

# Final Task Report

**Task Number:** T3.6

**Title:** Port of Thursday Island Seagrass Monitoring

**Start Date:** 01-Mar-04

**End Date:** 31-Jul-04

## Task Contacts

**Task Leader:** Rasheed, Michael

**Task Associate:** ,

## Objectives

### Need (from proposal)

### Significance (from proposal)

## Research Summary

This project was a 3rd party contract with the Ports Corporation of Queensland to monitor seagrasses in the Port of Thursday Island and forms part of the objectives of another task - T3.4. A long term monitoring survey of the port was conducted in March 2004 to compare with a baseline survey conducted in 2002. Results from this survey indicated that seagrass communities at the Port of Thursday Island were healthy. Significant increases in seagrass biomass were recorded for four of the nine monitoring meadows since the March 2002 baseline survey. Seagrass areas of the nine monitoring meadows were all within the ranges previously recorded in March 2002. Minor changes in community type and species composition of several monitoring meadows were identified but these were likely a reflection of greater sampling intensity in the latest monitoring survey rather than these species being absent from the meadows in 2002. Results from this survey were consistent with favourable regional climatic conditions for seagrass growth since the baseline survey. There were no apparent anthropogenic impacts from port operations or developments that influenced seagrass growth at Thursday Island since March 2002.

## Task Associate Comment

No comment available.

## Outcomes/Achievements against each Specific Objective

1: Conduct a monitoring survey of seagrass distribution and abundance for selected monitoring meadows within the port limits of Thursday Island - March 2004

Monitoring survey and reporting for this task was completed

2: Assess changes in seagrass distribution and abundance for the monitoring meadows since the baseline conducted in March 2002

This monitoring survey was the first of planned bi-annual surveys for seagrasses in the port. As such we are still establishing the range of natural change and variability for the seagrass meadows. Early indications are that the seagrass meadows within the port appear to be "healthy" and there have been no major declines since the 2002 baseline.

Results of this program have already been used by the State Government to aid in assessing

development proposals such as the extension of boat ramps and proposed reclamations and by PCQ to incorporate into their oil spill response plan

## **Utilisation and Application of the Research, Commercialisation**

Results of this project have been used by PCQ to assess the marine environment health of their port, to design appropriate oil spill and accident response strategies, and to aid in planning of future port developments that will have minimal impacts on the marine environment.

## **Publications**

### **(Previous Yearly Reports)**

#### **Technical Reports:**

Thomas, R. and Rasheed, M.A. (2004). Port of Thursday Island long-term seagrass monitoring - March 2004. QDPI&F Information Series QI04082. (Queensland Department of Primary Industries and Fisheries, Northern Fisheries Centre, Cairns), 22 pp.

Thomas, R. and Rasheed, M.A. (2004). Port of Thursday Island long-term seagrass monitoring - March 2004. QDPI&F Information Series QI04082. (Queensland Department of Primary Industries and Fisheries, Northern Fisheries Centre, Cairns), 22 pp.

## **Other Outputs**

### **(Final Report)**

Number of Other Public Presentations, eg Seminars and Conference Presentations:

Rasheed MA, Thomas R, McKenna S and Coles RG (2005). Long-term Seagrass monitoring in Queensland ports- revealing links between regional climate and seagrass change. Rainforest meets reef: Joint conference of CRC Reef and Rainforest CRC, 22-24th November 2005, Townsville Australia.

Rasheed, M.A., Taylor, H. and Coles, R. (2006) Long-term monitoring of seagrasses at risk in north Queensland. AMSA conference 10th-13th July 2006, Cairns.

### **1st July 2004 - 30th June 2005**

Media Activities (Television, radio exposure, newspaper or magazine):

Torres Strait radio interview, March 2005 - Dr Michael Rasheed discussing seagrass monitoring program in Thursday Island area

Number of Other Public Presentations, eg Seminars and Conference Presentations:

Conference presentation - Dr Michael Rasheed. Long-term seagrass monitoring in Queensland ports a successful government and industry partnership. Seagrass 2004 conference, Townsville 24th September - 1st October 2004

## **Postgraduate Students**

None reported.

## **Grants & Awards**

None reported.