

GEMMILLS SWAMP WILDLIFE RESERVE

THE WILDLIFE RESERVE
The Goulburn-Broken Wetlands Wildlife Reserve covers approximately 120 hectares of Goulburn River floodplain forest and wetland adjacent to the town of Heongoon. The reserve includes Gemmills Swamp, a wetland of high conservation value, and surrounding areas of relatively natural River Red Gum forest.
Gemmills Swamp Wildlife Reserve is reserved for protection of habitat for significant populations of wildlife, particularly water birds that inhabit the wetlands and adjacent forest areas.

THE MANAGEMENT PLAN

The objective of the 1997 Management Plan were:

- to provide habitat for significant wildlife, including colonial nesting water birds
- to maintain the current diversity and distribution of native vegetation
- to protect a technological and scenic value
- to provide for public recreation consistent with the above objectives

THE GEMMILLS SWAMP MASTERPLAN

The aims of the 2003 Gemmills Swamp Masterplan are:

- to develop a wider community understanding and appreciation of the ecological, cultural and hydrological values of Gemmills Swamp
- to protect a diversity of natural habitats and wetland systems that ensure the preservation and survival of the reserve's fragile ecology and dependent significant wildlife populations
- to identify recreational and educational opportunities that are complementary and compatible with the long term survival and protection of the wildlife reserve

CULTURAL

EXISTING VALUES

Report prepared for Gemmills Swamp Wildlife Reserve, located on the edge of Heongoon. The report identifies 15 known Aboriginal Cultural Heritage Sites within the reserve with a majority located on the western and southern fringes. Site types consist of mostly Surface Scatter, Isolated Artificial and Sacred Trees. The report also reviews proposed management of Aboriginal sites within the reserve. European colonisation of the Heongoon area dates back to 1841 with Gemmills Swamp primarily used for grazing stock and resource harvesting.

MASTERPLAN ACTIONS

- Ensure that local Indigenous communities are consulted prior to and during the Masterplan process to ensure that archaeological sensitive places and sites are recognised and protected.
- Rationalise informal pedestrian tracks and downgrids and close unnecessary vehicular tracks.
- Ensure reserve visitors use formalised shared trail system (non-vehicular).
- Follow management guidelines during the planning and implementation stages of any proposed ground disturbing works.

VEGETATION

EXISTING VALUES

Gemmills Swamp Wildlife Reserve supports three significant vegetation communities, Gemmills Swamp, Closed Forest - River Red Gum and River Red Gum, and Closed Forest - River Red Gum and River Red Gum. Gemmills Swamp is a rare and important vegetation community of the Victorian south-western coastal plain, with a high degree of endemism. It is a remnant of the extensive coastal plain rainforest that once covered the area.

These three dominant vegetation communities support a wide variety of aquatic, fauna and arboreal species. The combined health of the vegetation communities of Gemmills Swamp Wildlife Reserve are critically dependent on the natural watering and drying regimes of the system. Currently, the vegetation communities are threatened by agricultural and residential activities on the fringes of the reserve.

MASTERPLAN ACTIONS

- Undertake a Vegetation Community Study of Gemmills Swamp Wildlife Reserve to determine distribution of vegetation communities within the reserve. This is critical in gaining a better understanding of vegetation requirements and determining appropriate management actions.
- Prepare and implement a Weed Control Strategy as part of the Vegetation Community Study.
- Conduct critical short term weed management of invasive species, where strategies are known to be effective in weed reduction.
- Increase indigenous over-story, mid-story and ground layer vegetation to enhance environmental and habitat value in accordance with the recommendation outcomes of the Vegetation Community Study.
- Management Agency to monitor and reduce fuel loads in the wildlife reserve in accordance with the Management Plan.

WATER

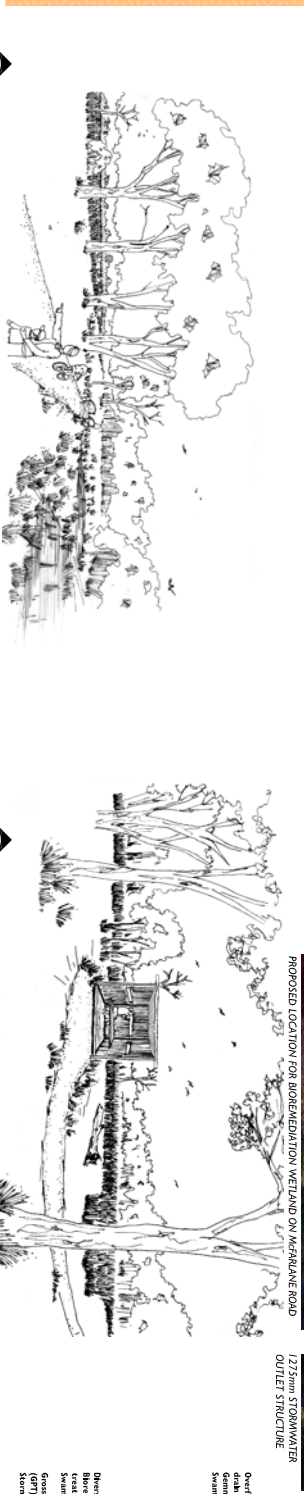
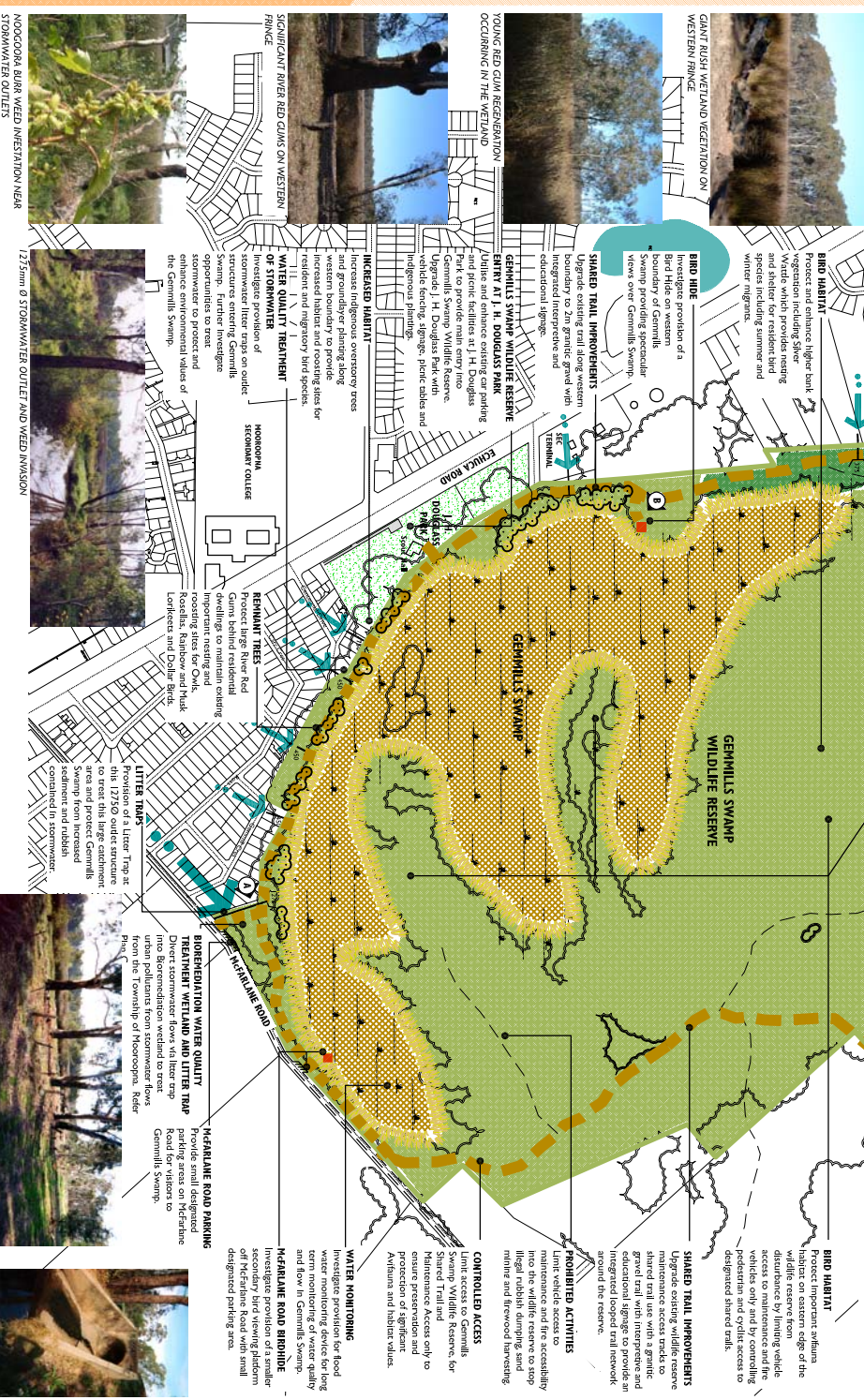
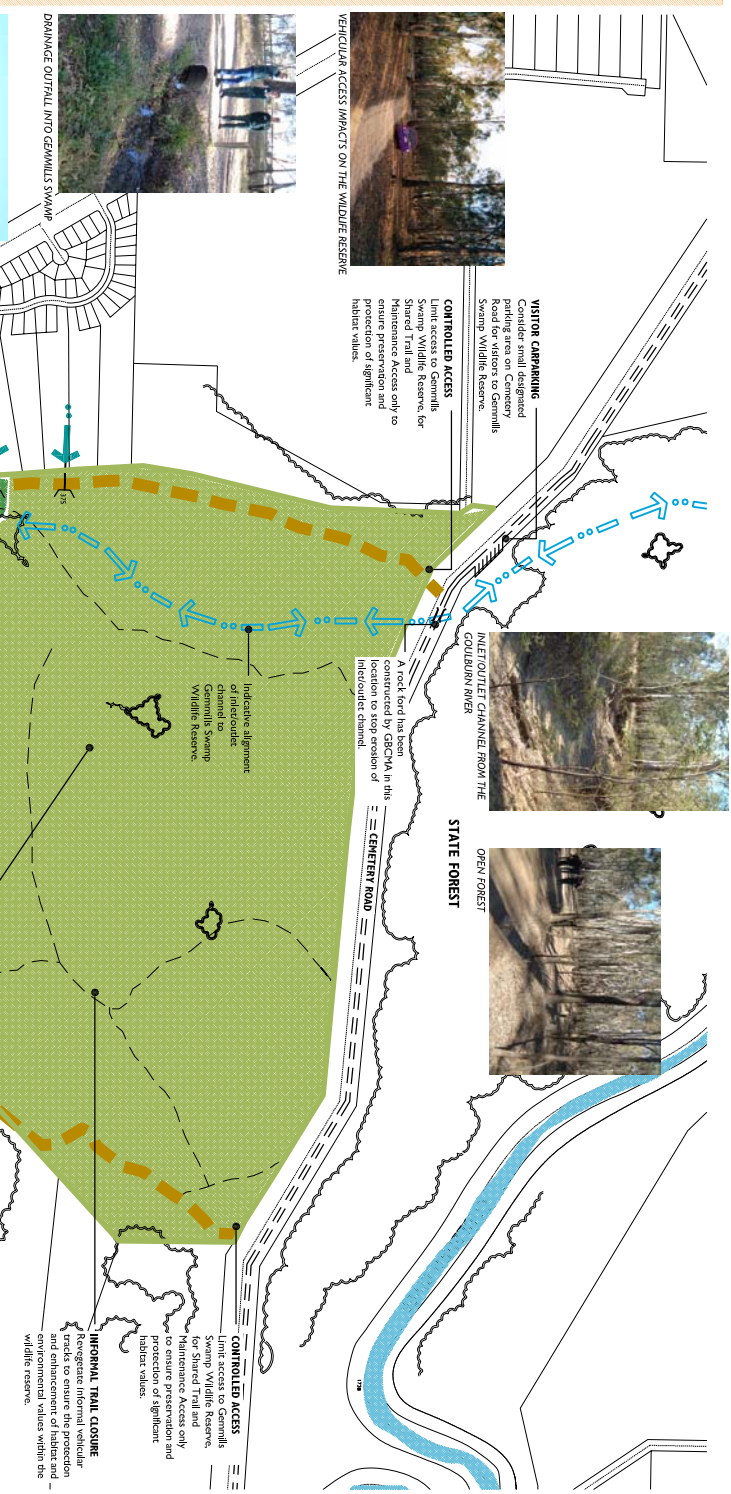
EXISTING VALUES

Gemmills Swamp wetland (declared approximately 84 hectares of the broader Gemmills Swamp) is a wetland of high conservation value. The wetland is a remnant of the extensive coastal plain rainforest that once covered the area. It is a remnant of the extensive coastal plain rainforest that once covered the area.

Urban stormwater flows into the wetland via gullies for considerable lengths on the hydrological, ecological and environmental regions of the swamp that in turn impact on vegetation communities and change in current form and fauna habitation of the swamp.

MASTERPLAN ACTIONS

- Investigate the design and installation of a Bioremediation Wetland on the McFarlane Road 1273m outfall to improve quality of stormwater entering Gemmills Swamp.
- Investigate treatment of larger stormwater outfalls on adjacent reserve entering Gemmills Swamp.
- Undertake a Freshwater Management Plan for the Township of Heongoon.
- Investigate the provision of sediment and litter traps on selected drains to ensure environmental and ecological values are maintained.
- Investigate improved management methods of Lake Copginnup to minimise the potential risk of Algal Bloom entering the Gemmills Swamp.
- Remove existing invasive weed species from outfall areas in accordance with the recommendation of future Weed Control Strategy.



AVIFAUNA AND FAUNA

EXISTING VALUES

Gemmills Swamp Wildlife Reserve provides diverse vegetation habitat for Avifauna (Birdlife), with dense stands of Giant Gum, River Red Gum, Woodland and swamp areas during periods of inundation. It also supports a wide variety of resident, spring, summer and winter migrant bird species. Over a 20-year period, 198 species of birds have been identified and over 90 species of birds have been recorded breeding in the reserve (Gemmills Swamp Management Plan, June 1997). The wildlife reserve also provides habitat for a range of amphibians, reptiles and mammals including the Squarred Tailed Antechinus and the Eastern Water Skink.

Human disturbance (recreation) on the fringes of the reserve has had a decline in bird habitat and breeding, particularly on the western fringe with a majority of species roosting, feeding and breeding along the eastern fringe of Gemmills Swamp and the higher floodplain forest. Significant species have been recorded in the area.

MASTERPLAN ACTIONS

- Undertake an avifauna survey of Gemmills Swamp Wildlife Reserve to monitor bird migration, roosting and feeding sites and habitat requirements.
- Limit recreational activities to shared trail with non-vehicular access to southern and eastern wetland fringe for bird observation.
- Limit vehicular access within the reserve to maintenance and the vehicles only to ensure minimal disturbance of important bird habitat.
- Monitor bird habitat requirements and ensure protection and enhancement of native and indigenous vegetation used for breeding, feeding and roosting sites.
- Restore appropriate seasonal wetting regime of Gemmills Swamp is understood and maintained to provide adequate breeding habitat for key bird species.
- Prohibit the removal of vegetation and threatened to ensure significant habitat is maintained.
- Limit animal access into reserve in accordance with Wildlife Reserve Policies.



RECREATION

EXISTING VALUES

Gemmills Swamp provides for a diverse and compatible range of informal recreational activities including walking, bird watching, nature study and fishing. Some current activities are incompatible with the objectives of managing a Wildlife Reserve including off-road vehicle use (motor, television, wheel drive), camping, shooting, firewood collection and sand extraction.

MASTERPLAN ACTIONS

- Control vehicle accessibility to maintenance and fire management vehicles only to protect the values of the wildlife reserve in accordance with the Management Plan. Uncontrolled vehicle access from flood roads causes severe and unacceptable damage to maintenance tracks, fencing and parked barriers to be located and constructed to efficiently restrict access, and built to withstand damage by vandals.
- Limit pedestrian access to formalised shared trail network to ensure protection and preservation of environmental and habitat values.
- Limit existing on-road bicycle routes along McFarlane Road to proposed City of Greater Shepparton shared trail network.
- Provision of interpretive signage and educational information for Gemmills Swamp Wildlife Reserve to raise greater understanding of environmental values, wildlife, cultural history and hydrology. Signage to be designed and built to withstand damage by vandals.

