

Productivity Commission
Great Barrier Reef Study
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**Comments Re: “Industries in the GBR Catchment and Measures to Address
Declining Water Quality”, November 2002**

Thank you for this opportunity to provide a response to the Draft Research Report.

I appreciate that the Commission has only had a very short time frame to put together this Report. I’m aware that, given the scale of the perceived problem, some of my comments may seem trivial and pedantic and are too finely honed for the TOR and scope of this Draft Report.

I would like to point out that:

- my comments are based only on the Overview and Chapters 1 and 2, as there has been too little time for me to read beyond that.
- there has also been insufficient time to consult with my peers / mentors or any of my community Waterwatch Members, and so these comments are mine only.
- my comments are drawn from my c.18 months as a coordinator – I am a lay person with only recent experience of water chemistry / physics.

My page references are those from the hard copy of the Draft.

Terms Of Reference (p. iv and v)

I appreciate that the TOR refers (only) to "...water quality entering the GBR Lagoon.", and that the definition of the lagoon includes "... the mainland coast of Queensland."

Comment: the Report does not give due consideration to those wetlands that are an intrinsic part of the coastline i.e. estuaries, and it has virtually no reference to the many coastal freshwater wetlands that adjoin the coast i.e. billabongs, lagoons, soaks, small surface water flows as well as underground water.

The Draft often refers to rivers impacting on the GBR Lagoon per se, and does not mention that poor water quality may / will similarly impact on the health and biodiversity of these coastal freshwater systems. p. 18 only mentions "... state of mangroves and other wetlands (sic)."

In discussing water quality impacts on the GBR Lagoon, it is equally important that the environmental, social and economic impacts that poor water quality has on these filtering systems, be considered. If the health of coastal (freshwater) aquatic systems continues to decline, then this shall in turn contribute to the scale of impacts on the GBR Lagoon.

In the sections I have read, there is insufficient recognition of the environmental and aesthetic values of the coastal system (both fresh and marine). There is no reference to RAMSAR sites for example.

Overview

Key Points (p. xx)

I agree with the conclusions / sentiments as they are listed here, and whilst they are general in nature, I think that some are too conservative. Some specifics:

Dot point 2 recently Dr Norm Duke released his report that directly linked water quality to the mangrove die-back in the Mackay area

Dot point 4 I think it could be argued that daily urban behaviours have a significant impact on water quality and subsequently the GBR Lagoon on small but important areas. There are human sourced gross pollutants, especially plastics and cigarette butts, and contaminants from lawns and gardens, car washing on hard surfaces, dog faeces, etc. Point sources may be “tightly controlled”, but mega-fauna and nearby sea-grasses / macro- and micro-algae are potentially under significant threat.

Dot point 6 I think “would” should replace “could” so that it reads “ – would be beneficial.”

Dot point 7 I would like greater recognition of the role that the community can play in monitoring activities.

Overview

(p. xxi) the last paragraph refers to the uses of land areas adjacent to GBR WHA, but does not list environmental or aesthetic values

(p. xxv) 1st paragraph “low to very low concentrations”. Are the affects / consequences known for these contaminants at these levels? I think the Precautionary Principle should be applied!

(p. xxv) last paragraph – some stressors are listed but climate change, increasing sea temperatures, possibly increasing Crown of Thorns are not included. Precautionary Principle should be applied!

(p. xxvi) 2nd paragraph – I strongly agree with these statements, and (again) given their clarity and succinctness, I think other statements / suggestions could be strengthened

(p. xxvii) Box 1

golf courses – can have a very significant impact in a localised area, especially if the surrounding buffer is small in area

(p. xxviii) 5th paragraph refers to “... fencing off riparian zones.” The Report does not refer to the serious impacts that feral animals (especially pigs) have on water quality. I believe that a lot more attention needs to be given to the eradication of feral pigs to help address loss of water quality, in-stream and riparian values, and biodiversity.

(p. xxviii) last paragraph and its continuation (p. xxix) – I would like this to be a more cogent statement, perhaps recommending banning any further clearing of these habitats.

I don't understand why society continues to allow some (cane) growers (and property developers) to continue to take up marginal cropping land (or vulnerable mangrove habitats) with no apparent recognition of the highly important role of riparian vegetation and / or the significance of remnant vegetation. Coastal ecosystems have been, and continue to be, too highly fragmented with the remaining islands (of 'bush') being further encroached upon and so lost. Cane expansion has no market whilst reducing the natural systems that can help to achieve some sustainability of environment and income.

Chapter 1 Introduction

(p. 3) 3rd paragraph – (again) no reference to the natural environment which is the basis of the (eco)tourism industry

Chapter 2 Water Quality (WQ) in the GBR Lagoon

2.1 Measuring WQ

(p. 10) 1st paragraph – I agree with the sentiments expressed and the suggestion “... that a precautionary approach is required.” Again I think that some comments / recommendations could be strengthened

(p. 10) 2nd paragraph – whilst the “focus” is on ‘rural sourced impacts’, I suggest that the impacts from urban areas not be ignored (ditto p. 14, 3rd paragraph)

2.2 WQ changes

(p. 14) 1st paragraph – please refer to Appendix 1 ‘ACTFR Report No. 02/12’

(p. 17) the only paragraph – it is pleasing to read this reference to “... mangroves; soft-bottom communities, and seagrass” habitats

(p. 23) last paragraph (heavy metals) – please refer to Appendix 1 ‘ACTFR Report No. 02/12’

(p. 27) Sugar cane cultivation – the affects of cane juice on DO levels is briefly mentioned earlier in the Report, but is not referred to in this section

(p. 30) Mining and mineral processing
2nd paragraph

I would like the Commission to consider a broader or perhaps longer ‘catchment approach’. In the event of a fish kill in the upper catchment, I would like to suggest that there may be an impact on the downstream fauna that are relying on a healthy and viable upstream eco-system. The total catchment needs to be considered as a whole and not a series of independent ‘pools’.

3rd paragraph

Townsville has a number of large industries, the prevailing wind is a SE, and (any) discharges would be carried to the coast (and beyond) most of the time

(p. 33) dot point 4, 2nd paragraph

I would like greater emphasis to be given to this key statement

(p. 36 and 37) I welcome these references to the broader coastal habitats and again think that because of the strengths of the arguments presented in this Report, that the statements could be strengthened, and the need for the Precautionary Principle be adopted as a matter of urgency.

Other issues

Urban and rural sensitivities – the Report has a strong rural content with little reference to urban populations.

I appreciate the TOR and the justification as set out “Prelude to an analysis of policy options” (p. xxxv), but urban areas contain the greatest density of people and I believe should be targeted for awareness raising / change of behaviour strategies, re water quality impacts, as the rural sector.

My Waterwatch Project works collaboratively with many producers who are changing land management practices. My concern is that without more broad community involvement in water quality strategy(s), then these pro-active producers will feel as if their work is not be recognised.

There seems to be no reference to the impact that dams have on water quality, habitat values and biodiversity

Tourism and Fishing – impacts

It seems to me that the management of the tourist and fishing industries needs to be tightened to protect those resources upon which they depend for their, and the GBR's, sustainability.

Damming of waterways

I believe that the impacts that existing, and potential, dams have on WQ, in-stream and riparian values, and biodiversity, could fall within the TOR for this Report.

Appendix 1 ACTFR Report No. 02/12

“Water Quality in the Townsville / Burdekin Dry Tropics Region”

This Report was recently completed by John Faithful of the Australian Centre for Tropical Freshwater Research at James Cook University.

The Report is part of the Natural Heritage Trust Project No. 2002153 and provides scientifically defensible water and sediment quality data gathered over a 15 month period.

In brief I would like to draw the Commission’s attention to some key points made in this ACTFR Report which I think strengthens “... difficult to determine generally acceptable baseline standards” (p. 14 and 23).

ACTFR’s Executive Summary notes that some “... notable exceptions (to the ANZECC Guidelines)” were found.

These exceptions relate to Dissolved Oxygen, phosphorus and lead levels were found to either be near (DO) or exceed anticipated levels for Dry Tropics waterways.

DO levels in coastal lagoon systems were found to be far more susceptible to (cattle) disturbance, and anoxic situations quickly develop. “... lagoons were in a highly vulnerable state and would be expected to suffer severe water quality degradation if disturbed ...” ACTFR Report p. 1