Out on the water in Margaret River

Project Title
Protecting the Margaret River Estuary

Project Officer
Drew McKenzie

Water Quality Monitoring
Hayley Rolfe

Aboriginal Representative
Bill Webb

Project Duration
2009-2010

Stakeholders & Funding
Protecting the Margaret River Estuary
Caring for our Country Coastal Community grant

Beneficiaries
General public, tourism operators, community, visitors and the Aboriginal community

All photos: Jen Stevens

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Avoiding problems in Paradise

The Margaret River Estuary is in a beautiful part of the world, with a National Park to its north side, limestone cliffs to the south and a world class surfing spot to the west. But every paradise has its threats and the Cape to Cape Catchments Group has been concerned about degrading processes affecting the Estuary.

To assess the risks and to start addressing degrading processes from increasing visitation, weed invasion and urban and agricultural run-off, Caring for our Country funding was acquired. “We wanted to look at biodiversity, protection of riparian vegetation and water quality, particularly to assess the risk of algal blooms in the future,” says Project Officer Drew McKenzie. “An equally important aspect of the project has been to investigate the estuary’s indigenous heritage. We have worked with local Aboriginal families to draw up interpretative signs for the region which would help visitors appreciate that the estuary has significant heritage value and is not just a pretty spot.”

Sunny paddles and wet sprints

Long sunny paddles on hot summer days or cold wet sprints in wintertime were part of Hayley Rolfe’s workday as she kayaked from the river mouth to the lower reaches of the river near Caves Road to collect water samples – capably aided by a willing volunteer and a water testing kit.

The testing of basic parameters such as temperature, turbidity, pH, and salinity was possible on site, but other samples were sent to a laboratory in order to be analysed for nutrients and the risk of algal blooms.

“Algal blooms come in many varieties and can be unsightly, smelly or toxic. They generally display during summer months and can be deadly for aquatic life. An algal bloom demonstrates that an estuary is out of balance and some ecosystem functions have stopped working. It’s a sure indication that things are going seriously wrong,” explains Ms Rolfe.

Threats to estuaries

The water quality of any body of water is likely to vary during the course of a year. “Throughout this project we wanted to test what happens to the water in the estuary during summer and in winter, to assess the risk of algal blooms, monitor the levels of nitrogen, nitrates and phosphorous and look at turbidity and phytoplankton. So far the results indicate that nutrient pollution isn’t being trapped for long enough in the estuary to cause algal problems in the summer. It is flushing out to sea during the rainy season so there’s nothing to panic about just yet. A report card has been drawn up by the Department of Water, but we do still need to keep an eye on things,” explains Ms Rolfe.

Indigenous values respected

The Margaret River is steeped in indigenous heritage and the rivermouth and estuary are of particular importance with a wealth of heritage listed sites and values. “It was identified early on that the project needed to go beyond

Knock-on effects

Protecting the estuary has also meant addressing the problem of weeds in the National Park and Shire Reserves, which has led on to more general community education.

“Now there is a renewed interest in the health of the estuary, and because we know more about the water quality and riparian environment around it, we can begin to look further – such as instigating ongoing weed control to allow areas to regenerate, thereby encouraging more biodiversity.”
consulting with local elders and raise the community’s understanding of indigenous values and how they can respect these while enjoying the area.” The project was very lucky to have a number of local Wardandi elders share stories but about the area and had these developed into interpretive signage placed at key locations around the estuary and rivermouth.

**Involving our community**

The project worked with local community groups including the Margaret River branch of the Surfrider Foundation and the Margaret River Coastal Residents Association to help manage access to the popular rivermouth and co-ordinate several working bees stabilizing dunes with local brush and seedlings.

The project has helped target further actions. “Previously, we didn’t have a clear picture of water quality or the risk of algal blooms in the Estuary. Now we know that ongoing water quality monitoring is a necessity and weeds are a major threat to the health of the riparian foreshore. Mapping, as well as tackling weeds has been a major positive outcome of the project” explains Drew. “Working closely with Aboriginal people has given us a much better understanding of the heritage values of the area and the ability to provide our community and visitors with more information about how to care for all the estuary’s values.”

**Important targets addressed**

Three Caring for our Country targets were addressed in this multi-faceted project. By undertaking water quality monitoring, involving volunteers, engaging in weed control, formalising access points (a fence was erected from the car park to direct foot traffic away from the regenerating sand dune), brushing and planting activities and putting up interpretive Indigenous signage, various outcomes relating to the following targets have been achieved:-

- Coastal rehabilitation, restoration and conservation
- Engaging volunteers in coastal management projects
- Increasing community knowledge and skills.

**Future considerations**

Funding is being sought for further action including:

- Additional weed control to bring the foreshore back to a natural condition.
- Ongoing water quality monitoring of nutrients, nitrogen in particular, in order to better understand what is coming from the catchment area.
- Additional work with the Aboriginal community is also seen as a priority in order to further educate visitors and tourism operators who use the estuary.
The Wardandi people are the traditional owners of the area extending from north of Bunbury to Nannup and travelling down the Goorbilyup (the Blackwood River) including the Capes region. Their continuous occupation in this region has been traced back 55,000 years—one of the oldest records in Australia.

The caves throughout their country are of great spiritual and practical significance to the Wardandi. Other cave uses include shelter, social gatherings, tool making, birthing places and ceremonies. Wardandi are the protectors of the spirit trails—the pathways across the land to enter the caves. The Wardandi believe that after death the spirits use the caves as a portal back to the dreaming. The spirits travel to the ancient land called Kornup beyond the setting sun.

Thank you for respecting and protecting this heritage site by:
- Leaving no rubbish and litter;
- Not entering the caves;
- Respecting the surrounding vegetation.

Sacred Ground
The significance of these caves and many others in the surrounding areas to Wardandi culture is recognised and protected by their listing as formally registered sites under the Aboriginal Heritage Act 1972.

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