

**Comment of the Cardno Environmental Assessment carried out on the Macquarie River  
for Orange City Council in respect of the pipeline from Gardner's Hole.**

**Rod Harrison  
PO Box 1509  
Gladstone BC  
Qld 4680  
0318 892 600**

***Author, Journalist, broadcaster and freshwater fish and habitat scientific fellow traveller***

The EIS carried out by the eco-consultancy firm Cardno on behalf of the Orange City Council is both incomplete and inaccurate. It is highly incorrect in what it states and misleading in what it omits.

The irrefutable fact is that the site of the proposed pipeline take off point, known variously as Dixon's, Gardiners Hole, and Bundi (the property name of Rick Burns, owner of the northern side river frontage) contains significant populations of native fish, including Murray cod, golden perch, silver perch, trout cod, eel-tail catfish and minor indigenous species.

There are comprehensive records that have been studiously maintained over the years by the "Bundi Fishing Club" that attest to those facts.

Noxious exotic species such as European carp, wild goldfish and redfin are also present, but not as sole habitants as the report alludes. It is beyond dispute that the predation from the carnivorous native species has been and still remains a significant, and only, factor in the control of these gazetted noxious fish.

Native species are well distributed along the Macquarie river between Burrendong Dam and a location near Bathurst known as 'the forge.' A natural rock formation there forms a barrier to the upstream migrations of Murray cod, trout cod, golden perch and silver perch.

It is common knowledge amongst scientific and lay person communities that native fish breeding biology's are closely linked with high river flows. Less recognised, perhaps, is that those same fish use river rises to move upstream to re-colonise holes that have been depleted of fish for one reason or another in times of drought.

The location of 'Gardiners' takes on a strategic significance for a number of reasons –

- (1) Volume and depth-wise it is the largest defined "hole" between the Burrendong backwaters and 'the forge.'
- (2) As such it fills a critical niche as a repository for migrating native fish. Fish stocks in 'Gardiners' are supplanted by upstream movement from Burrendong assuming water levels are adequate.
- (3) Upstream movement beyond is dependent on rainwater runoff providing an inter-connectivity between holes that take on a more upland complexion.
- (4) Any reduction in the natural flows and levels at 'Gardiners' would make it difficult, if not impossible for migrating fish to negotiate the next upstream stage, to say nothing of the native fish carrying capacity of the hole.

The sampling methods cited by Cardno are grossly inadequate for a EIS statement of this significance and ignore the fact that the most accurate data on fish populations comes from angler creel surveys, and in the case of specific sampling to enlist the support of anglers having local knowledge. My latest visit (May 2012) with friends to the location resulted in the an afternoon/overnight session resulted in the lure fishing capture and release of eleven Murray cod to 80cms and a single endangered trout cod that I caught. This totally contradicts the Cardno conclusion that “native fish are scarce” and “no endangered species were encountered.”

In summary, the Cardno report is erroneous, misleading and incomplete. The pipeline EIS is long on peripheral detail but comes up short on the major issue of the important/threatened/endangered native fish, a step it avoids by contradicting a major weight of opinion by pretending they are not there. This EIS reinforces the widely held view that some, not all, eco-consultancy firms deliver the desired outcome to clients.

My views and conclusions are based on the following –

- (1) Years spent time on and along the riparian zone of the Macquarie river, generally between the site of Burrendong Dam and the junctions of the Fish and Campbell Rivers, near Bathurst, and more specifically on Gardiners Hole.
- (2) That presence, from 1964 to the present, was engaged on research for books and magazines and law enforcement. I was a member of the NSW Police force with a posting in the district from 1965 to 1972.
- (3) From 1968 onwards, material on the Macquarie River has appeared under my byline in magazines and newspaper columns and articles.
- (4) My Book “Native Fish” has established as an authority in its field. It contains a glowing foreword from Dr. Stuart Rowland, then head biologist with the NSW Fisheries.
- (5) Specimen gathering trips from 1965 with Dr. Tim Berra, an American fish scientist whose post graduate work led to the differentiating between Murray Cod and Trout Cod. These were followed by Murray cod brood stock gathering trips with Dr. Rowland and field work with Will Trueman whose work Tales of the Trout Cod have been published by the Murray/Darling Basin authority.
- (6) My discovery of Murray cod and trout cod in Cataract dam and the existence of hybrids.
- (7) Barramundi breeding programmes in Queensland and impoundment stocking with Drs. Mal McKinnon and Alf Hogan.
- (8) My standing amongst the freshwater recreational fishing and freshwater fish scientific communities and the confidence in which my opinions are regarded.