

Productivity Commission. Issues Paper.

**'Industries in the Great Barrier Reef Catchment
and measures to address declining water quality'.**

Submission by Johnstone Ecological Society P.O.Box 1917, Innisfail, Q. 4860

Johnstone Ecological Society is a small but highly experienced and active conservation organisation based in Innisfail, Far North Queensland. Members of our Society have been, and are, heavily involved in land management issues pertaining, in particular, to the Johnstone River Catchment. The Chair of the local Landcare group, the Secretary of Johnstone Catchment Management Association and the Chair of the Johnstone Shire River Improvement Trust are all JES members. In addition JES members are involved, as members, on the local pest management committee, crocodile management committee, the Wet Tropics Neighbours committee, the Port of Mourilyan advisory committee and the Advisory Committee of the CRC for Sustainable Sugar Production.

Because the Issues Paper is only partially concerned with environmental matters, JES is not able to comment on a number of the 21 specific questions. This brief response will therefore consist of two parts. Firstly some comments on various points within the text of the Issues Paper; and secondly responses to some of the specific questions raised in the paper.

Comments on points within the Text (by reference to issues Paper page number).

Page 1; para 1. "water quality". It is important to recognise that water quality and water quantity within rivers are strongly linked. (That linkage is not just a direct linkage of the simple variety "the solution to pollution is dilution," but indirectly through economic/industrial systems; cane v banana production.)

Page 3; para 3. "Terrestrial sourced sedimentcoral communities". That is a highly contentious statement. There is substantial evidence that it is not a true statement for the vast majority of the Reef. There is a much higher level of agreement amongst scientists that inner reefs and sea grass may be affected. It is important that crude generalisations are not used (or implied as is frequently the case in the media). The first step in the solution to any problem is proper and accurate identification. Despite the lack of agreement in respect of down stream damage to the GBR, in particular inner reefs and sea grass beds, we consider this to be a matter for which the Precautionary Principle is relevant. Hence JES supports actions to prevent damage to those systems.

Page 3; 1st dot point. Add sewage systems.

Page 4; Mid first para. "...problems appear reasonable....ecosystems." Sublime optimism. Probably untrue that these issues are well understood.

Page 4; Last sentence and on top of Page 5. That is indisputably true - but the problems are far, far greater within the catchments than without. There is no need to apply the Precautionary Principal to this issue! Here is the kernel of JES's problem with the whole matter: the environmental problems WITHIN the Johnstone

catchment (and all others) are monstrous in size, known without argument, and many in number. The problems for the Reef are more restricted both in magnitude and severity - and still being argued. It is important to JES (though not to the Productivity Commission whose task is to look at the Reef, the Reef and only the Reef) that it is recognised that it is not true that if all impacts on GBR were to cease then the catchment would be environmentally satisfactory. It is true that if the catchment were environmentally satisfactory, deleterious inputs from those catchments into the GBR would cease eventually.

Page 5; Dot point 2. This dot point deals with sediment. It is important to add (and to recognise) that there is a vast amount of sediment trapped in all rivers and streams, see for example Bunn *'The influence of riparian vegetation on stream ecosystem health in the Wet Tropics'* and also Liverpool Ck Management Plan. Any idea that sediment moving out of the river would decline immediately if land practices became perfect is simply untrue. That is why our previous comment (re p4/5) ended with the phrase 'cease eventually'.

Page 5; Second last para. "Catchment management groupsresponsibility..." That is probably true, but they have no POWER. It is an old saw that "Responsibility without power is the prerogative of the Eunuch".

Page 6: dot point 1. End of river targets are totally useless as a managerial tool. If the objective is to improve water quality then it follows that it is essential to know the sources of pollution so that remedial action can be taken. What on earth is supposed to happen if it is decided that quality of water at the river mouth is unsatisfactory? Shut everything down? Fine everybody irrespective of their 'guilt?' The whole idea is without value and shows a total lack of understanding of the complexities of environmental problems. It is convenient, at this point, to comment on the attitudes of (some at least) of GBRMPA employees. They make - and state - that problems are (a) easy to solve and (b) cheap to solve. Such an attitude ('thought' would be an inappropriate term) can only be founded on total ignorance.

Page 12; near bottom. Suggest 'revegetating' be replaced by 'rehabilitating'.

Comments on some of the specific questions (by your numbering).

(4) Yes, indubitably, but not regions - which have little ecological significance - but catchments which have. JES urges that the Johnstone catchment be the subject of a 'more detailed investigation' for a number of reasons. Firstly it may be viewed as quasi typical of the Wet Tropics Regions. Secondly, there is a wide variety of agricultural industries resulting from great differences in altitude. Thirdly, and most importantly, there is a vast amount of knowledge already available to the Commission. The Johnstone River Catchment Management Assoc (JRCMA) was the first Integrated Catchment group formed in Queensland. During the ten years since its inception JRCMA has been responsible, in whole or in part, for a large number of projects many of which involved the obtaining of hard data. E.g. nutrient balance throughout the catchment, the precise condition of the Johnstone River in terms of fish health, a detailed management plan for Liverpool Creek (in conjunction with Johnstone Shire River Improvement Trust (JRIT)). A similar management plan for the South Johnstone River is due for completion in a short time, etc. etc. Also, in view of the crucial importance of sea grass condition, it is

noteworthy that Ports Corp Queensland hold a number of records on the condition and extent of sea grass in Mourilyan Harbour. JES opines that the existence of data for this catchment - almost certainly greater than for any other catchment - makes the Johnstone River most suitable for the Productivity Commission especially in view of your tight time schedule.

(11) For the major industries in the lower Johnstone, i.e. sugar cane and bananas, it will be hard to estimate 'growth' to 2010 and 2020. That is because sugar's future depends to a great extent on external factors that determine the world price of sugar; i.e. Brazilian production and the continuance or otherwise of the US and EU subsidies. For bananas the problem is different, but equally imponderable; will bananas from the Philippines or Ecuador be allowed into Australia? If they are then the prospects for the Australian banana industry must be poor. It should be noted that any further change from cane to bananas (or any other intensive horticulture) would have a major effect on the rivers because in this area cane is not irrigated but bananas are. (c.f. our comment re your P1 para.1)

(15) The biggest industry improvement would be the rehabilitation of the riparian zones. Other major matters are water usage vis-à-vis environmental flows, and feral plants and animals. The importance of remnant wetlands is recognised by all. Tragically all of them are under extreme threat from weeds, notably hymenachne and pond apple. Those who 'think' the solutions to our problems are simple and cheap might care to consider the following: wetlands are vitally importantalmost all streams in the lower Herbert Catchment are riddled with hymenachnehymenachne (a Weed of National Significance) is still being planted by graziers as ponded pasture in the upper Herbert.

(16/17) This question raises a most important issue, one that we have touched on in our response to your Page 6 dot point 1. It is a fact and one that is beyond argument, that there is enormous variation between the practices of farmers even within the same industry. JES could easily take you to cane farms that are sustainable in all senses, and to others that are deplorable, shockingly bad. We also know of banana farms that are well managed but others that are dreadful - gross over use of water, bananas growing to the top of steep banks etc. In all industries the variations such as the Issues Paper mentions - precision fertiliser application and revegetation (and water usage efficiency) are widely variable. Variable progress has been made in the efficient use of water in the dairy industry in the upper Johnstone and in the banana industry in the lower Johnstone. A major problem is the lack of a reward or encouragement for good practice. e.g. a dairy farmer who uses advanced irrigation techniques, so saving water, is not rewarded by being allowed to irrigate a larger area.

(18 & text above) If 'specific sources of run-off cannot be monitored' then you (and we) might as well give up for there is no hope of improved management unless and until the polluter(s) is identified.

(19) Absolutely. Obviously ties in with our convictions (certainties) about variabilities to which we have referred repeatedly. It is surely a truism that any management system, applied to anything complex at all, may be either (1) cheap or (2) efficient or (3) neither cheap nor efficient. But it cannot be both cheap and efficient.

(21) Yes. At present there exists, in many catchments, some sort of 'Catchment Management' organisation such as JRCMA. They have no statutory powers. There are also, in some shires statutory bodies called River Improvement Trusts. Of course the whole idea of managing rivers according to shire boundaries is a nonsense. River Improvement Trusts should be eliminated and replaced with catchment trusts that must be statutory bodies with powers similar to, preferably greater than, those available under existing RIT legislation. Furthermore, at present, River Trust membership is dominated by shire councillors. That makes it difficult for Trusts in two ways. Firstly they cannot take a whole of catchment view, and secondly, it is difficult in an area with a small population to deal with riparian landholders at 'arms length'. As a consequence of those serious difficulties it is frequently the case that Trusts seldom (many never, ever) use their powers to pro-actively protect the bed and banks of the rivers. We therefore urge that (1) Catchment Trusts should replace Shire River Trusts, (2) those Trusts should be statutory bodies properly funded by the state, (3) the membership be of people with knowledge and experience of riverine management. That way it is far more likely that the new Trust would discharge its responsibilities in part by the use of its statutory powers and 'without fear or favour'.