



EAST GIPPSLAND
CATCHMENT
MANAGEMENT
AUTHORITY



Bemm River

The Bemm River will be free of willows and fenced from grazing stock.

Message from the East Gippsland Catchment Management Authority

This week we introduce the Authority's goal for the Bemm River catchment. This goal identifies the direction of the Authority's plans to improve river health and water quality along the Bemm River, and its tributaries such as the Errinundra and Combienbar Rivers.

In the main, these rivers are in good condition due to the extensive forested areas that cover most of the catchment. However, in some places land clearing for agriculture has resulted in the removal of native vegetation along the river banks. This vegetation removal has, over time increased the level of soil erosion and reduced the stability of the river bed and its banks.

In this article, we describe this catchment and explain our goal for it. We also look at the threats to the health of this catchment, and recent works undertaken to address these threats.

Leo Hamilton, Chair



Bemm River catchment.

THE BEMM RIVER CATCHMENT

The Bemm River is formed at the confluence of the Errinundra and Combienbar Rivers, 10 kilometres upstream from the small township of Club Terrace. Major tributaries are the McKenzie, Arte and Goolengook Rivers which join with the Bemm downstream of Club Terrace.

The catchment comprises mainly public land, including Cape Conran Coastal Park, Bemm River Scenic Reserve, Errinundra National Park and the Lind National Park. These areas have a broad range of ecosystems including cool and warm temperate rainforest, ancient wet eucalypt forest, coastal heathland and banksia woodland.

The Errinundra National Park (25,100 hectares) in the north east of the catchment contains cool temperate rainforest unique to East Gippsland. Eucalypt forests containing trees over 400 years old are also an important feature in this park. The Errinundra Plateau is the source of seven rivers flowing north, south and east.

The Lind National Park south of the small township of Club Terrace contains a variety of eucalypt forest types such as grey gum, messmate and silvertop ash with areas of Warm Temperate Rainforest in gullies.

Cape Conran Coastal Park (11,700 hectares), along with Marlo Coastal Reserve to the west and Croajingolong National Park to the east is part of the 'Wilderness Coast'. These areas include a diverse range of habitats including sandy dunes, mudflats, wetlands and estuaries that contain healthy and diverse native plant and animal communities.

The Bemm River flows into Sydenham Inlet (included in Cape Conran Coastal Park), a coastal lagoon that is intermittently open to the ocean. The Inlet is an important location for recreational fishers. Lowland wetlands adjoining the Inlet include Swan, Cygnet and Mud Lakes. These are important breeding locations for waterfowl, migratory birds and other aquatic animals.

Beware Reef Marine Sanctuary (220 hectares) is located 5 kilometres offshore, west of the point where Sydenham Inlet flows into Bass Strait. This marine park supports a wealth of marine life that include various types of seaweeds, Bull kelp, Fur Seals, Maori Octopuses and more than 20 species of reef fish including the Long-Snouted Boarfish.

Water quality in the Bemm River and its tributaries was rated Excellent or Good in the 2004 Index of Stream Condition (ISC) report. The ISC combines information on five key aspects of river health - hydrology (flow), water quality (phosphorus, turbidity, salinity, pH), physical form (banks and river beds), streamside vegetation and aquatic life. These high ratings are largely due to the extensive forested areas in the catchment and the limited impacts of human settlement and agriculture.

The Bemm River and its tributaries have heritage river status due to the environmental values associated with these rivers such as cool temperate and warm temperate rainforest areas (from 1200 metres to sea level), long-footed Potoroo habitat, Australian Grayling habitat, native fish diversity in the lower reaches and Sydenham Inlet, and the land form characteristics of Sydenham Inlet.



Sydenham Inlet.

Fertile floodplain areas on the Combienbar River, and along the Bemm River between its confluence with the Errinundra River and the Princes Highway, have been cleared and support mainly beef cattle grazing.

There are two small rivers in the region that are independent of the Bemm River - the Little River which flows into Sydenham Inlet and the Yeerung River (East and West branches) which flows directly into Bass Strait.

CATCHMENT GOAL

The catchment goal states that *the Bemm River will be free of willows and fenced from grazing stock (by 2012).*

Willows were first introduced to the Errinundra and Combienbar Rivers and along the Bemm River to control erosion on river banks where native vegetation had been cleared. Without the protection provided by native plants and shrubs, the banks readily eroded, particularly during major flood events.

Willows were selected because they were easily propagated, fast growing and had a root system that was considered to be effective in stabilising the soil.

However, while willows were often originally planted to provide bank stability and prevent erosion, they have been found to actually increase erosion and flooding and, in some situations cause diversion of the river (avulsion). The rapid spread of willows has also caused many other problems along our rivers.

In 1999, willows were considered to be among Australia's worst weeds, a weed of National Significance, due to their highly invasive nature and negative impact on the environment.

WILLOW CONTROL IN THE BEMM CATCHMENT

In recent years, the Authority has undertaken extensive willow control works in the Bemm River catchment. Willows are now under control along the Errinundra River. On the Combienbar River, willows are also under control above and below the floodplain reach.

On the Combienbar floodplain reach, willow control works are ongoing. Mechanical removal of willows was undertaken in 2004 and 2005, followed by fencing and planting of native vegetation. Follow up willow control has been completed since then. Further willow removal will take place as problems with bank instability at some places are resolved.



Willows, Combienbar River.