

## Submission regarding Macquarie River to Orange pipeline project

### OBJECTION

Ref No: 10\_0235

Attention Belinda Scott

This letter is written on behalf of the two hundred and fifty three members of the Friends of the Macquarie

By [REDACTED] Kelso NSW 2795 [REDACTED]

#### Friends of the Macquarie

Friends Of The Macquarie were originally formed to oppose the government proposal to acquire 90000 hectares of land for a Department of Defence artillery range in the 1980's.

The Macquarie River cut through the section of land that was being proposed to be acquired.

This proposal by the government was defeated in 1986 largely because of the uniqueness of the Macquarie River in this section which is now under threat of being destroyed by Orange City Councils irresponsible proposal to pump from the Macquarie River.

The Macquarie River in the section between Bathurst and Burrendong Dam is now more critical to preserve for the future of the population as the river now holds more diversity as far as fish species that occur now in the river. The Friends of the Macquarie were reformed in October 2011 when concerns grew as to the information that Orange City Council were releasing on a regular basis telling the media that the Pipe Line had been approved.

#### Ian Kiernan AO attended our October meeting and became our Patron!

The Friends are made up of landholders along the river, canoeists, anglers, environmentalists, bird watchers, bush walkers and many others who have a close connection the river and the environment and have a demonstrated knowledge far in advance of those who have been employed by the Orange Council to produce reports on the river and associated environments who mostly had never had any experience with the river before being contracted!

It is of our opinion that the reasons the government refused the proposal to establish an army base here in the 1980's are now more relevant to refusing the proposal for the pipe line!

Prior to the pipe line being muted NSW Fisheries were searching for sections of rivers that were still in a relatively wild and pristine condition with flows that were not affected by “ **FLOW REGULATION** “ the first THREAT to native fish in the Murray Darling Basin listed in the book “ Fishes of The Murray Darling Basin written by Mark Lintermans. Mark is an expert fisheries ecologist and has written over 100 papers and reports. His major interests are the ecology and management of threatened species. ISSN 1 921257 20 2

The section identified as the MOST suitable section of river to implement the Trout cod recovery project was the section of river that Orange City Council have proposed to pump from originally for emergency drought relief

NSW DPI had reviewed many rivers and streams to find those suitable to implement the National Trout Cod Recovery Program. See

<http://www.environment.gov.au/biodiversity/threatened/publications/recovery/trout-cod/pubs/trout-cod.pdf>

1. THIS section of river was selected by NSW DPI as the MOST suitable of all sections of the upper Macquarie River and the first releases of Trout cod were made in 2009 these supplemented the already abundant Murray cod as species also **threatened** under the

The **Environment Protection and Biodiversity Conservation Act 1999**.

*One of the Trout cod released in the proposed pipe line area most likely in 2009*



*It should be noted that the Trout cod released in 2009 are just becoming mature enough to reproduce naturally; flow alteration is their biggest threat!*

Also abundant in the river is a healthy population of the **Murray Darling Basin Fresh Water Catfish** also **endangered under** the Fisheries Management Act



**Silver perch** also inhabit the river with many being caught and released from the proposed pump site by angling groups with many pictures taken to document these catches.



**Silver perch are a threatened species** and are subject to the NSW Silver Perch Recovery Program. [http://www.dpi.nsw.gov.au/data/assets/pdf\\_file/0011/230330/NSW-Silver-Perch-Recovery-Plan.pdf](http://www.dpi.nsw.gov.au/data/assets/pdf_file/0011/230330/NSW-Silver-Perch-Recovery-Plan.pdf)

**Freshwater Blackfish** also inhabit this area; many have been caught by anglers while fishing for other species. These have been reported to NSW DPI Fisheries and the areas where they have been caught have been nominated to NSW DPI as area's possibly suited to stocking of the Macquarie Perch under the Macquarie Perch Recovery Program.

**The Endangered Macquarie Perch** are now extinct in the Macquarie River Catchment

*A Freshwater Blackfish caught in the proposed pipe line area, downstream of the proposed pump*



This section of Macquarie River has vast numbers of Golden Perch but numbers can vary during different times of the years. Golden perch are stimulated to move upstream on spawning runs and release their demersal eggs to drift downstream to hatch. These numbers may be severely reduced as they rely on the low warm spring / Summer flows when water temperatures are ideal for spawning.

Pumping water at flows as low as OCC's stated trigger point of 38 Mega Litres will prevent the migration from Burrendong dam to the proposed pump hole due to flows of 26 Mega Litres and lower. A good example of how critical flows are to Golden perch was seen during the latter part of 2005 when significant rainfall caused Ben Chifley Dam to over flow for the first time since the wall was raised (Orange City Water Storage Suma Park also spilled in late 2005) and a large numbers of Golden perch and Murray cod "run "as high as "The Forge" where they are blocked by a natural rock barrier.

Gardiners Hole, the proposed pump hole is the largest fish refuge hole and holds more large breeding cod than any other water hole from Burrendong dam up.



Fishing records have proved time and again that many big cod (one metre plus) inhabit this hole.



The Friends Of The Macquarie have noted many inadequacies during the preparation of the Environmental Assessment by contracted consultants , mostly it seems had no experience with the Macquarie River and Environs .

Firstly an OCC application to have the project assessed as a non-controlled action” by the Federal Government but failed to recognise the Ramsar Listed Wetlands , the Macquarie Marshes were in the Macquarie catchment .

To us this was demonstrated proof that they and the consultants had no real idea of the Macquarie River.

Secondly OCC were advertising that they would only take water from the river at “High Flows” over 30 Mega Litres. This caused us great concern as anyone who knew the river knew that at 30 Mega Litre flow the river itself was in survival mode and could no way afford to have 40% of the flow extracted and sent to Orange.

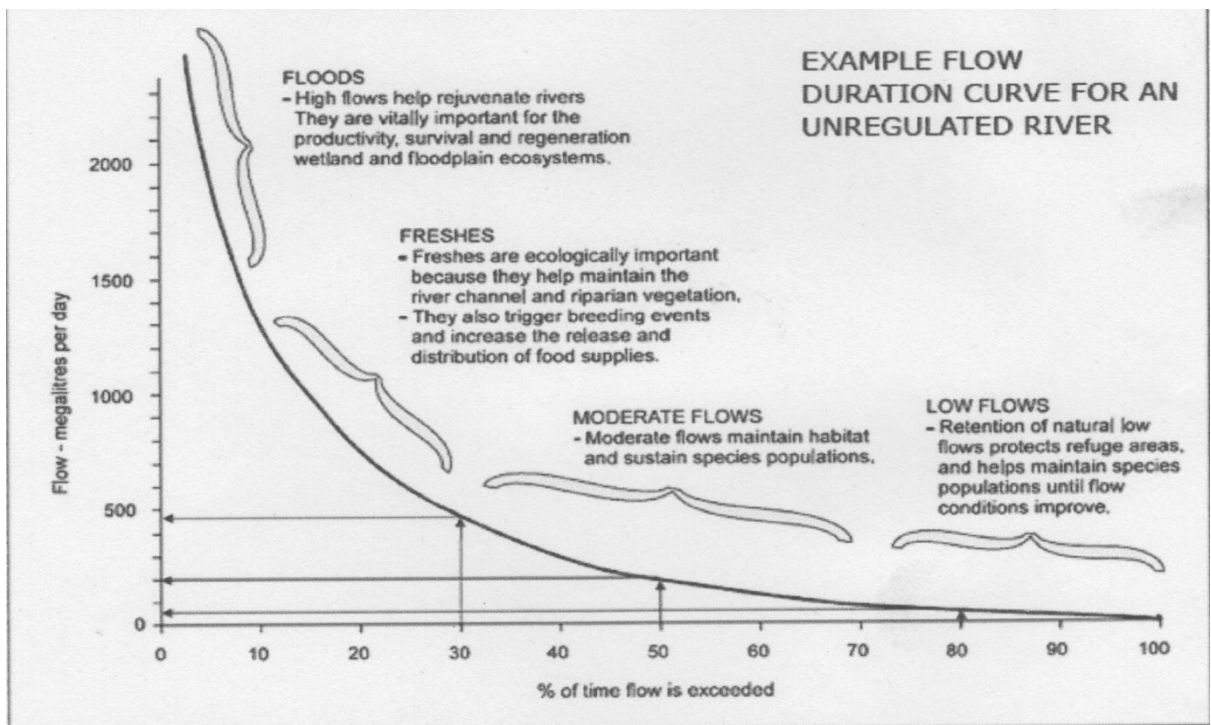
OCC lifted their trigger point to 34 ML and then to 38 ML still a deadly level to be extracting water (now around 32 % of the flow).

OCC were also advertising that they were planning to extract water from the “Jumbo “water hole where in fact the hole they had marked was Gardiners Hole, the Friends corrected OCC at a meeting in their chambers. The Friends were concerned that OCC hadn’t taken the time to get the names and position of pump correct.

OCC contracted a consulting company to do an Aquatic survey but failed to give the consultants any idea of the area that they were required to study.



A 30 mega litre flow in the Turon River 4th November 2011, a flow that OCC called "HIGH "



**NSW Water show low flows to 200 ML, note – Retention of natural low flows protects refuge areas and helps maintain species populations until flow conditions improve!**



GHD were the first consultants contracted and arrived at the Land Holders property Paul Smith who accompanied them to the river. Quote Paul Smith

“The aquatic study was carried out by two guys from a Tasmanian company. They had completed studies on 1 or two creeks that lead to the Macquarie prior to arriving. When they attempted to complete their study on the Macquarie River they were *ill equipped and stated so*. Wading into the river with an electric device to stun the fish was unsuccessful due to the depth of the river and the two metre radius the stunner covers was affected by them being in the river themselves. *A boat was required to complete this satisfactorily and also appropriately sized nets which they did not have with them. They stated they were not informed of the size of the river.*”  
“End quote.

This so called study forms the basis of the Aquatic EA which is very unprofessional and very inadequate.

A further company was contracted to complete the Aquatic study , Cardno was the company and the Friends had a chance to ask some questions to a Cardno representative at a meeting In OCC chambers , our question was to how detailed would their study be “ their reply “ the study due to “ time and money constraints “ would only be a “ SNAP SHOT “ study “ .

To the Friends it now appeared that the studies would be far from adequate as we knew that fish species and numbers would need to be sampled during different seasons over several years to get a true and accurate report of the numbers of species in the river and the actual numbers of fish.

An offer to supply catch records from local fishing clubs as well as many hundreds of photos from anglers as well was never taken up by the consultants.

Cardno visited the study area during a flood period so were not going to get a true and accurate study.

Cardo had the advantage of having the use of a canoe and set a gill net across the river, this gill net recovered Six Golden Perch being 400,420,430,460,460,500 mm and one Redfin 275mm

**Note Cardo in the aquatic EA have incorrectly stated the size of the fish and have showed them to be very small**, they are recorded as being 40, 42, 43,46,46,50 mm , plates 2c and 2d shows the mistake they have made in recording these fish .

The measurements are shown as measured “ fork tail length “ again this is incorrect as Golden Perch have a rounded tail and a catfish have an eel tail , these should be shown as overall length.

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States Fish fauna was **not diverse**, consisting of four alien and one native species;

**No threatened species were identified.**

The Friends would vigourously disagree that the fish fauna is not diverse with many captures of Murray cod , Golden perch , Silver perch , Freshwater Catfish and Freshwater Blackfish and recently a few Trout cod which had only been first released in 2009 in the upper Macquarie. Those caught are logged with the Threatened Species Unit of NSW DPI.

The Trout cod recovery project is set to become a phenomenal success if the pipe line is not approved! It should be noted Ministers must not make decisions detrimental to the recovery project

A suggestion by the patron of the Friends of the Macquarie Ian Kiernan AO a short coming of the consultants being paid by the proponent would find in the favour of the proponent was ridiculed by OCC but in hind sight it appears Ian Kiernan may have been correct in his assumption.

The Friends of the Macquarie also vigorously disagree as no threatened species were found as GHD recovered a total of four Endangered Fresh Water Catfish and these species of Murray Darling Fresh Water Catfish are indeed a threatened species.

Cardno also recovered one endangered Fresh Water Catfish so it brought their total to five recorded, these are part of the large Endangered Population / Community which inhabits the river throughout study area. One only has to observe the round gravel nests made by the Catfish in December / January each year; something both GHD and Cardno could not or would not do.

Interestingly GHD's Aquatic Presentation Cover Picture Shows a Macquarie River in Full Flood where we believe it would give the Minister a truer idea of the state of the river when they would be pumping from the river at a 38 ML level should be shown.



This is a 46 Mega Litre Flow measured on the Bruibun Gauge , OCC believe that a further reduction in this flow by over 17% can still be classed as a " HIGH FLOW " and they will extract a further 12 ML from this paltry flow .

Appendix G shows a degraded Summer Hill Creek

Demonstration of the poor management by Orange City Council of water ways in their catchment.

Suma Park Dam is not far upstream of the photo and Summer Hill Creek is starved of water as OCC has contracted to send up to 10 Mega Litres of Treated Effluent a day **free of charge** to Cadia Mine.

Previously this flow of treated effluent was the life blood of Sumer Hill Creek, once a major tributary of the Macquarie River and a valuable environmental flow

Our opinion is OCC **is irresponsible** and have no concern if the Macquarie River ends up looking the same as the degraded Summer Hill Creek which OCC have a lot to answer for!



Only three of the twelve councillors have bothered to visit the site.

OCC's Engineer Chris Devitt is yet to visit the site!

Orange's deputy Mayor, Jeff Whitton called for the pipe line project to be scrapped as he could find no one that supported it, recently Jeff appeared on local television news stating that the few falls of rain during the last drought would have filled Oranges water supply Suma Park Dam twice using their world class storm water harvesting scheme to its full capacity

! A local solution

The mayor of Orange John Davis a staunch supporter of the pipe line was asked whether he would rule out the transfer of water from the pipe line to Cadia Gold Mine, he would NOT!

It is now being reported that OCC are now considering moving the uptake site as the steep incline into the site may be too dangerous as it has been demonstrated as being in a land slip area! **The Friends believe this invalidates a major part of the EA because the off take site has not been identified.**



This landslide completely blocked the Macquarie River downstream of the proposed pump site.

The Friends of the Macquarie believe much of the project has failed to be adequately assessed. Water flows / levels have been misrepresented as being higher flows than they are in reality

This in the executive summary!

**Certificate** I certify that I have prepared the contents of this Environmental Assessment and to the best of my knowledge:

☑ It is in accordance with the requirements of Part 3A.

☑ **It contains all available information that is relevant to the Environmental assessment of the development.**

☑ **That the information contained in the environmental assessment is Neither false nor misleading.**

Signature

Name Amanda Raleigh

Endangered fish that were found have not being reported as being found only as “could potentially occur “surely **this is false and misleading!**

GHD is assessing the uptake site at **coordinates 33° 0'31.00"S 149°14'23.14"E**

Cardno is assessing the uptake site at **coordinates 32°59'53.94"S 149°13'57.83"E**

**Not only is this misleading and confusing as to date we do not know where the exact uptake site is and we are told OCC are currently exploring a further FOUR sites!**

GHD the first consultant was unprepared for the task at hand and admitted to the fact, GHD assessed the off take site as being a different site to the one Cardno refers to. GHD assessed a site 1.25 kms away from the site Cardno assessed as being the off take site

Cardo undertook a “snap shot “study during a flood period and had no chance of giving a true and accurate assessment of the river and its environs.

We believe that studies need to be carried out by independent ecologists over four seasons of a year and for several years so a true picture of species and numbers of fish can be obtained.

Key gaps in the assessment are;

1. Cardno (2012) states that there are two fish that are likely to occur in the area, Trout Cod and Silver Perch. An assessment of significance as for the EPBC Act was completed for these species. However, an assessment of significance for the FM Act is also required. This assessment requires a 7 part test as described under the TSC Act.

In addition, the FM Act lists 2 additional fish species, one river snail and an EEC as potentially occurring in the Central West region (Table below). While some species, such as the River Snail, are considered to be locally extinct a precautionary approach is required to ascertain the likelihood of these species occurring in the project area and their potential for adverse impact as a due to the proposal.

Scientific Name	Common Name	Status	Profile
<i>Maccullochella macquariensis</i>	Trout cod	Endangered	<a href="#">profile</a>
<i>Notopala sublineata</i>	River snail	Endangered	<a href="#">profile</a>
<i>Bidyanus bidyanus</i>	Silver perch	Vulnerable	<a href="#">profile</a>
<i>Mogurnda adspersa</i>	Purple spotted gudgeon	Endangered	<a href="#">profile</a>
<i>Ambassis agassizii</i>	Olive perchlet	Endangered Population	<a href="#">profile</a>
<i>Aquatic ecological community in the natural drainage system of the lowland catchment of the Darling River</i>	Darling River EEC	Endangered Ecological Community	<a href="#">profile</a>

2. Fish stocking Plan. Here the implications of stocking threatened species, such as Murray Cod, in the project area requires evaluation. Assuming that the Murray Cod fry were released in suitable habitat (at Gardiners Hole, the proposed off-take site) and they can sustain a viable population, then the likelihood of these fish species being subject to a negative impact requires further assessment under the EPBC Act.

3. Management of Key Threatening Processes as listed under the TSC Act were not considered in the proposal. These processes require evaluation to determine whether the proposal would mitigate the processes and how they could be managed to reduce the risk of adverse impacts to the study area and its environs (e.g. downstream).

Relevant Key Threatening Processes are;

- a) Alteration to the natural flow regimes of rivers and streams and their floodplains and their floodplains and wetlands;
- b) Predation by *Gambusia holbrooki* Girard, 1859 (Plague Minnow or Mosquito Fish); and,



- c) Infection of frogs by amphibian chytrid causing the disease chytridiomycosis.
4. One of the potential impacts of construction phase of the project that Cardno describes is the risk of injury or mortality of threatened aquatic species contained in the coffer dams. The aquatic fauna that are considered include; fish, platypi and turtles. In addition, frogs should also be translocated from the coffer dam to edge habitats of flowing water within the river. The pump should also be screened for frogs and tadpoles to minimise entrainment of amphibians when the water is pumped out. In handling the frogs, the OEH chytrid protocol is required to be implemented when handling frogs.

### Recommendations

- Assessments of significance are required for the species listed under the FM Act.
- Evaluation of the viability of stocking threatened fish species at the proposed off-take site is required. The implications of the any ongoing fish stocking in light of the proposal needs consideration.
- Management of Key Threatening Processes as listed under the TSC Act require consideration for the life of the proposal (that is, construction and operation phases).

If the pipe line gets approval then aquatic studies need to be carried out every year that pumping occurs to monitor the effect on the threaten populations of Murray cod , Trout cod , Freshwater Black fish , Freshwater catfish and Silver Perch and the now abundant Golden perch .

We also need to monitor the effects on the introduced species such as European Carp , Redfin and Mosquito Fish to ensure the pumping in low flows does not ( as we know will happen ) cause a mass explosion of the populations of these pest fish to the detriment of our native fish .

This is of National Importance that concise and in depth studies are done to reflect the true and accurate state of the river and fish species and numbers!

OCC have told us that even though their experts couldn't find much there that they would "assume" they were there (refer John Boyd Project Manager at the meeting with Council of Fresh Water Anglers at Bathurst 2012).

What good are assumptions? We stress thorough studies are done so no assumptions are needed.

This small section of river is so diverse as to hold many of the endangered species in the Murray Darling Basin.

Ian Kiernan AO has publicly vowed to fight this pipe line all the way.

Rex Hunt Fishing Legend has publicly stated his stand against the pipe line

Rod Harrison fishing author / angler and journalist travels to this section of river to fish in what he calls a World Class Fishery, Rod has fished throughout the world.

Jim Harnwell editor of Fishing World Magazine has travelled to this section of river and made a video of the fantastic fishing available, see [www.youtube.com](http://www.youtube.com) Cod Country.

Jim and his son Harry far exceeded the results of both Cardno and GHD with very little effort.

Rob Paxavanous is set to visit the proposed pump hole and film the diverse number of species and sheer fish numbers for his national broadcast show " Fishing Australia "

Dr John Harris who has extensive knowledge of this section of river has found the EA to be wanting in many areas and has stated so in a letter to the Environmental Defenders Office who have also indicated that if the pipe line is approved they will help us fight the pipe line in the Land and Environment Court

OCC have indicated they want the water at all costs , one of their media consultants stating that people should have precedence over a " few fish " he has never visited the site and has no intention of visiting the site .

It has been demonstrated that the storm water harvesting program can secure the water supply to Orange. To repair and raise the dam the 1.8 metres that was approved and supposed to commence in 2006 would now see the new improved catchment full and overflowing for the past two years!

Finally we ask that consideration be given to protecting forever one of the last sections of river that to date has been isolated enough to escape the destructive forces of man, until now.

We believe the pipeline proposal should be REJECTED.

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On behalf of The Friends Of The Macquarie

██████████████████ NSW 2795

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