Att: Belinda.Scott@planning.nsw.gov.au

RE: PROPOSED MACQUARIE RIVER PIPELINE REF: 10 0235

OBJECTION TO THE ABOVE PLANNED PROJECT.

Dear Sir/Madam,

I am the landowner occupying the land on which the proposed pipeline will be built between CH1900 and CH5600. The farm address is 'Elebah" 1829 Long Point Rd Mullion Creek 2800.
I wish to address the issues as they are presented in the

Macquarie River to Orange Pipeline Project
Environmental Assessment [The EA]

The quotations from the Environmental Assessment are in italics and underlined, with the referenced page number below the quote.

Executive summary
Scope of the environmental assessment
What are the benefits of the project?
ensure that Orange would have sufficient water to meet demands during any future drought more severe than the worst recorded drought
Page | x

Summary of the findings of the environmental assessment
Hydrology and water security
Water security and system flow impacts

The hydrology and water security assessment indicates there is some flow in the Macquarie River at least 99% of the time,

During the three dry (drought) periods modelled, the
average annual *extraction was 1.0% to 2.4% of the total river flow,*
Page | xi

The Project will not drought proof Orange as the Macquarie river ceases to flow, or is reduced to a negligible flow in dry years and droughts. The statement,

"During the three dry (drought) periods modelled, the
average annual *extraction was 1.0% to 2.4% of the total river flow,"*

defies logic, as there will be no pumping, as the river will not be flowing or flowing at a rate less than 38 ML/day. At the very time that water is needed for Orange's security there will be none to pump.

Land use

Land use impacts during operation would mainly relate to restrictions on the use of land within the easement. Most agricultural activities, such as livestock grazing, would be able to continue.
Page | xvi

As a result of negotiations held between myself, my consultant Mr. Lindsay Johnston, Messer's Stephen Palmer and Graham Eggelston, NSW Office of Water [NOW] and Mr. John Boyd, Pipeline Project manager Orange City Council [OCC] it was agreed that access would be denied to OCC through my lambing paddock during lambing, i.e. between CH1900 to CH4100.
The management of lambing ewes on my property conforms to standard advice as issued by NSW Department of Primary Industries.
See attached "Wean More Lambs", Meat and Livestock Australia March 2004, NSW Agriculture Page 24.

Lambing may take up to 3 months to complete and usually commences in about June/July. Orange City Council has stated that it will shut down the pumping operation during this period if servicing or maintenance of the pipeline or pump station is necessary. This means that no water will be pumped if there is a mechanical or electrical breakdown or breach of the pipeline between CH1900 to CH4100.

The lambing period coincides with the period in drought years when the Macquarie River reaches its maximum flows and the agreed restriction of access will pose a significant negative impost on the Orange City Council calculations of water yield.

Orange City Council must make an allowance in its water yield calculations for the risk of not being able to access the pipeline and pump station to enact maintenance and repairs.

Socio-economic issues

Beneficial impacts as a result of the operation of the project include improved water security and resultant local and regional economic benefits. Increased water security means increased security for beneficial users of water and regional economic growth.
Page | xix

Mr. Martin Haege from Geolyse Pty Ltd has informed me that the Pipeline will only supply water for Orange City with no capacity to supply any other user in the region.

5 Conclusion

The consequences of not proceeding are summarised below:

Orange's future water security would not be assured, and it would be difficult to meet the water needs of current and future populations without extensive water restrictions. Orange could run out of water, even if severe and onerous water restrictions are applied.
Page | xx

This statement is irresponsible scare mongering. During the drought OCC constructed a very successful Storm Water Harvesting scheme, which if stage three had been completed would have maintained Orange's water supply at a safe level during the recent drought.

The need is for a regional water security plan for the Central Tablelands, not an inadequate pipeline from the ephemeral Macquarie River, but a regional pipeline from secure water storage such as Burrendong Dam.

In discussion following a Macquarie Pipeline Consultative Committee presentation on 8 May 2012 at Orange City Council office, Martin Haege from Geolyse Pty Ltd estimated water would only need to be pumped from Burrendong Dam one year in ten.

Part A Introduction
3.3 Location of the project including the pipeline route
3.3.1 Offtake structure and pump station

Access to the site is via an unsealed road. The site is surrounded by the river and steeply wooded banks.
Areas in the vicinity of the site are used informally for recreation purposes. There are no structures or residences in the vicinity of the site. Other than landowners there is no real public access to the site except by river craft.

There may well be some recreational use of the land but first and foremost this property has been and is, a grazing property.

3.3.2 Pipeline
The pipeline is approximately 37 km long, and extends from the Macquarie River in the north, to theSuma Park Dam in the south. The pipeline route is shown in Figure 1.2 and Figure 3.2 (with chainages).
More detailed figures of the route are provided in chapter 6.
The route of the pipeline was determined based on a number of physical factors such as topography, landscape, land use and environmental considerations. The route selection process is described in
chapter 8.
The pipeline would commence at the offtake point on the bank of the Macquarie River. It then continues in a south-easterly direction for approximately 4 km through private property. Following this, the pipeline would continue along (or adjacent to) the road reserves for the following roadways:
Page | 3.6

The selection of the route of the pipeline to the proposed off-take site was made by a vote of Orange City Councilors without any of the pro pipeline Councilors ever having inspected the site, or where the access road would have to be built. The selection of this site was made without any of the Council engineers, including the Project Manage Mr. John Boyd and the Director of Technical Services Mr. Chris Devitt ever having looked at the site identified by Douglas Partners [Report on Geological Inspection Orange

Drought Relief Connection, Prepared for MWH Pty Ltd Project 72151.00 November 2010], who did the initial Concept Investigation Report, as the preferred off-take site.

As a result of negotiations between the NOW and OCC, myself, and landowners Mr. Paul Smith and Ms Sandra Lamb, OCC is now investigating four other off-take pump sites and access roads, three of which are well beyond 2km of the current site.
We have previously written to Minister Hazzard requesting this Environmental Assessment be delayed until the results of OCC's current investigations are completed.

Chapter 6. Project description – project components and operation
6.1 Overview
6.1.1 The project for which approval is sought

avoid ground conditions or services that present significant construction difficulties in terms of logistics, time and/or cost

minor changes to the pipeline route and/or access roads for distances of less than 2 km, such that the route remains in the same approximate location, with similar characteristics to the original location
Page | 6.1

Chapter 7. Project description – Construction
7.2 Construction methodology

7.2.1 Offtake structure
Before the offtake structure and associated pumping station can be constructed, it would be necessary to construct an ***all-weather access road*** *(approximately 4 km long) between the offtake site and Long Point Road.*

The indicative construction sequence would involve:

grading of access road and road cuttings as required
installing road drainage and erosion control measures
placing and compacting road base

7.2.2 Pipeline
Construction corridor
The only exception to this would be in the vicinity of the river offtake where a wider clearing zone of 60 m is proposed to allow access (via the proposed access road switchback) through steep grades (from chainage 00 to 400).
Construction method
Page | 7.2

In steep locations, there may be a risk of rainwater entering the trench, building up pressure and then scouring backfill material out of the trench. To reduce the risk of this occurring, trench stops or impermeable barriers would be installed at strategic locations to divert surface

water away from the trench. At trench stop locations, side trenches would fan out and away from the pipeline trench. These side trenches would be filled with granular material and would permit water collected in the trench to be directed out of the trench and above ground. This would prevent water in the trench from building up sufficient pressure that backfill scouring occurs. The locations of trench stops would be determined during detailed design.
Once a trench has been excavated, granular bedding material would be placed in the base of the trench by an excavator (or similar plant) and levelled.

Page | 7.3
Once the pipe has been laid and joined, backfill would be placed around the pipe with an excavator (or similar plant) and compacted, typically with a hand-held vibrating plate compactor. Backfill material would comprise a combination of excavated trench material (depending on condition) and imported fill. Imported fill would be delivered to site via a tipping truck. Excess backfill material would be removed from site to a suitable landfill via a tipping truck.
Page | 7.4

See my comments below in respect to slope stability.

7.6 Construction access
7.6.1 Access to main infrastructure construction sites
Offtake site
As noted in section 7.2, an access road would be constructed from Long Point Road to the Macquarie River. This access road would be approximately 4 km in length, 3 to 5 m wide and would run through private property. It would be constructed to ensure ***all weather access to the site.***
Page | 7.6

Chapter 8.Alternatives considered
8.3 Alternatives to project components
8.3.1 Offtake structure location and design options
Location options
Page | 8.9
Justification of the preferred option
Close inspection of the riverbank in the vicinity of location MR4 indicated that a location immediately upstream of the confluence with Boshes Creek offered the best access to the river and reasonable performance in terms of the criteria listed above. As a result, this location was selected as the preferred option.
Page | 8.12

8.4 Refining the pipeline route
comply with the preferences of respective land holders
reduce risk of WHS *in the construction and operations phases*
Page | 8.14

An outline for the justification for selecting key sections of the proposed route is provided below. Commencing at the offtake structure at chainage 0 (CH00), the route is located in private property within a 60 m wide corridor up the steep river embankment to CH400. This alignment passes through moderately treed steep slopes, with the majority of trees being re-growth with less than 10 of these trees classed as mature (considered to be a tree measuring 125 cm circumference or more when measured at 130 cm above the ground level).
From CH400 to CH1900 the route is located in private property within a combined 20 m wide corridor. A combined corridor would limit the impact on vegetation. This section passes through moderately treed slopes, the majority of which are re-growth.

[The following description describes the route through "Elebah"]

From CH1900 to CH2700 the route follows existing farm tracks. This location was chosen as the farm tracks have previously been cleared of vegetation, to a width of approximately 8 m. From CH2700 to CH4100 the route passes through private property to cross cleared paddocks. The route has been located to avoid trees.
From CH4100 to CH9600 the route is located mainly within the public road reserve (from CH4100 to CH5600 the road reserve is located in private land). In this section, the pipeline would be located within 8 m of the road. This would place the pipeline in a convenient location when/if the road reserve reverts to public status.
Page | 8.15

Based on the above considerations, the Macquarie River pipeline option was considered to be the preferred option. The availability of a Government grant for the project, whilst not used as part of the assessment process, also makes this option much more cost-effective than the other options.
Page | 8.17

I am only addressing the issues, which relate to the pipeline route and access through my property and that of Mr Paul Smith and Ms Sandra Lamb. Our properties operate as sheep and or cattle grazing farms.
On my property, sections of the pipeline traverse steeply sloping hillsides of highly dispersible soils, which are prone to land slips and erosion. [The area traversed approximately from CH2700 to CH4100] As the result of negotiations with Mr S Palmer and Mr G Eggelston [NOW] and Mr John Boyd [OCC] it was agreed that the route would be altered to reduce erosion risk. **This was not done in the EA**. This omission further raises questions in respect of the reliability of the assumptions, costings and calculations used in the EA.

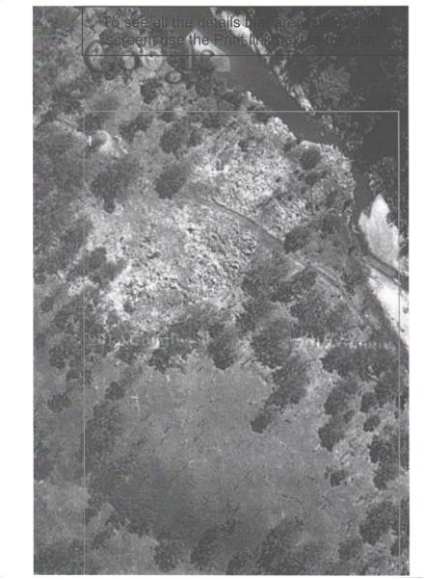
Douglas Partners report, (see attached) with particular reference to points 5.1 page 6, through to point 7.4 page 11 identifies issues of **slope instability.**

" 7.1 Slope Instability
Previous slope instability is noted in several adjacent to or at the investigated pipeline corridors. Steep slopes, at the periphery of a basalt covered plateau crossed by Corridor 1 at MR4 river off-take, include scattered fallen joint blocks to in excess of 3 m greatest dimension."
And
"7.3 Site Preparation
Relevant general earthworks guidelines for the cut to fill operations for access roads and pumping station platforms proposed for the project:"

This section refers to specific design criteria for construction on steep slopes and includes;

"where the ground slopes are steeper than 8H:1V, each layer should be placed and compacted horizontally in a cut and benched formation in accordance with AS3798-2007."

On the adjoining property “Merrinah”, immediately downstream of the Boshes Creek option, as covered in the EA, is a basalt plateau (Horse Bald Hill), almost identical to the one adjoining the pipeline route (Finches Bald Hill). In the early 1960s, the steep hillside fronting the Macquarie River failed, resulting in a landslide of such size that it dammed the Macquarie River for some time. OCC engineers were unaware of this landslide until I presented a slide show of it.



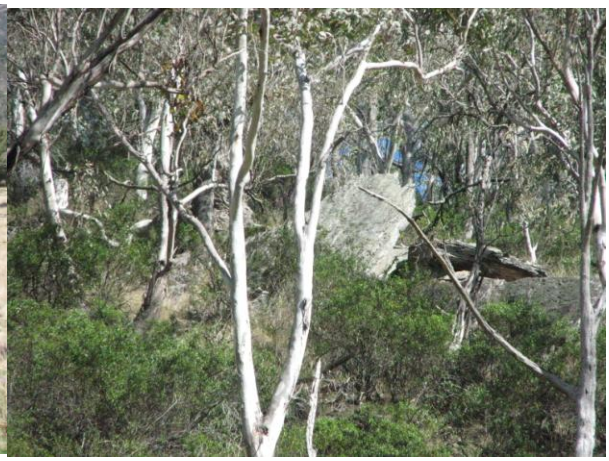
Landslide on “Merrinah” from Goggle Earth.

Landslide on “Merrinah" looking up the slope.

Landslide on “Merrinah .

River valley, P Smith’s property.
Location of MR4, Switchback
and Boshes creek pump sites.
Horse Bald Hill Plateau to the right, middle distance.

Switchback slope beneath plateau leading to 45-degree decline to river.



Large rocks between Boshes Cr and Switchback, evidence of unstable hillside.

The issue of slope instability is of critical importance in relation to determining the appropriate off-take location. Not only does the pipeline have to traverse this approximate 45-degree slope, but so to does the access or service road.

In a chain of email negotiations between John Boyd [OCC], Stephen Palmer [NOW] and Lindsay Johnston [my consultant] Mr Boyd stated,

"Council will not be building the access road to an Australian Standard. It will be constructed to an appropriate safety standard where possible limiting graded to approximately 18%." (Email received 10 August 2012)

"It is of no benefit to Council to construct a road that is likely to fail. As I mentioned on the phone any road constructed would be based on the recommendations of Council's Geotechnical Engineers and the road grades would be in consistent with the NSW FRS (sic) *for a safety point of view."* (Email received 14 August 2012)

I am alarmed that Orange City Council after receiving expert advice appears to have ignored that advice and is now proposing to build a track to Rural Fire Service standards. This obviously ignores the fact that RFS standards are by nature of the proposed use, dry weather tracks for infrequent use. The road to the pump extraction station will be regularly used and will need to be 24/7 accessible in all weather conditions and meet WH&S standards at all times. I consider that landowners could be

exposed to serious legal and commercial consequences if a road on our land is not constructed to appropriate safety and construction standards.

Again I refer to the EA

7.2 Construction methodology
7.2.1 Offtake structure
Before the offtake structure and associated pumping station can be constructed, it would be necessary to construct an ***all-weather access road*** *(approximately 4 km long) between the offtake site and Long Point Road.*

And again
7.6 Construction access
7.6.1 Access to main infrastructure construction sites
Offtake site
As noted in section 7.2, an access road would be constructed from Long Point Road to the Macquarie River. This access road would be approximately 4 km in length, 3 to 5 m wide and would run through private property. It would be constructed to ensure ***all weather access*** *to the site.*
Page | 7.6

And
8.4 Refining the pipeline route
comply with the preferences of respective land holders
reduce risk of ***WHS*** *in the construction and operations phases*
Page | 8.14

Please note the reference to an **all weather access road** and to **WHS.**

I am at a complete loss to understand that Orange City Council should ignore an internationally recognized firm of consultants' advice?

After a meeting held with Orange City Council on 6 August 2012, Orange City Council agreed to assess a number of potential options to avoid some difficulties it was encountering when crossing our farms.
The agreement that emerged at the meeting covered the five options below:

1. Long Point known MR5 (b) in a report to Council prepared by Douglas Partners.

2. An option on a very gentle grade identified by Douglas Partners and known as MR5 (a) (near the Smith/Fleming property boundary).

3. Fishing Hut (identified by Douglas Partners as MR4.

4. A new option identified by Orange City Council between MR4 and the Boshes Creek extraction point. (Switchback)

5. The Boshes Creek option (as covered in the EA)

I believe and accept the advice of Douglas Partners, which is generally in keeping with information I have researched and is supported by local people with many years experience in the Macquarie River valley around Long Point. The major issue to Paul Smith is the grave risk of erosion and landslip caused by improper and inadequate construction on unstable slopes.

I believe it would be improper of Orange City Council to encourage construction of anything that goes against expert advice. In fact I cannot perceive how reliable reports and cost assessments can be prepared unless appropriate construction standards can be met.

Conclusion

Orange's future water security will not be assured by the implementation of this project. To be secure, water needs to be sourced from a secure storage reservoir or dam.

The full implementation of the Orange storm water-harvesting scheme needs to be completed to help maintain the existing storages at higher level.

Government funding needs to be directed towards the greatest benefit for the taxpayers, that is a properly planned regional water security scheme.

I wish to commend the professionalism and assistance provided by staff of the NSW Office of Water in negotiating with Orange City Council.

Attachments
1. "Wean More Lambs", Meat and Livestock Australia March 2004, NSW Agriculture

2. Orange Drought Relief Connection
Concept Investigation Report
6th January 2011
Prepared by MWH

For Orange City Council
this includes
Douglas Partners report on Geological Inspection
Project 72151.00
November 2010

Yours faithfully
Colin Young
15-8-2012

PO Box 27
Orange NSW 2800