



# Chair's Report

## October 2008

### FOURTH EDITION: COASTAL ENVIRONMENTS AND CRITICAL AQUATIC HABITATS

Queensland's regional NRM bodies are working with many community organisations, industry groups, Indigenous groups and government agencies to protect and rehabilitate coastal environments and critical aquatic habitats.

With the increasing demands on Queensland's coastal resources, namely population growth, there is a great need to recognise and protect the coast's importance and values. Coastal and aquatic managers across the state are taking this into account in their coastal management planning, assessments and activities.

The extensive efforts to manage the state's critical aquatic habitats

and 9500km of coastline support communities, business and industry. Queensland has much to offer in terms of its pristine beaches, rich biodiversity, tropical rainforests, wetlands and the world's largest sand island and coral reef (2002, EPA).

Regional NRM groups and partners dedicate efforts in coastal environment and aquatic habitat management through regional NRM plans and 'on-ground' activities. Coastal and aquatic issues in Queensland range from connections between agriculture and the reef; native fish migrations; wetland rehabilitation; to protecting marine species, such as dolphins. Many of these cases receive support from the Australian

and State governments through funding programs such as Coastcare.

The following stories show a sample of the extensive, collaborative efforts of regional NRM bodies and partners, which continue to strengthen our programs and on-ground outcomes for all to enjoy across Queensland.

MIKE BERWICK, CHAIR,  
QUEENSLAND  
REGIONAL NRM  
GROUPS COLLECTIVE



#### Capricorn Coast dolphins at risk

##### *Fitzroy Basin*

A study funded by the Fitzroy Basin Association (FBA) has found dolphins along the Capricorn Coast may be in danger of disappearing from the region.

FBA's Coastal and Marine Coordinator Shane Westley said it was the perfect opportunity to highlight the plight of the Pacific Humpback and Snubfin dolphins.

The dolphins are both listed as rare under the Queensland Nature Conservation Act 1992.

Mr Westley said, "A four-year study

has confirmed there is a small and isolated population of around 50 Snubfin dolphins between the mouth of the Fitzroy extending to just above Yeppoon.

"While it's yet to be officially documented, it appears the species is not sighted again until north of Mackay and none are found south of the Fitzroy."

"With such low numbers across such a small area, their chances of survival in this region are seriously impacted by issues such as inbreeding, habitat degradation, poor water quality and food availability," Mr Westley said.

"We hope to work collaboratively with groups involved in managing our marine areas to get a plan up and

running that could address things such as boating and fishing practices," Mr Westley said.

Daniele Cagnazzi, a PhD student with Southern Cross University Whale Research Centre, undertook the study, which involved collecting skin samples from both the Pacific Humpback and the Snubfin dolphins to help determine the genetic make-up of the populations.



*Australian Snubfin dolphin*



*Escott culvert increasing fish movements*

## Fish on the move

### *Southern Gulf*

The Department of Primary Industries and Fisheries (DPI&F) in conjunction with Southern Gulf Catchments and Burke Shire Council have completed three Fish Passage projects on the lower reaches of the Nicholson and Gregory Rivers. The completion of these fishways means the natural migration of fish in the lower reaches of the rivers is enhanced.

Tim Marsden (Senior Fisheries Biologist - Northern Fish Community and Fishway Monitoring Team) of DPI&F explained, "While the freshwater rivers and streams of the Gulf region remain in a relatively undeveloped state, they are still

under pressure from human activity that can affect the fish communities of the region. For example, roadways which can create barriers to migration have been built in the region which affects species that spend some portion of their life-cycle in freshwater.

Previous studies have shown that of the 50 species of native fish found in these rivers 24 are migratory species requiring fish passages to maintain healthy population levels.

Southern Gulf Catchments Kate Masters said, "This project is a great example of investment in the region that will have a significant impact on improvement to the natural environment whilst not impacting on the use of existing infrastructure."

## Life's a beach in Sarina

### *Mackay Whitsundays*

Over 60 people from industry and community gathered at Grasstree Beach in Sarina for the launch of the Sarina Beach Coastal Sustainable Landscapes Project in May 2008.

Reef Catchments Mackay Whitsunday Inc. was fortunate to have three Federal Ministers in attendance. The Honourable Tony Burke, Federal Minister for Agriculture, Fisheries and Forestry officially opened the project. Also present were Ms Kirsten Livermore, member for Capricornia,

and Mr James Bidgood, member for Dawson.

Sarina Landcare Catchment Association and Reef Catchments also took the opportunity for Minister Burke to present Coastcare medals to those volunteers who have helped on with the project.

The Sarina Beach Coastal Sustainable Landscapes Project is a three year project to rejuvenate the seven Sarina Beaches. Reef Catchments has now expanded this project to include the Mackay Beaches. Beach Management Plans are currently being developed with Mackay Regional Council.

## Monitoring water quality in the reef catchment

### *Great Barrier Reef*

Two new reports have been released which improve our current understanding of water quality monitoring activities supporting the Reef Water Quality Protection Plan (Reef Plan) actions.

The Water quality monitoring in Reef catchments (June 2008) report outlines what water quality monitoring programs occurred in the Great Barrier Reef (Reef) catchment during 2002-08.

The second report Water quality modeling for the Great Barrier Reef catchment and lagoon (June 2008) is a compilation of modeling activities undertaken in the Reef catchment during 2002-08.

The report captures metadata on current Reef relevant modeling activities and demonstrates modeling packages that can be used to support water quality planning at regional and cross-regional scales. Both these reports can be viewed on the Regional NRM website.



*Royce Bishop, Chair, Reef Catchments; Kirsten Livermore, MP for Capricornia; The Hon Tony Burke, Federal Minister for Agriculture, Fisheries and Forestry; James Bidgood, MP for Dawson at the launch of the Sarina Coastal Sustainable Landscapes Project.*

## Expanding environmental education in the Townsville region

### *Burdekin Dry Tropics*

Schools in the Townsville region are set to get a boost as two environmental agencies officially join forces to expand an innovative environmental education program.

The Great Barrier Reef Marine Park Authority (GBRMPA) and Burdekin Dry Tropics NRM (BDTNRM) are working together to support more schools getting onboard with the Reef Guardian Schools Program in the Townsville region.

The partnership was launched when the organisations welcomed Mundingburra State School as the newest recruit to the

action-based education program.

GBRMPA Chairman Russell Reichelt said the launch at the school showed the close collaboration between the two organisations was already reaping rewards for local schools, particularly smaller schools in the region.

“We’re delighted to work with Burdekin Dry Tropics NRM to give more schools in the Townsville region the opportunity and support to get involved in on-ground Reef protection projects,” he said.

BDTNRM CEO Bob Frazer said working with the GBRMPA to get students involved in Reef protection was an important way to ensure this great Australian icon is protected for the future and to help them understand that our actions throughout the entire Burdekin Dry Tropics Region have an impact on



*Reef Guardians*  
the Great Barrier Reef.

The Reef Guardian Schools program is an education initiative of GBRMPA. Now in its fourth year, the action-based education program involves more than 61 000 students in 148 schools across Queensland. As part of the program, schools develop on ground projects that actively help to protect the Reef.

## There are plenty more fish in the catchment

### *Northern Gulf*

Ecowise, on behalf of the Northern Gulf Resource Management Group (NGRMG), have just completed a survey of freshwater fish and aquatic bugs in the Staaten River Catchment.

Alf Hogan (fish ecologist), Terry Vallance (aquatic ecologist) and Adrian Dickson (environmental scientist) battled the bush to reach unexplored water holes and lagoons in the catchment area.

Using a technique known as ‘electro fishing’, they zapped the water around the boat with a 1000 volt charge that stuns the fish so they float to the top of the water. They can then be identified, measured and returned to the water to swim away unharmed.

The survey found:

- 46 species of fish including the largest ever recorded for one particular species
- water quality in the catchment was excellent
- species that have never been recorded before in the catchment
- unseasonable rainfall in July caused

unseasonable spawning in a number of species

- the lowest incidence of weeds observed by the team in any gulf catchment despite over 100 years of cattle grazing in the area.

Stakeholders contributed greatly to the scientific team with their local knowledge and showed tremendous interest in the results.

The commercial and recreational fishers in the region will appreciate the catchment has been maintained in such excellent condition because there is such a wide diversity and abundance of fish and prawns in the catchment.



*Terry Vallance (NGRMG) with electro fishing backpack*

## Ostwald Bros strike first for Australia

### *Condamine region*

The Loudoun Weir Fishway will be the first fishway in Australia to be completed with financial support from corporate investment. Dalby’s local Civil Construction firm Ostwald Bros have led this challenge assisted by GHD Toowoomba and Arrow Energy to ensure the fishway on Loudoun Weir would become operational in time for the next big rain.

This unique corporate investment bolsters funds from state and federal government funding bodies including the Murray Darling Basin Commission who have identified the Loudoun Weir as a priority barrier to fish passage in the northern part of the basin. Original attempts to solve this problem were supported by Dalby Town Council in the mid 1990s but were undermined by unexpected problems with design and structural damage resulting from flooding and vandalism.

The current project has taken two years to come to fruition and has been driven by Dalby Regional Council and the regional catchment body for natural resource management, Condamine Alliance.

Preliminary planning is underway for the Dalby Demonstration Reach which will be designed using the principles of the Native Fish Strategy to develop and showcase healthy river ecosystems in the region. The Dalby Demonstration Reach will be the flagship project for the Condamine River Rescue Program.

## Reaching out for aquatic recovery

### Queensland Murray Darling

Communities along the Macintyre and Dumaresq Rivers, on the Queensland/ New South Wales border, have been working with government agencies and regional NRM bodies from both states to establish a demonstration reach project.

The project is being coordinated by the Queensland Murray-Darling Committee (QMDC) as part of the Murray Darling Basin Commission's Native Fish Strategy, and has recently received a further \$32,000 from the Commission to support the growing momentum for the reach.

"Demonstration reaches are large-scale sections of rivers or wetlands

where a number of rehabilitation and conservation activities are applied to showcase the cumulative benefits of holistic aquatic ecosystem management," said Megan Purvis, QMDC's coordinator for the Border Rivers Demonstration Reach.

"One of the main aims of the Border Rivers Demonstration Reach is to bring together different rehabilitation methods and resources in one place, not only to maximise our impact, but also to demonstrate to communities how they can help manage our critical aquatic habitats," said Megan.

The project is being guided by a community reference panel, with activities being supported by community groups, council and land managers. To date, the reach project has:

- identified in-stream fish barriers for modification;
- researched native fish species to understand local threats that exist;
- begun promoting aquatic habitat conservation through interpretive signage;
- supported a Murray Cod stocking research project; and
- supported European Carp management projects, like the Goondiwindi Carp Cull.

"The Demonstration Reach has gained momentum, particularly in the last 12 months," said Megan. "With growing support from the community, and the boost in funding from the Commission, we're very hopeful to see some actual in-river activities take place, based on some of the foundational work we've already completed."

## Turtles face extinction

### Cape York

Three species of sea turtle that nest on Western Cape York Peninsula could face regional extinction by the year 2030, according to the findings of a 2006 Turtle Nest Predation Monitoring Program conducted by the Cape York

Peninsula Development Association Inc (CYPDA).

The CYPDA coordinate monitoring of turtle nest predation by Indigenous rangers, funded through the Australian Government.

Brian Benham, CYPDA, said the data collected in 2006 gave a clear

indication of the immediate risk to turtle populations on Cape York's western coastline.

"Because of the urgency of the situation, we are working hand in hand with communities, scientists and all levels of government to formulate an effective response," Mr Benham said.

To find out more about natural resource management projects, visit the 14 Regional Bodies directly or via the Queensland Regional NRM Groups Collective website:  
[www.rgc.org.au](http://www.rgc.org.au)

Digital Chair's report movies are available at [www.landcare.placestories.com](http://www.landcare.placestories.com)

Supported by



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State Coastal Management Plan – Queensland's Coastal Policy (2002), The State of Queensland (Environment Protection Agency). Available at: [http://www.epa.qld.gov.au/environmental\\_](http://www.epa.qld.gov.au/environmental_)

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