

# Industries in the Great Barrier Reef catchment and measures to address declining water quality.

#### Introduction

The Cairns Seaport is the most northern major port on the Australian east coast and it is the country's second busiest commercial port.

The Port of Cairns, is owned and operated by Cairns Port Authority (CPA), a Queensland Government Owned Corporation and generates directly and indirectly 12% of the regions employed workforce.

In addition to the management of the Cairns Seaport, CPA's portfolio also includes the responsibility and operation of:

- Cairns International Airport:
  - o The fifth busiest international airport in the country.
  - The Airport directly and indirectly generates 24% of the regions employed workforce.
- Over 1,100 hectares of strategic port land and property; and
- Cityport, an urban waterfront development project adjacent to the CBD

The tropical north Queensland coastal environment in which CPA operates, has outstanding natural values of international renown. Two World Heritage Areas, the Wet Tropics and the Great Barrier Reef, abut each other in close proximity to CPA's operations.

Cityport is Cairns' departure point to the Great Barrier Reef and growth in the region's tourism has been reflected in increasing visitor numbers to the Cairns section of the reef. Great Barrier Reef Marine Park Authority records indicate that approximately 737,000 passengers departed on reef trips in 2000, through the terminals and marina's in the Cityport area.

Furthermore, Cairns is Australia's second largest cruise liner port after Sydney. In 2001, CPA records showed that over 33,900 passengers and crew visited the Port of Cairns on international and domestic cruise liners.

With the Australian Navy's north eastern operations base at Cairns, cruise ship visits are paralleled by frequent visits from Australian and overseas warships and their crews, providing significant economic benefits to the city.

All in all, Cairns is not only one of Australia's most scenic ports; it is one of the busiest with close to 30,000 shipping movements a year.

## Current management approach to activities that influence water quality entering the GBR lagoon.

### **Environment Policy & Environmental Management Systems**

The Cairns Port Authority Environment Policy outlines CPA's corporate commitment to environmental management. CPA is developing an Environmental Management System based on the ISO 14000 standard, which will cover all airport and seaport operations.

CPA currently has an Queensland Environmental Protection Agency approved Integrated Environmental Management System (IEMS) which covers significant environmental aspects of marina operations (CPA operates three marinas in the port), contract dredging, and regulated waste storage and transportation.

The IEMS contains specific objectives and strategies to protect and enhance water quality in Cairns Port. All major works undertaken by CPA or on behalf of CPA require an Environmental Management Plan, which specifically addresses protection of water quality as a key objective. The plans must be approved prior to works commencing.

#### **Ongoing Monitoring Programs**

CPA conducts routine water quality monitoring programs at the airport and seaport including stormwater, receiving waters and discharges.

Project specific water quality monitoring is undertaken for all major development works and dredging programs. In some cases i.e Cityport development the monitoring programs and overall environmental performance are overseen by a scientific advisory group who assist CPA in achieving 'best practice' in water quality protection associated with major works.

#### Research – James Cook University Sedimentology Investigation

CPA recently finalised a three-year sedimentology investigation undertaken by James Cook University (JCU). The project was funded by CPA (\$75,000) and the Australian Research Council (\$225,000).

The project was an independent and integrated study of the sediment dynamics of the Trinity Inlet-Trinity Bay area, Cairns. The study was designed to yield high-quality baseline data concerning water movements, pollution, and sediment suspension, accumulation and transport, from throughout the Cairns near-shore area. The information is particularly relevant to CPA's dredging and ocean disposal programs but has much wider application and interest.

JCU completed the project final report in July 2002.

### **Trinity Inlet Waterways (TIW)**

Trinity Inlet Waterways is a partnership program between CPA, Cairns City Council and Queensland State Government aimed at ensuring the management and maintenance of Trinity Inlet and its catchment as a viable and sustainable ecosystem.

The aim of Trinity Inlet Waterways (TIW) is to support the ecological sustainability of the Trinity Inlet catchment & estuarine ecosystems. This will be achieved through best practice management of land and water based activities to manage and minimise impacts on the land and the marine environment.

TIW management group meets at least four times per year and holds an annual forum open to the wider community and key stakeholders once per year. All partner agencies present their key initiatives to address ecological sustainability and environmental protection. Water quality protection and enhancement is a key issue for TIW and one, which has been given priority.