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Intertidal seagrass monitoring – A component of the RWQPP monitoring programme

A key component of the Reef Water Quality Protection Plan is the implementation of a long-term water quality and ecosystem monitoring program in the Great Barrier Reef lagoon. Intertidal Seagrass meadows are only one, of many habitats that are being monitored for the effects of changing water quality. The key aims of this project were to:

- a. Detect long-term trends in seagrass abundance, community structure, distribution, reproductive health and nutrient status from representative intertidal seagrass meadows in relation to large river inputs into the GBRWHA.
- b. Detect long-term trends in levels of ecologically significant herbicides and nutrient pollutants from representative intertidal seagrass meadows in relation to large river inputs into the GBRWHA.
- c. To work closely with and involve community partners (Seagrass-Watch) to ensure broad acceptance and ownership of the RWQPP by the Queensland and Australian community.

Eleven seagrass meadows within nine of the GBR catchments from Cooktown to Hervey Bay are currently being monitored. This presentation will discuss the preliminary findings.

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Coastal lakes in NSW – A sustainable future

The ecological health of many NSW coastal lakes and waterways is at serious risk as a result of increasing pressure from human activities particularly urban development, land use intensification and changes to natural lake opening regimes. In 2002 the Healthy Rivers Commission of NSW released an Independent Public Inquiry into Coastal Lakes. The subsequent NSW Government Statement of Intent outlined Stage 1 of the *Coastal Lakes Strategy*. Stage 1 requires the preparation of sustainability assessment and management strategies for a group of priority lakes.

As part of the NSW Comprehensive Coastal Assessment, the Department of Natural Resources and the Australian National University developed Coastal Lake Assessment and Management (CLAM) decisions support tools to underpin the sustainability assessment and management strategy process.

The tool allows a range of management scenarios to be modelled and can incorporate a wide range of social, economic and environmental parameters to assist decision makers assess the impacts of various decisions. The tool has potential to be developed further and can be applied to coastal river systems and other environments.

Although the management strategies have not been completed the methodology has been favourably received and is being adopted more widely throughout NSW and will become part of the NSW Estuary Management process. This paper will discuss the methodology for carrying out sustainability assessments and developing management strategies, their broader application and current status of the project.