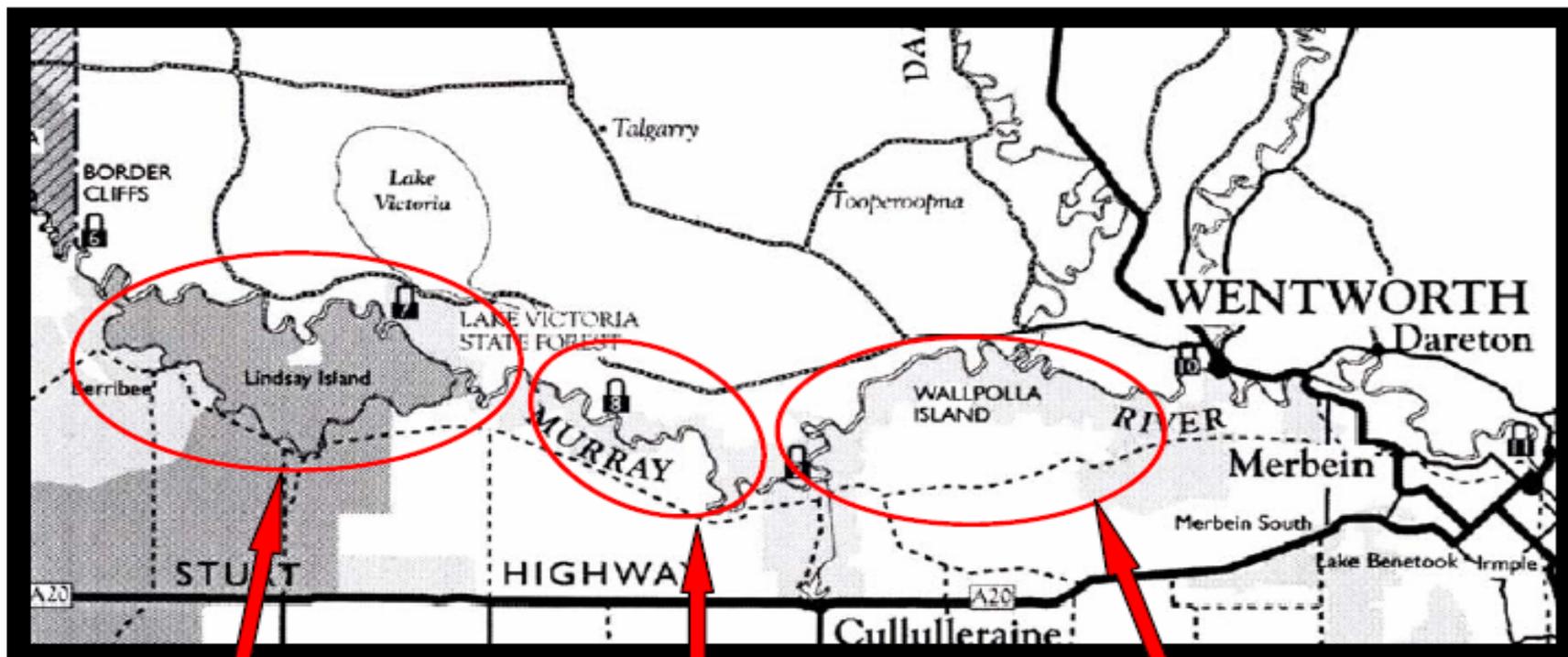
⑥

River Murray Channel

Murray-Darling Basin

# Site Management

- Overall management of each site remains the responsibility of the partner Governments through their land management agencies.
- As land managers, Parks Victoria has been involved throughout the process via project committees.
- As Icon sites areas are eligible for specific programs aimed at enhancing and restoring biodiversity and ecological values through improved surface water management.
- Each site has an EMP that explores the ecological objectives for the site and identifies the volume and timing of environmental water and structural works needed to achieve those objectives.



**Lindsay Island**

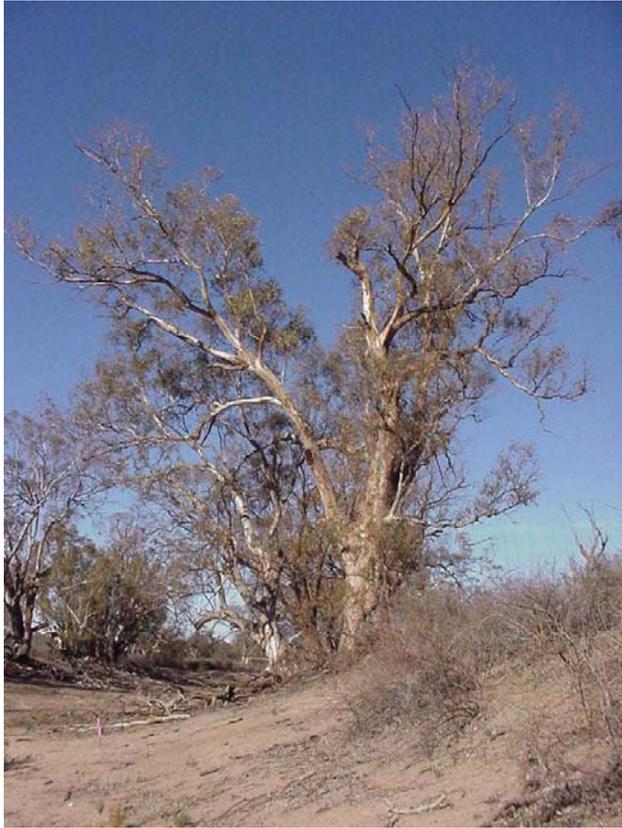
**Mulera Island**

**Wallpolla Island**

# Lindsay Island

- An Island of approximately 20,000ha
- Wetlands range from deep freshwater marshes to freshwater meadows.
- Listed in Australia's Directory of Important Wetlands and protected with the establishment of the Murray Sunset National Park in 1991.
- The area is under threat due to:
  - the reduced frequency, duration and extent of flooding during spring plus reduced flow variability,
  - groundwater salinity,
  - obstructions to fish passage, and
  - grazing of the floodplain.

# Red Gum Recovery



# River Red Gum Rescue

- Floods of 85,000ML/day once occurred on an average every 3.3 years; now every 10.8 yrs.
- This short term project sees water pumped into creeks to assist River Red Gum health while long term initiatives are being developed
- A collaboration between MDBC, Dept of Sustainability and Environment, Mallee C.M.A. and Parks Victoria
- Water is sourced from environmental allocations and voluntary irrigator donations:
  - 2005: 42km of channel, 2,500ML pumped on PV land
  - 05/06: 32 GL, 40 sites, 22 pumps, 2000ha and along 800km of floodplain.

# Water Regulation

- After several years of investigation, including baseline monitoring, water control structures are now being built on Lindsay Island to optimise flows.
- The construction of these proposed structures was subject to the normal approval requirements under the *National Parks Act 1975 (Vic)*.
- Parks Victoria believes there will be a net ecological benefit associated with the operation of the proposed structures, particularly in terms of improved tree health and waterbird breeding.
- The ecological responses to the operation of the structures will be the subject of a long term and rigorous monitoring program.

# Two Projects

1. The raising of the mail route road at Lake Wallawalla by 0.5m and the replacement of existing culverts with large box culverts
  - To allow water to be held at a higher elevation for longer in the event of a natural flood at the lake, enhancing opportunities for breeding events of colonial nesting waterbirds like Egrets, Spoonbills, and Ibis and promoting River Redgum health and recruitment.
2. Installing a regulator structures at Webster's Lagoon
  - To reinstate a more natural wetting and drying cycle, by blocking flows into the Lagoons in Summer and allowing the wetlands to refill during winter and spring. This will promote a greater diversity of water-plants, water-dependant birds, and native fish at the lagoons, while helping to control carp and other exotic species.

# Specifics

- Preliminary due diligence has been undertaken by Parks Victoria to inform this work
- Environmental and cultural officers, plus site monitors will be integral to this work
- Boundaries of worksites and 'setdown' areas have been pegged out
- Vegetation removal will be minimised
- Construction will only take place under dry conditions
- Borrow pits will be rehabilitated
- And the structures will become the assets of MDBC