ENQUIRIES: Joan Crawford **PHONE:** 40443216 **OUR REF:** 521375

10 September 2002

Great Barrier Reef Study Productivity Commission Locked Bag 2 Collins Street East MELBOURNE VIC 8003

Attention: Greg Murtough

Dear Mr Murtough

Invitation to Participate in Great Barrier Reef Study

Thank you for providing the opportunity for Cairns City Council to participate in the preparation of a report on the importance of different industries in the Great Barrier Reef (GBR) catchment and the costs and benefits of various options to address declining water quality entering the GBR lagoon.

Council offers the following attached response to the questionnaire provided.

Yours faithfully

D B FARMER
Chief Executive Officer

Matters on which the Commission seeks comment and information

1. What is the nature and extent of research and monitoring activities relating to land and water uses, water quality and GBR health? What are the main areas of scientific agreement and disagreement on these relationships?

'Cairns Water' Council's water and wastewater services section monitors the following:

- Wastewater discharges from Treatment Plants.
- Ambient monitoring of discharges upstream and downstream of outfalls.
- Biological impact monitoring (focusing on macro-invertebrates) upstream and downstream of outfalls.
- Groundwater monitoring of solid waste and bio-solids storage sites.
- Monitoring of water quality of rural water intakes, upstream and downstream of screening apparatus.
- Monitoring of industrial discharges to sewer (Trade Waste Program)
- Monitoring of Treatment Plant performance (operational testing)
- 2. Are there any particularly useful examples which shed light on the nature and extent of the relationship between land and water uses and the GBR, including areas where multiple factors are seen as contributing to deteriorating water quality?

Background information on the Cairns region can be obtained from:

- Trinity Inlet Management Plan
- Regional Coastal Management Plan (Queensland Environmental Protection Agency)
- Cairns City Council Waterway Strategy
- 3. To what extent might Australia's economic, social and cultural values and international obligations be affected by deterioration in health of the GBR?

The economy of the Cairns region is reliant on the tourism and fishing industries. These industries are both reliant on the quality of the natural environment including the water quality in the GBR lagoon.

4. Should the Commission undertake a more detailed investigation of a few regions or catchments as part of its study to highlight important regional and local issues? If so, which areas are suggested and for what reasons?

Yes.

The Cairns region is recommended for the Commission to undertake a more detailed investigation. It is representative of a large portion of the Queensland coast where the Great Barrier Reef is offshore. The region is capable of demonstrating impacts on the GBR lagoon from areas with high annual rainfall and rapid urban development. The area is also representative of a wide range competing uses that impact on water quality in the GBR lagoon.

Geographic disaggregation

10. Are the proposed levels of regional disaggregation appropriate? If not, please suggest alternatives.

Yes

Economic importance of main industries in 2010 and 2020

11. What growth projections are available for the main industries, particularly in 2010 and 2020?

Background information on the main industries in the Cairn region can be found in: FNQ Industries Study (Department of State Development)
Edmonton Business / Industry Planning Study (CCC And Department of State Development)
FNQ Region Plan (Queensland Department of Communication and Information, Local Government, Planning and Sport)

Current Management approaches

15. What are the principal activities of the main industries that have the potential to change water quality in the GBR lagoon, and how do these industries currently manage these?

Urban Development – stormwater discharge (Coast and Tablelands) – sewer outfalls

Cairns Water operations are managed properly to secondary discharge standards and monitoring undertaken supports this. Implementation of a tertiary treatment upgrade has commenced. Cairns City Council is implementing stormwater quality improvements, both for construction and permanent water quality. Funding assistance is required to hasten the process.

16. To what extent are management approaches like precision fertilizer application or revegetation being used to limit reductions in water quality, and what are the key incentives behind their use/non-use? Are there significant regional variations in the adoption of such practices?

In respect of urban development legislative requirements provide incentives. Developers are required to undertake revegetation or make a significant contribution to revegetation works in urban areas. Other industries such as builders and those involved in earth moving activities are under strict control from both state and local government legislation.

- 17. What industry codes of practice and other voluntary measures have been developed that would influence water quality in the GBR lagoon? Are these effective in terms of the adoption rates and their contribution to improved water quality outcomes?
- Environmental code of practice for agriculture
- Sustainable cane growing in Queensland

- Sustainable fruit and vegetable production in Queensland
- Environmental code of practice for Queensland piggeries
- Queensland dairy farming environmental code of practice
- Environmental code of practice for Australian prawn farmers
- CCC Development Manual soil and water quality plan for urban development. This will be used as a model for the FNQ Development Model which Councils are moving towards adopting as a Regional Development Manual.
- Cairns City Council Stormwater Quality Plan presently being finalized in accordance with EPA legislation.

Policy Options

- 18. Are there policy options which should be given priority for analysis by the Commission? If so, why are the nominated policy options of particular interest?
- a) It is recommended that the Commission should review riparian zone protection. Riparian zones act as a buffer for runoff from developed areas and reduce the sediment loss to water courses. This is a significant problem in high intensity rainfall regions such as Cairns.
- b) Water resources legislation some clarification is needed to identify the boundaries of responsibility of the landowner as well as local and state government tenure.
- 19. To what extent will the assessment of policy options need to take account of variations between and within catchments?

Assessment of policy options need to consider variations between and with catchments in respect of recreational, cultural and social values as well as the significance of individual waterways in specific areas.

21. Could institutional arrangements for managing water quality in the GBR lagoon be improved? If so, how?

Yes.

The Environmental Protection Agency should take an improved leadership role in achieving improvements in water quality in the region. Specifically, funding support should be provided to local authorities in relation to retrofitting of water quality devices to existing urban catchments.

The coordination of management across agencies as well as the sharing of information and data collected on issues affecting each area.