

Anna Timbrell - Online Submission from Flora Jean Craig (other)

From: Flora Jean Craig <ianshuttle@ozemail.com.au>
To: Anna Timbrell <anna.timbrell@planning.nsw.gov.au>
Date: 15/06/2010 19:25
Subject: Online Submission from Flora Jean Craig (other)
CC: <assessments@planning.nsw.gov.au>

We wish to object to the method, lack of appropriate consultation and lateness of correspondence from GHD Pty Ltd with reference inter alia, the signing of an agreement for the Pipeline and Water Supply.

The details of the proposed line through my property has not been thought through and lack of face to face consultation in the important first stages was non-existent.

The easement should be outside my property on the Northern end as my land for the proposed pipeline easement is designated low density residential and for stage two of release re G.M.C LEP. The amount offered for the easement will be more than likely challenged if the easement is not located in a different area outside my property.

It can be seen in Chapter 3 Figure 3.3-6 that the pipeline doglegs prior to reaching my property being Lot1/DP 603886.

We will be making a further submission and or objection before the 30th June 2010.

The above has been made by Ian Shuttle
for and on behalf of Mrs F.J.Craig

Name: Flora Jean Craig

Address:
54 Cathcart Street
Goulburn NSW 2580

IP Address: 124-170-4-172.dyn.iinet.net.au - 124.170.4.172

Submission for Job: #1356 Project Application
https://majorprojects.onhiive.com/index.pl?action=view_job&id=1356

Site: #889 Highlands Source Project
https://majorprojects.onhiive.com/index.pl?action=view_site&id=889

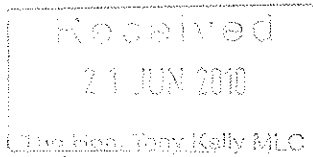
Anna Timbrell

E: anna.timbrell@planning.nsw.gov.au

Powered by Internetix Affinity

Hon. Mr. Tony Kelly MLC
Level 34 Governor Macquarie Tower
1 Farrer Place, Sydney
2000

George Gildea
69 Middle Arm Road
Goulburn NSW
2580
16th June 2010



**Re: Highland Source Project
Part 3A Environmental Assessment
on Public Display 28th May 2010
Submissions Close 30th June 2010**

Dear Mr. Kelly,

Because of the limited time available for public submissions, I write to you as a matter of urgency. You have the opportunity to slow down this engineering debacle and to request that no decision is made until the complete costs are calculated, all the options are properly studied and all those options are widely publicised, before any decision is implemented.

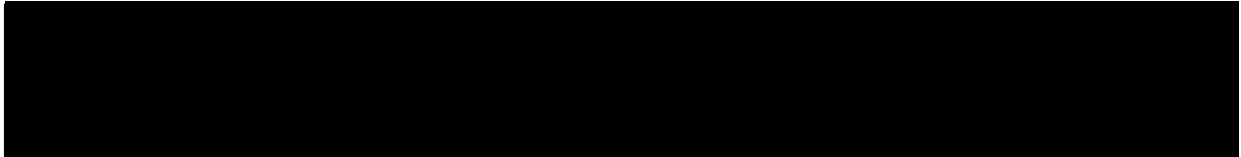
The State Government does not want another botched project using 40% State money, 40% Federal money and 20% Goulburn Council money. The submission by GHD Pty Ltd is so incomplete it is insulting to the Minister.

The final route, and type of water usage, has not been completed by the GHD consultants, who say further costings will be investigated as the project progresses. The two options described in the press publication are major multi-million dollar alternatives and yet no costings are available on specific alternatives that GHD has identified as feasible. Their reply as to why some alternatives were not considered was "... we did not have time."

Mr. Kelly, this is State Government money. What is the agenda? By whom?

Is the 40% from the Commonwealth a lead-in to another insulation debacle? Why the rush? The project was advertised on 28th May 2010, with submissions closing 30th June 2010.

This haste is after five years of bumbling by the local Goulburn Council, who have no experience whatsoever in running a 30 year project, let alone the construction of such. Maintenance and running costs have not yet been quantified.



 announced the estimates of \$54 - \$57 million agreed to the Budget of Loan Funds. This seems nothing short of a **miracle** with GHD stating in their report that major engineering alternatives have yet to be decided!

It is an effrontery to the Minister's office that Goulburn Council would be writing to residents stating that a final route has been decided and will not be altered.

I am an interested landholder in the above project and I have objected to the pipeline crossing 1.5 km of my property - an unnecessary public expenditure and degradation of agricultural land on the northern side of Goulburn. I have 400 acres on the Goulburn town boundary and have been a ratepayer for 50 years. I have offered alternatives, which Goulburn Council have rejected as nonsense.

For 35 years I have had the 23 metre wide Moomba-Sydney gas pipeline under my grazing property and the degradation of the land resulting from that pipeline is clearly visible in images from *Google Earth* - taken from space! It is devoid of normal pasture.

And now Goulburn Council want to take more - an **additional** 20 metre wide strip immediately adjacent to the existing pipeline. They won't even have their vehicles on the existing pipeline scar, yet I have had to live and work on it for 35 years! The proposed project is not simply an underground pipe. It also has concrete pumping stations installed above-ground on every rise and fall of the undulating terrain. There are proposed *six to eight of these concrete structures* proposed for the 1.5km of pipeline crossing my property.

Goulburn Council's waste of money on unnecessary additional survey fees and compensation for the extra 26 metres is simply negligence, not to mention **misuse of State Government funding**.

Maybe they're saying: "*Why not spend up big? Take 80% of government funds, put in just 20% and don't bother about costings - we'll just cut out the Loan Funds.*"

It has been all too easy when Government funds are available. [REDACTED], now designing the extra Goulburn easement, [REDACTED] whose predecessors built the Moomba-Sydney gas pipeline in the mid-1970s. [REDACTED] and now advises Goulburn Council to construct another 20 metre wide easement - staying out of, but right next to, the existing gas / Powertel fibre-optic cable easement.

I urge you, Mr. Kelly, that the gas pipeline correspondence must be examined to stop the pilfering of State Government monies. APA have made millions of dollars out of the gas flowing through the pipeline under so much private land, but were given the easement for a public purpose. They paid the Keating government for the costs of construction:

- but pay nothing annually to farmers or anyone for the passage of gas under their land and the continual traversing of the easement through that private land
- and yet the wind tower operators have to pay an easement fee plus and annual loan fee for the use of such land
- two energy providers both use the existing easement with no annual cost to transport their product
- the gas pipeline was sold with an expectation of 25 years. It has now been in the ground for 35 years.

So, Mr. Kelly, has the APA told Goulburn Council to 'get lost' and stay out of 'our' easement and to go buy another one with State Government money?

What correspondence is available as to why Goulburn Council will not use the existing gas pipeline easement? The Powertel fibre-optic line went within the existing 23 metre gas easement, and no doubt paid to do so.

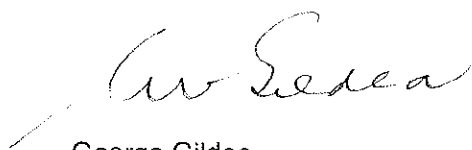
Water for the DA-approved gas-fired power station at Brayton has not been mentioned.

So why is APA forcing Goulburn Council to unnecessarily use State Government money to take extra easement immediately adjacent to the existing one? The Minister must be informed as to why Goulburn Council has been shut out of the public easement, by an independent engineering expert on gas pipelines.

This is an engineering debacle, a political scandal in the making and a permanent scar on the environment. The Minister must be warned of the parochial outlook of Goulburn Council. They are wasting State Government money because of the inadequacy of the report in covering all

alternatives and there is the opportunity for conflict of interest between GHD personnel and Goulburn Council employees.

Yours Sincerely,

A handwritten signature in cursive script, appearing to read "G. Gildea".

George Gildea

Contents

1. Letter of Urgency to Hon. Tony Kelly MLC
2. Comments on Source and Delivery Options Paragraphs 7.2.1 and 7.2.2
3. Emphasis On Source Option 6 With Delivery Option 5
4. GHD Identify Rail Corridor For Direct Input of Water to Goulburn
5. Brayton Gas-Fired Power Station's Need for Water
6. My Personal Objection
7. Use of APA Gas Easement by Powertel
8. Publication On 28th May and Closure on 30th June 2010
9. My Position On Use of Rail Corridor
10. Acceptance of the Rail Corridor
11. My Recommended Option to Pipeline

2. Comments on Source and Delivery Options - Paragraphs 7.2.1 and 7.2.2

The whole tenor of Section 7 - Alternatives is one of parochial constraints imposed by the engineering staff of Goulburn Municipal Council. I read the report as GHD not being committal and being restrained in exercising their expertise to produce a broad community project, frustrated by being confined to the narrow objectives of Goulburn Council staff.

It is not disputed that Goulburn needs the augmented water supply, but State and Commonwealth monies are being used and that places an expectation on the consultants that their final considered and recommended plan would include an analysis of the wider scope they have identified and yet within reach of the common goals expressed by the funding parties.

The State Government is paying for 40% of the project cost and should not allow Goulburn Council staff to convert their 20% of the project to 100% Goulburn's exclusive design.

3. Emphasis on Source Option 6 With Delivery Option 5 - Advantages to Moss Vale, Penrose, Wingello and Towrang

Paragraph 7.2.2 with Delivery Option 5 with Source Option 6 presents a fantastic opportunity to supply water to villages such as Bundanoon, Tallong, Wingello and Penrose and the construction along the rail corridor would not present any encroachment on agricultural land. The soil types along that corridor are sandy, hence the proliferation of pines. The long route presently preferred by Goulburn Council is riddled with granite boulders, slowing construction and increasing cost. Nowhere in the report does it mention water from Wingecarribee already has a pipeline beyond the Bundanoon village - the start of the railway corridor. Enhancing this supply would save millions of dollars.

But above all, the State is crying out for decentralisation and those villages present an excellent opportunity for subdivision of cheaper home sites for those who do not want suburban living - but who need water for modern living and are prepared to pay for such essentials. Even if the pipeline along the rail corridor was dormant for 10 years in serving those towns, it would still serve its immediate purpose to serve Goulburn via Marulan. To travel west across from Exeter, out to Arthursleigh and back to Goulburn is travelling in an unnecessary arc that helps no one and, above all, has no costing on years of maintenance.

GHD commented that Wingecaribee water filtration and accompanying lines would need to be upgraded. Is it not better planning to do the upgrade NOW and improve the Wingecaribee plant to supply suitably treated water to the area, plus eliminate the need for a second treatment plant at Goulburn. You would have the immediate advantage of treated water direct into Goulburn / Bradfordville for instant use. This option eliminates the need for more pipes to the old plant at Goulburn, where another treatment plant is advocated by Goulburn Council. Having two small plants loses the economy of scale.

Surely this is small town parochial thinking and not State Government-level planning? Such parochial thinking will not obtain for the electorate a share of the Federal Treasurer's 36 million people by 2050 - 40 years into the future.

What has Goulburn achieved in the last 40 years? Nothing. The population has effectively decreased. The town stagnated from 1955 to 1975 due to a town council that effectively discouraged industrial development with a 'me first' policy that turned away any prospective industry.

The Wingecaribee update should be done now, to plan for the immediate intention that Moss Vale be the service centre for the Port Kembla Corporation wharf extensions. Moss Vale's infrastructure must be updated to capitalise on the modernisation of Port Kembla. This will reduce the daily cavalcade of residents travelling daily to Liverpool and beyond. The section of the freeway from Mittagong to Sydney has slowed remarkably in the last five years due to increased traffic from this the Southern Highlands.

4. GHD Identify the Rail Corridor for Direct Input of Treated Water Into Goulburn

Furthermore, GHD cite this railway option as entering Goulburn on the speedway end or racecourse Bradfordville reservoir - and to lock into the whole network at this point of entry without travelling pipelines around Goulburn and up the old present water treatment plant at St. Pat's hill.

From a modern engineering perspective Goulburn is presented with new up-to-date technical facilities, at the northern end of Goulburn, with immediate access with treated water to the industrial area and the area favoured by council for residential expansion.

Why pump new water into an old plant, then pump it back to users through old pipes?

Goulburn Council staff are not water engineers. That old Goulburn plant should be relegated to secondary usage with the prime distribution facility, with modern controls, being located on a new site near the speedway or Bradfordville. No treatments annual cost to Goulburn. All treatment would be better done at Wingecarribee, on a more economic scale large enough to attract specialist personnel. Road staff on council payrolls are disappearing to specialist road contractors all over the state. It is inevitable that this pipeline will eventually be sold to private enterprise, as in the UK, because council staff are inefficient operators and the ratepayers will soon object.

In the compensation contract now offered to landholders, Goulburn Council has a clause reserving unto themselves the right to sell the pipeline to anyone, with objection or compensation available to landholders.

Why trammel agricultural land, creating additional desecration, and then to do so, open up new construction easements in a circuitous route to arrive at the old, outdated plant? And such new easements adjacent to the present gas easement Goulburn Council will not even drive over the gas easement. It is ridiculous, and a negligent waste, not to drive on already ruined land.

This water line requires ongoing maintenance, valves to be opened and flooded. Thousands of miles are going to be traversed annually beyond the western side of the freeway, in and out of agricultural properties, on unmade roads. That is thousands of wasted hours of travelling by work crews. Whereas all the travel along the rail corridor is adjacent to sealed roads for the entire length.

Where has the costing been done to compare maintenance and various options?

5. Brayton Gas-Fired Power Station's Need for Water

You are no doubt aware that the NSW State Government has purchased at least 200 acres for a DA approved power station:

- to be fired by the adjacent gas line that passes through Goulburn from Moomba
- to be watered by the 'Goulburn' water pipeline

The Brayton power station is really for the people of Sydney - the same users of the gas line.

That Brayton facility could still be serviced because the rail line joins the highway at Marulan - a short distance from the Brayton power station site. Why has GHD not mentioned the Brayton

power station requirements for water, the quantity required, its effect on the pipeline's size and treated and untreated water usage?

Do the ratepayers of Goulburn know that they are going to be paying for maintenance on a pipeline which is operating for the people of Sydney?

Mr. Kelly, taking a wider view of the needs of NSW and its place within the Commonwealth, and exporting from Port Kembla, surely you must elevate this project beyond the narrow engineering aspect being promoted by Goulburn Council, and you yourself make a broad submission before 30th June?

You can service three new residential areas for decentralisation, already serviced by fast passenger train linking Mittagong to Goulburn. Those three areas are not beyond daily travel to Wollongong. Countrylink buses are a good way to travel from the Highlands to the coast, if you develop the Highlands' villages for people to live in with modern utilities.

6. My Personal Objection

I have suffered the gas pipeline easement for 35 years. The degradation of the 23 metre-wide , 10 acre area, easement is clearly visible even on *Google Earth* images taken from space! (images attached)

APA use that gas line and have made millions of dollars from gas passing daily under my now barren land. I receive *not one dollar* for this annual usage by this corporation. It would be nearly 25 years since any remedial work was done by them on the ground they damaged.

The fibre-optic line uses the same easement. Apparently the owners of the line, Powertel Pty Ltd, paid APA in 2000 to use the easement. No remedial work has been done since. The gas ethane line also uses the easement.

So within a 23 metre wide easement, three large corporations make millions of dollars from product passing under my land, which is visibly degraded and from which I can never properly harvest hay, in my business of beef grazing on 400 acres.

Now the Goulburn Council's Project Officer has written to me stating that they will resume another 20 metre easement, meaning this 1.5km strip of dead earth destroys 20 acres of my farmland.

That is my personal objection.

It is not simply an underground pipe. It also has concrete pumping stations installed above-ground on every rise and fall of the undulating terrain. There are proposed *six to eight of these concrete structures* proposed for the 1.5km of pipeline crossing my property.

In addition, I was not supplied with an appropriate map or plans for this proposal - nothing which contained measurements - until the 6th May this year, and still then nothing with measurements or dimensions on it. But it did include newly-added concrete and steel structures that impede my farming activity. I had written in November 2009 for a professionally prepared map and plan, but was forced to wait **five months** for a reply. *Then we were deliberately ambushed, with no time to brief objecting solicitors and water engineers.*

Goulburn Council state that they chose my land because it is cleared grazing land - they do not want to disturb the public road system. Obviously this is the easy option for Goulburn Council staff, to take more private farm land to feed new water into the old, outdated treatment plant, instead of establishing a completely new entry point for the water into Goulburn that would service three villages, the Marulan industrial and residential areas and the Brayton power station.

Bluntly? Goulburn Council wants to take this land that I have cleared and sown because it is cheaper for me to bear the cost of the pipeline into Goulburn than to have the users of the water be made to pay the council to uproot the streets to carry the pipeline to the outdated old treatment plant.

It is dishonest for Goulburn Council to say that they will accept responsibility for remedial work. The truth is that Goulburn Council has subrogated to its insurers any liability claim against the Council. This means that the landowner has to battle personally with the insurance company, who only have one aim - to maximise profit by minimising claims. They have no interest in, nor accountability for, conserving the productive capacity of the land.

All landowners with active easements bear the burden of potential claims under their public liability policies. The burden of 'not guilty' for any claim lies on the landowner, not the Goulburn Council. Plant or vehicles working on, or left on, the easement are legal risks attached to the landowner. The landowner has the burden of costs to prove no negligence. The easement is a perpetual worry and risk which other landowners do not have to suffer.

Restoration Work

It is totally unacceptable for a City Council to undertake restoration work on an agricultural property. They do not have the funds, the qualified personnel, the experience nor the will. History clearly shows such attempts to have been puerile and subject to the whims and lack of interest of the current council staff.

There must be, inserted into the Compensation Contract, mandatory clauses stating that decriptive ground work, pasture renovation and fertiliser usage will be a contractual obligation, with no subjective appraisal provisos. The description of that obligatory work must be written in to the contract of compensation as a condition of granting the easement, wherever it is located - not a dollar figure, not an assessment.

7. Use of the Easement by Powertel for Fibre Optic Cable to Melbourne

- Clearly Powertel must have paid APA to use the easement in 2000
- Clearly Ethane must have paid APA to use the easement in 1996
- That's three trenches from 2m to 1m deep - and a width of 6m used out of 23m total width

Please turn to the GHD report, Paragraph 7.4, lines 4-5, where in two lines the use of the present easement by Goulburn Council's water pipeline has been dismissed.

- Has APA told Goulburn Council to 'get lost'?
- Has APA asked Goulburn Council to pay?

Can you not demand access to this correspondence of rejection?

This APA group has made millions of dollars and pay **NOTHING** for the annual carriage of gas to Sydney. Unlike wind towers where an annual fee is paid to farmers.

APA purchased the pipeline easement from the Keating government in 1994, with an expected life of 25 years. The pipeline has now been delivering for 35 years with not one cent paid to anyone for delivery of the gas from Moomba to Sydney.

So, Mr. Kelly, is the present State and Commonwealth Government also going to be told to 'get lost'?

[REDACTED]

[REDACTED]

Farmers have taken 150 years to cultivate this land. It is easy prey for the bureaucrats who have no connection to or love of the land that they so willingly desecrate for their own selfish needs, and who are too indifferent to exhaustively examine the non-agricultural alternatives.

The consequences of not using the present gas pipeline easement are that Goulburn Council has been plunged into wasting millions of dollars in unnecessary survey fees, given that detailed maps of the gas line were given to every landowner involved in 1973 - *maps that I have shown to GHD.*

- What a contrast these are to the sub-standard aerial maps being shown to residents at the public display in Goulburn. I believe that these tactics are in contempt of the Minister's authority to insist on public display.

- I have repeatedly requested properly marked maps so that residents can see the effect of the new easement and the degradation to the local environment that this additional easement will cause.

8. Publication On 28th May and Closure on 30th June

It was not until I read the newspaper notice on the hearing that I knew of the public report of GHD. I knew nothing about how the alternatives had been so readily dismissed by Goulburn Council - was this published?

9. My Position and Use of the Rail Corridor

In my view the State and Federal Governments should insist on using the existing rail corridor from Wingecarribee to Goulburn so as to use an excellent opportunity to service the area and population and stop kingdom-building of mini infrastructure in Goulburn at the old site.

10. Acceptance of the Rail Corridor Advocated Above

Such acceptance may not in any way stop Goulburn Council resuming another 10 acres of my land with their additional 20 metre easement.

11. My Recommended Option To This Pipeline

This relies on the delivery of Option 5 in the GHD report - for treated water to enter Goulburn but stop at the speedway or Bradfordville reservoir, for immediate reticulation into the Goulburn network.

In this age of obsolescence and scrapping I can not see how any amount of money spent on a completely new entry facility would not be justified as good engineering practice for the new subdivisions immediately adjacent and the industrial expansion currently in process. It is not some futuristic dream - as opposed to pumping water to the old facility in Goulburn South and then pumping it back over the same terrain to the new subdivisions in need of water.

Page 156 Paragraph 7.6 states that water treatment options have *yet to be finalised* and Paragraph 7.2.3 also states that alternatives *have not been decided*. And yet GHD report Paragraph 7.2.2 states that Delivery Option 5 was dropped.

Of course, this option is in my interest because it keeps probably 10km of new pipeline out of the inner Goulburn City and that eliminates the need to traverse 10km over my agricultural land and several other rural smallholdings. But I am still left with a 35 year old scar from the gas easement and the loss of 10 acres.

Mr. Kelly, I ask you - who is running the agenda for this pipeline? Goulburn Council amateurs are funding \$10 million - only 20% of the total cost - yet are still undecided on major input alternatives.

Clearly it is not GHD, with such indecision and options not finalised. Their report states that they "did not have time" for Options 2 and 3 on p.150. Is this how we will decentralise NSW?

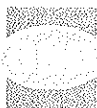
Mr. Kelly, are you prepared to stand by and do nothing to stop the squandering of State and Commonwealth Government money on a badly prepared submission?

The submission is not worthy of the GHD consultant's organisation, which has supervised numerous successful projects both in and out of Australia. Paragraphs 7.6.1 and 7.6.2 clearly state that these decisions have not been made.

How can a submission be accepted by the NSW State Government and the Commonwealth Government when there is no recommendation from the consultants how the funding will be utilised?

Just who will decide these options? What participation will the public and affected landholders have?

This indecision is making a mockery of this present submission date to the Minister.



7. Alternatives considered

7.1 Overview

Alternatives for the Project were considered in three stages:

1. Consideration of all the available options for securing Goulburn's future water supply;
2. Consideration of further options to secure Goulburn's future water supply including the investigation of three preferred options for the construction of a pipeline to supply water to Goulburn; and
3. For the construction of a pipeline from Wingecarribee Reservoir to Goulburn, investigation of five different route options.

Water treatment options are currently under consideration for the Project. These options require different plans and designs at either end of the pipeline (Section 7.6).

7.2 Water source and delivery options

Critical levels in the Goulburn water supply dams forced severe water restrictions to be enforced on the Goulburn community in 2007. The use of available water in the community was restricted to priority household uses and water saving measures were implemented by the Goulburn community. As a result, the only option to secure Goulburn's water supply into the future was to investigate an alternative water supply.

A workshop was held in April 2007 to determine and discuss the water source and delivery options available to secure the future of Goulburn's water supply. The workshop was attended by the Proponent, Wingecarribee Shire Council, Sydney Catchment Authority (SCA), NSW Department of Water and Energy (DWE) (now known as Environment and Infrastructure) and the NSW Department of Commerce (GMC & DoC, 2007).

7.2.1 Source options

The following water source options were identified and considered:

1. Extract unfiltered water from Wingecarribee River at the disused Berrima Cement Works Dam;
2. Extract unfiltered water from Wildes Meadow Canal (i.e. between Fitzroy Falls Reservoir and Wingecarribee Dam);
3. Extract unfiltered water from Medway Dam;
4. Extract unfiltered water from Bundanon Dam;
5. Extract unfiltered water from Wingecarribee Dam; and
6. Supply filtered water from Wingecarribee Distribution System.

A summary of these options, as discussed in the Drought Emergency Pipeline Route Corridor Option Study (GMC & DoC, 2007), is provided below.

Source Option 1: Extract raw water from the Berrima Cement Works dam

The disused Berrima Cement Works Dam is an on-stream storage located on the Wingecarribee River, some 20 km downstream of Wingecarribee Dam near the township of Berrima. The dam wall is in close



proximity to the Hume Highway and near the intersection with Illawarra Highway. The main source of water comes from the releases from Wingecarribee Dam.

Although the extraction and transfer of water from this source to Goulburn could significantly reduce the length of pipeline it was considered as an inefficient means of extracting the Wingecarribee Dam water. This is because of the potentially high in-stream losses and the potential for diversion of released water by users along the river reach.

Concerns were also raised over releasing significant quantities of water above the target requirement of 5 ML/d and the impact this release could have on the overall negotiations of changing environmental flow requirements downstream of Wingecarribee Dam.

This option was not considered further as an extraction source option.

Source Option 2: Extract raw water from Medway Dam

Medway Dam is an on-stream storage located on the Medway Rivulet and is the source of water supply to the township and residents of Berrima. The dam has a capacity of 1 400 ML and is owned and operated by WSC.

The reliability and sustainability of the Medway Rivulet flow is not known and that WSC's drought security to Berrima residents is based on releases from Wingecarribee Dam. It was recognised that significant additional studies would be required to establish the reliability and sustainability of the Medway Rivulet flow and that such studies are unlikely to be completed within the short timeframe required to complete the Project.

This option was not considered further as an extraction source option.

Source Option 3: Extract raw water from Bundanoon Creek Dam

Bundanoon Dam is an on-stream storage located on Bundanoon Creek and is the source of water supply to the townships and residents of Bundanoon and Exeter. The dam has a capacity of 2 100 ML and is owned and operated by WSC. The reliability and sustainability of the Bundanoon Creek stream flow is not known and that WSC's drought security to Bundanoon and Exeter residents is based on releases from Wingecarribee Dam. Again it was recognised that significant additional studies would be required to establish the reliability and sustainability of the Bundanoon Creek flow and that such studies are unlikely to be completed within the short timeframe.

This option was not considered further as an extraction source option.

Source Option 4: Extracted raw water from Wildes Meadow Canal

SCA's Burrawang Pumping Station located in a cut at the northern end of Wildes Meadow Canal is used to deliver water from Fitzroy Falls Reservoir into the Wingecarribee Reservoir to supplement the water supply to Sydney and Wollongong.

The proposed point of extraction would be close to the pumping station that lifts the canal water into the tunnel to Wingecarribee Dam. If the extraction point became the preferred source then further analysis would need to be undertaken in conjunction with SCA's current and future operating requirements.

SCA staff also indicated that Fitzroy Falls Reservoir also has occasional blue-green algal blooms. Although, power supply may be readily available for the pumping facility it adds an additional pipe length of approximately 5 km.



The option was retained as a less favourable or fallback option. No further analysis was undertaken.

Source Option 5: Extracted raw water from Wingecarribee Dam

The Wingecarribee Dam is owned and operated by SCA. The dam has a capacity of 25 900 ML. The dam receives water from both the local Wingecarribee River catchment and transfers from Fitzroy Falls Reservoir. Due to environmental requirements the operating level of the storage is maintained within a narrow bandwidth. Extraction of water to Goulburn was identified as unlikely to have an impact on dam operation and supply commitments. For example, 5 ML/d extraction equals 1 800 ML/a. This annual transfer is equivalent to slightly more than Sydney's 2006 average daily demand (1 500 ML/d) and would therefore have negligible impact on Sydney's supply security. Wingecarribee Dam water is relatively soft and has occasional blue-green algal blooms.

This option was identified as the preferred source of supply extraction option.

Source Option 6: Supplied treated water from Wingecarribee Distribution System

The supply of filtered water to Goulburn from the vicinity of Exeter, Sallys Corner and Blackes Hill Reservoir was considered. This source option was only considered viable if the villages such as Wingello, Penrose, Talong and Marulan were to be provided with water from the proposed pipeline. This could optimally be achieved by either following the Main Southern Railway corridor or the series of roads from a supply point in the vicinity of Exeter via the villages to Marulan.

In view of these two pipeline route corridors having the longest length and the significant design and construction works, this source option was eliminated along with the pipeline route corridor options. Further, supply from the vicinity of Exeter would have also resulted in some transfer system upgrade within the Wingecarribee distribution system resulting in possible perceived compromise to their stated objective of the pipeline proposal proceeding on the basis of no cost to WSC.

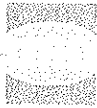
Although, this option could save approximately 19 km of pipeline compared to extraction of raw water from Wingecarribee Dam, it would require upgrading of an existing pumping station, construction of additional pipelines, construction in built-up areas, higher water purchase price and advancement of the Wingecarribee Water Filtration Plant upgrade, and hence would be more expensive.

This option was not considered further as an extraction source option.

7.2.2 Delivery options

The following delivery options were considered:

1. Deliver unfiltered water into Sooley Dam near the dam wall;
2. Deliver unfiltered water into the Copford Park Balance Tank;
3. Deliver unfiltered water into the interconnecting pipework between Sooley Dam and Rossi Weir Pumping Station;
4. Deliver unfiltered water into the inlet works (or into a new balance tank at the inlet works) of the Goulburn Water Treatment Plant; and
5. Deliver filtered water directly to the Bradfordville Reservoir near Kenmore area.



Delivery Option 1: Deliver raw water into Sooley Dam near the dam wall

Direct delivery of the Wingecarribee Dam water to Sooley Dam near the dam wall was considered as it would reduce the length of the pipeline by approximately 5 km compared to discharging at the inlet works of the Goulburn WTP. However, due to the prevailing dry weather pattern, delivery of Wingecarribee Dam water into Sooley Dam could result in significant loss due to evaporation and possible seepage losses. These losses could result in an availability of less than 5 ML/d of water for the consumers.

The frequency, magnitude and duration of blue-green algal blooms in Wingecarribee Dam is very low compared to Sooley Dam, which has regular prolonged and high magnitude blooms. This meant there would be a potential need to manage the blue-green algal growth and bloom in Sooley Dam as well as the cost of treating the by-products of blue-green algal blooms.

The option was not considered further as a delivery option.

Delivery Option 2: Deliver raw water into the Copford Park Balance Tank

Although discharging into the Copford Park Balance Tank for subsequent transfer to Sooley Dam would result in a reduction to the pipeline length, the need to extend the lagoon outlet pipe, with polyethylene pipe, up to the dam wall would negate any savings achieved. Further in addition to having the above mentioned evaporation and seepage losses and blue-green algal bloom issues, this arrangement would also require additional pumping energy.

The option was not considered further as a delivery option.

Delivery Option 3: Deliver raw water into the interconnecting pipework between Sooley Dam and Rossi Weir Pumping Station

This option would eliminate the above-mentioned evaporation and seepage losses and blue-green algal bloom issues. However, this option would require provision of valves on the Rossi Weir suction pipe work to prevent flow of Wingecarribee Dam water into Rossi Weir and possible modification to existing Rossi Weir pumps and switchgear to treat the flows from Wingecarribee Dam water. Use of the interconnecting pipe could also provide the opportunity to harvest and store excess flows in Wollondilly River at Rossi Weir for transfer to Sooley Dam. Further, if GMC wish to blend both the Wingecarribee Dam water and Sooley Dam or Rossi Weir water, there could be additional valves and flow measuring devices required.

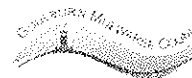
The option was not considered further as a delivery option.

Delivery Option 4: Deliver raw water into the inlet works of the Goulburn Water Treatment Plant

This option avoids the evaporation and seepage losses, blue-green algal bloom issues and additional pumping energy. Further it also retains the flexibility to pump and store in Sooley Dam any excess flows in Wollondilly River at Rossi Weir.

Blending of both Wingecarribee Dam water and Sooley Dam or Rossi Weir water is also made easy including the flexibility to add different water treatment chemicals and dosages that are applicable to each water source. There could also be added benefit (e.g., flexibility with plant operating time, power outage, simple control, etc) if the Wingecarribee Dam water was delivered into a balance tank at the inlet to the water treatment plant then directly to the plant inlet works. The added benefits together with the balance tank cost needed to be assessed during the concept design stage.

This option was identified as the preferred delivery method.



Delivery Option 5: Deliver treated water directly into the Bradfordville Reservoir near Kenmore Area

This option was not considered further as a filtered water source was no longer an option as water supply.

7.2.3 Identified preferred option

Based on the above analysis, it was recommended that the raw water be sourced from Wingecarribee Dam and delivered into the inlet works (or into a new balance tank at the inlet works) of the Goulburn WTP. On further consideration of this option an alternative was included to source treated water direct from the Wingecarribee WTP. Discussion of the alternative is provided in Section 7.6.

7.3 Further options to secure Goulburn's future water supply

7.3.1 Water cartage option

In 2005, GMC considered the option of using water carting to support Goulburn's water supply in continuing drought periods. Two main options considered were road cartage by trucks and rail cartage. Water cartage options were considered from Sallys Corner Service Station and Oldbury Pump Station or a combination of both for road cartage and Calwalla Siding for rail cartage.

It was determined that water cartage to a city the size of Goulburn was an expensive exercise and all other options should be exhausted prior to taking up this option (DoC, 2005). If the drought conditions were to persist for 6 months or longer, the recommendation was to further consider the option of constructing a pipeline from Moss Vale to Goulburn.

7.3.2 Further consideration of water saving options

Although the pipeline from Wingecarribee Reservoir to Goulburn was identified as the preferred options for the source and delivery of water to Goulburn, consideration of additional or alternative measures to increase the security of Goulburn's water was undertaken. The short listed options included (NSW Public Works, 2010).

- ▶ Pejar to Sooley Pipeline - One-way transfer to increase Goulburn secure yield;
- ▶ Pejar to Sooley Pipeline - Two way transfer to increase Goulburn secure yield;
- ▶ Pipeline transfer from Wingecarribee Dam to increase Goulburn secure yield (would be suitable to meet Marulan's growing demand as well);
- ▶ Evaporation Control for the dam - to reduce storage losses;
- ▶ Site specific non-potable bore supplies to public parks - to reduce use of potable water in parks at both Goulburn and Marulan subject to obtaining bore licenses and availability of adequate yield and suitability of water quality
- ▶ Reuse of stormwater collected in the former Goulburn brick pits for reuse in public open spaces and industries subject to approvals and licenses.
- ▶ Harvesting of urban stormwater from Concord Reach & transfer to Sooley Dam to increase yield in the short-term subject to approvals and licenses;
- ▶ Decentralised (sewer main) reuse in greenfield residential subdivision (third pipe) at Marulan only;



- ▶ Centralised reuse for new coverings (third pipe) in both green and brown field subdivisions if combined with public open space reuse;
- ▶ Centralised reuse for public open spaces (e.g., golf course, Carr Conroy fields and the Recreation area);
- ▶ Highly treated effluent as environmental flow replacement in Wollondilly River to increase yield of Goulburn system if environmental flow releases are needed below Rossi Weir;
- ▶ Extraction from Mulwaree River near Tarago Village as source for a reticulated village scheme subject to approvals and licenses;
- ▶ Extraction from Lake Bathurst as source for Tarago reticulated village scheme subject to approvals and licenses; and
- ▶ Evaluate Demand Management measures to enhance the existing program.

Three preferred options have been investigated further (DoC, 2009) as follows:

1. One-Way Pejar Pipeline: The scheme involves construction of a pipeline from Pejar Dam to Sooley Dam to avoid losses which occur when water is released down river from Pejar to Rossi Weir.
2. Two-Way Pejar Pipeline: The second scheme adds extra pumping capacity from Rossi Weir to Sooley Dam to harvest more water from high flows at Rossi Weir and a pump station to transfer water through the pipeline from Sooley to Pejar Dam.
3. Highlands Source: The third scheme involves piping water to Goulburn from the Wingecarribee Reservoir which is part of the Sydney and Southern Highlands supply system.

The Pejar Pipeline Schemes (options 1 and 2) did not satisfy the DWE secure yield criteria for NSW regional water supply schemes. There would be a significant risk of the Goulburn storages dropping to Level 5 restriction levels within a decade, triggering the need for water cartage or construction of a Wingecarribee - Goulburn pipeline or another major source (DoC, 2009).

Cost/yield comparisons of the three pipeline options showed that the Highlands Source is more cost-effective than the Pejar Pipeline Schemes, and that the advantage in favour of the Highlands Source increases when climate change impacts are taken into account (DoC, 2009).

The remaining options identified above would be further investigated as part of the GMC IWCM Strategy which is due for completion in draft 2010.

7.4 Wingecarribee to Goulburn pipeline alternatives

The Project was based upon the pipeline route defined by GMC from Wingecarribee Reservoir to Goulburn WTP. The original proposed route, described and examined as a possible emergency pipeline route (GMC & DoC, 2007), utilised existing gas and electricity easements for a large proportion of its alignment. On commencing the Project, the APA Group advised the owners of the Moomba to Sydney gas pipeline that the pipeline could not be located within the existing gas easement as originally proposed by GMC.

In response to the inability to utilise the existing alignment as initially proposed, GHD investigated five alternative routes in detail in 2007. It was determined that constraints on the original route could be reduced. The five alternative routes were analysed with both positive and negative aspects identified for all in light of aspects as follows:



- ▶ Minimising the number of landholdings traversed;
- ▶ An assessment of potential pipe construction and operating costs as dictated by pipe length, number of creek and road crossings;
- ▶ A consideration of the difficulty of construction (due to factors such as ground conditions and gradient); and
- ▶ Selecting the route that would likely result in minimal disturbance of local vegetation and need less clearing, etc.

A multi criteria analysis was undertaken based on available mapping data and brief field inspections but only from public access roads and viewing the possible route alignments from these viewing points. The outcome of the analysis gave little to suggest that any of the alternative routes would provide significant benefits over the original route.

Whilst the presence of other services including the high pressure gas pipeline and Telstra service cables were of concern with the original route, all alternative routes posed a similar level of constraint. In particular, other routes which compromised the use of existing power easements raised issues due to the hazard of working adjacent to overhead power lines.

It was accepted by the Proponent that the route could generally be retained by offsetting the alignment adjacent to the gas pipeline easement. In this location the pipeline would require greater vegetation clearing, thus widening the existing cleared easement.

In order to utilise the original route an additional 6 to 15 m clearing would be required adjacent to the existing 25 m wide cleared gas easement. The alternative options considered impacted a lesser area of dense vegetation but still traversed through land which contains threatened ecological communities, which currently have little fragmentation as a result of existing easements.

Following the investigation of the five alternative routes, it was recommended that an alignment based on the original route be retained as the preferred alignment for the Project.

The preferred pipeline route corridor would predominantly be located adjacent to existing infrastructure easements that have previously been cleared and either remain cleared or have regenerating vegetation present. From Wingecarbee Reservoir, the pipeline route largely runs adjacent to existing power line easements until it crosses the Hume Highway. After crossing the Hume Highway, the pipeline route would be located adjacent to and outside of an existing gas pipeline easement, which it follows almost the entire way to Goulburn.

7.5 The 'do nothing' option

DoC (2009) notes that climate change is expected to reduce the streamflows in the Goulburn catchment, and that mid-range projections (RCP4.5/2007) show a decline in secure yield from the Goulburn catchments of 20 percent per degree of global warming is possible.

Goulburn has implemented high water use restrictions throughout the drought. Despite the implementation of water use efficiency measures such as installation of home water saving devices and rainwater tanks under Council initiatives, there is a real risk that Goulburn could in the near future be placed on Level 5 water restrictions as water levels in the supply continue to fall (DoC, 2009).

The option of doing nothing would not avert the risk that the city may run out of water. The Goulburn community would be severely distressed and the option is therefore unacceptable.



7.6 Water treatment options

Two options are under consideration for the operation of the proposed pipeline; one option being to transfer raw water, and the second option being to transfer treated water. These options require different plans and designs at either end of the pipeline. A preferred option would be selected during detailed design.

7.6.1 Raw water

For the raw water option, untreated water would be transferred from Wingecarribee Reservoir to Goulburn. The pipeline would be designed to accommodate a flow of approximately 7.5 ML/d (over a 22 hour period). Initially the pipeline will deliver 5 ML/d until such time that a booster pump station is installed.

The system would be based on drawing water from the existing outlet works at the Wingecarribee Dam upstream of the offtake to the water treatment works. A high lift pumping station would be located adjacent to the existing raw water pumping station between the dam and the Wingecarribee WTP.

The raw water option would require a longer pipeline than the treated water option, with the construction of the pipeline around the northern side of the city of Goulburn to connect to the Goulburn WTP on the western side of the city. The pipeline would be operated as a raw water transfer system and would discharge directly into one of the raw water balancing tanks upstream of the Goulburn WTP, prior to any treatment there. Alternatively it may be delivered to the existing 600 mm diameter rising main from the Ross Weir system in Goulburn and taken directly to the intake works.

Two options are under consideration for the mode of operation of the raw water transfer pipeline:

1. Continuous operation – where water from the Wingecarribee Reservoir would be delivered daily to Goulburn so as to contribute some set percentage of the overall daily water demand;
2. Intermittent operation – where water from the Wingecarribee Reservoir would be pumped to the Goulburn water supply system only on occasions where Goulburn's existing water supply resources were measured to be below a predetermined trigger level.

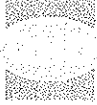
7.6.2 Treated water

For the treated water option, treated water would be transferred from the Wingecarribee WTP to Goulburn.

The water transfers will be made by a pump station located at the Wingecarribee Reservoir. The pipeline would be designed to accommodate a flow of approximately 7.5 ML/d (over a 22 hour period). Initially the pipeline will deliver 5 ML/d.

A new treated water pump station would be located near the Wingecarribee WTP. A booster pump station may be located along the pipeline alignment to provide additional pressure in the pipeline.

The pipeline would be shorter than for the raw water option due to its termination on the eastern side of Goulburn. The pipeline would be operated as a treated water system. It is possible that chlorine dosing or similar disinfection treatment may be required along the pipeline route; however this will depend partly on the residual levels from the WTP treatment plant. The water would be delivered from the pipeline into a new covered chlorine residual reservoir at Governor's Hill in East Goulburn. The water would then be piped off to serve the eastern zone of the Goulburn water reticulation system.



Alternatively, the pipeline may connect directly to the existing Goulburn water main in North Goulburn, which, through water supply rezoning work, could supply Goulburn's entire network with water from the Wingecarribee Reservoir.

As for the raw water transfer pipeline, two options are under consideration for the mode of operation of the treated water transfer pipeline, continuous operation or intermittent operation.

27/5/10

The Past Weekly

Worker's big night

FRIDAY night is set to be a big one at the Workers Club with a jam-packed night of free entertainment.

Workies favourite Chad Croker is back and will be playing his unique renditions of contemporary classic in the Auburn Bar.

Chad's first set starts at 9.30pm and he will be playing until 2am.

Meanwhile in the back bar, DJ Shane Burgess will be bringing all of those great drinking songs of yesteryear with the Bear Songs Party in the McKell Bar. All entertainment is free to club



Planning

EXHIBITION OF ENVIRONMENTAL ASSESSMENT

Highlands Source Project

Application No	MP 09 0193
Location	The buried water pipeline will run from the Wingecarribee Reservoir east of Moss Vale along an 83 kilometre route to the City of Goulburn
Proponent	Goulburn Mulwaree Council
Council area	Wingecarribee Shire Council and Goulburn Mulwaree Council
Approval Authority	Minister for Planning

Description of proposal

Construction and operation of an underground pipeline and associated infrastructure with the capacity to transfer up to 5 Megalitres of water per day a distance of approximately 83 kilometres from the Wingecarribee Reservoir in the Southern Highlands to the Goulburn water supply system. Two pumping scheme options are proposed including a raw water transfer option drawing untreated water from the Wingecarribee Reservoir and delivering to the Goulburn Water Treatment Plant (WTP), and a treated water option whereby treated water from the Wingecarribee WTP would be supplied directly to the water reticulation system in Goulburn.

Application of Part 3A

The project is a development to which Part 3A of the *Environmental Planning and Assessment Act 1979* (the Act) applies by virtue of an Order made by the Minister for Planning under section 75B of that Act on 9 July 2007.

Exhibition

The Environmental Assessment (EA) will be on public exhibition from Friday, 28 May 2010 until Wednesday, 30 June 2010 during regular business hours, at:

- Department of Planning, Information Centre, 23-33 Bridge Street, Sydney;
- Nature Conservation Council of NSW, Level 2, 301 Kent Street, Sydney;
- Goulburn Mulwaree Council, Civic Centre, 184-194 Bourke Street, Goulburn;
- Goulburn Library, cnr Bourke and Clifford Streets, Goulburn;
- Marulan Post Office, 66 George Street, Marulan;
- Exeter General Store, 1 Exeter Road, Exeter;
- Wingecarribee Shire Council, Civic Centre, Elizabeth Street, Moss Vale; and
- Moss Vale Branch Library, Elizabeth Street, Moss Vale.

A copy of the EA may also be viewed on the Department of Planning's website (www.planning.nsw.gov.au).

Submissions

You are invited to make a written submission on this project. This submission should include:

- your name and address;
- the name and application reference number (09_0193) of the project;
- a statement on whether you support or object to the project; and
- the reasons why you support or object to the project.

Persons lodging submissions are required to declare political donations (including donations of more than \$1,000) made in the previous two years. For more details including a disclosure form go to www.planning.nsw.gov.au/donations

Your submission must reach the Department of Planning by close of business on Wednesday, 30 June 2010 and should be addressed to:

Director, Infrastructure Projects
Department of Planning
GPO Box 39, SYDNEY NSW 2001
Fax: (02) 9228 6355 Email: anna.timbrell@planning.nsw.gov.au

Under section 75H of the Act the Director-General is required to provide copies of submissions received during the exhibition period, or a report of the issues raised in those submissions, to the Proponent and other interested public authorities. It is Departmental policy to also place a copy of your submission on the Department's website. If you do not want your contact details to be made available to the Proponent, these public authorities, or on the Department's website please state this in your submission.

Enquiries: Anna Timbrell (02) 9228 6345

• F/ The

Tr. No. Ci.

Wi a p ser tiv ity and The

Log uni who I pet in k she

Lo ge ep

GHD
REPLY PAID 1877
CANBERRA
Act 2601

Director Infrastructure Projects
Dept Planning
GPO Box 34 Sydney

June 21 2010

MPO 20193

Dear Sir/ Madam,

re HSP Environmental Assessment

The following points have come to mind while reading this comprehensive document *Water for Goulburn, Highland Source Project, Environmental Assessment*

- I would like assurance that Goulburn and Marulan have instigated the best possible water re-use programs prior to embarking on this 83k pipeline to transfer up to 7ml a day from Wingecarribee Reservoir for \$54million plus..
- What is the rationale for burying the pipeline and not having it accessible on the surface as are other water pipelines – (e.g Warragamba to Prospect, Murray to Woomera)
- What effects will the actual trench have on the local drainage patterns as it will act like a conduit for groundwater and storm water to run in unnatural directions.
- I am particularly concerned about the removal of old growth, endangered *Eucalyptus macarthurii* from the Wingecarribee valley.
- Please send me a copy of the Bio-Diversity Off-set Strategy and the formulae for assessing replacement equivalents for the various components of a plant community, and for lone old growth trees.
- re 28.1 No. 5, Please identify the Off-set sites for the Wingecarribee Shire and include Wingecarribee Shire in the consultation process. If these have not yet been identified I suggest that consideration be given to sites within the Great Eastern Ranges- Southern Highlands Link project within Wingecarribee shire.
- Please ensure that wash down procedures are in place and are used for construction vehicles with a view to control distribution of weeds and Serrated Tussock, Patterson's Curse and Fireweed in particular.
- I am concerned that in times of drought when Goulburn and Marulan require water the Shoalhaven will also be stressed. I would like assurance that environmental flows to the Wingecarribee River and water supply to Wingecarribee Shire has a priority to water from the Wingecarribee Reservoir AND that the Kangaloon aquifer will NOT be breached.
- When the pumping station is built, (to which I am a neighbour) please ensure that an effective vegetative screen is planted, as for other industrial sites in the Shire and that lighting is kept to a minimum.

- Surely this Environmental Assessment should have been presented to the WSC Environment and Sustainability Committee prior to the closure of comment on 30th June as the project greatly affects the Wingecarribee Shire.

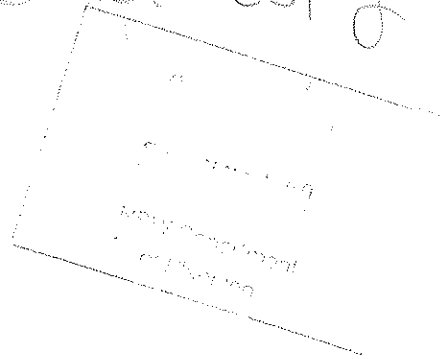
- Please send me copies and or notice of future HSP planning documents as they become available.

Yours faithfully,

[REDACTED]

Cc Councillor Larry Whipper.

additional copy



Re: APPLICATION MP 09 0193

SUBMISSION OF OBJECTION

HIGHLAND SOURCE PROJECT

George W. Gildea

69 Middle Arm Road

Goulburn NSW 2580

29th June 2010

Director, Infrastructure Projects
Department of Planning
GPO Box 39
Sydney 2001

George W. Gildea
69 Middle Arm Road
Goulburn NSW
2580
29th June 2010

**Re: Application MP 09 0193
Highland Source Project**

Dear Sir,

I enclose a Submission of Objection to the Highland Source Project, as outlined in the Submission of Environmental Assessment by Mr. David Chubb of GHD Pty Ltd for Goulburn Mulwaree Council, dated 27th April 2010. I am an affected Landholder with regard to this project.

The GHD submission is incompletely prepared, exhibits a lack of due-diligence on critical issues, hides the potential for significant budgetary overruns, and has been insufficiently and inappropriately negotiated with affected members of the public.

As a long-time resident of the Goulburn area I am only too aware of the need for securing sustainable water supplies for the region, even if the immediate emergency may have passed. However, despite several years of Council discussion, the final preparation of the project as submitted by GHD Pty Ltd has been rushed and has suffered as a consequence. Public debate in city has been minimal, as proper evaluation and discussion is stifled by keeping important details of the project deliberately minimal and difficult to obtain.

I request that you reject the GHD / Goulburn Mulwaree Council submission and direct that it be resubmitted, with greater input from a broader range of independent professionals. I believe this will result in a more appropriate use of State Government funds and a greater benefit for the region as a whole, rather than rewarding a narrow group with vested interests.

If allowed to proceed, this project will be a disaster - politically, financially and environmentally.

Yours Sincerely,



George W. Gildea

Attached:

- Points of Objection - 17 pages
- Supplementary Documents - 6 pages
- Political Donations Disclosure Statement - 4 pages

Points of Objection

1. Two Options - Improperly Submitted
2. Water Use In 'Preferred' Option 1B
3. Preempting Minister's Decision - Contracts
4. Preempting Minister's Decision - Treated Water
5. Lack of Transparency - Insufficient Public Information & Consultation
6. Undisclosed Costs - Ongoing
7. Absence of Reports from Independent Specialists & Council Unresponsive For Such
8. Energy Costs - Sustainability
9. Pipeline Routing - Maintenance Issues
10. RU6 Zone - Environmental Incompatibility
11. RU6 Zone - Unfairly Compounds Restrictions
12. Environmental Impact - Visual
13. Pipeline Routing - Easement Specifications Exacerbating Environmental Damage
14. True Impact of Easement On Immediate Environment
15. Marker Posts - Lack of Detail
16. Compulsory Acquisition of Land - Inappropriate Media Statements
17. Restoration of Land - Council Avoiding Responsibility
18. Restoration of Land - Subrogation to Insurers
19. Restoration of Land - Council's Inadequacy
20. Future Privatisation
21. GHD / APA - Potential Conflict of Interest - Lack of Transparency
22. Future Privatisation - Compensation
23. Questioning of Valuer and Other Agricultural Specialists Used
24. Future Privatisation - Contract Changes Necessary
25. Future Privatisation - Brayton Power Station
26. Public Liability Issues
27. Security Issues
28. Inadequately Considered Alternatives - Rail Corridor
29. Inadequately Considered Alternatives - Decentralisation

1. Two Options - Improperly Submitted

I object that the two alignment Options have been submitted improperly to the Minister. The absence of adequate costing and appropriate consideration of all social and environmental issues by GHD and Goulburn Mulwaree Council renders their assessment invalid.

The ultimate decision as to which alternative is chosen is of immense importance to many Landholders. It is an insult to the integrity and accountability of the Minister's Office to say that the choice will be made after construction has begun and constitutes reckless use of State funds.

Approval by the Minister of this present GHD Submission would, in effect, allow Goulburn Mulwaree Council to apply a 'best fit' decision, within the bounds of the approval, no matter how inappropriate the final calculations may reveal the GHD 'preferred option' to be - on financial, budgetary or environmental grounds. The Minister would be approving something exhibiting too little transparency and far too much hidden potential to be a costly and politically damaging mistake.

The options presented are definitive for the whole approach to be employed by the project after the Minister's decision. This project is permanent infrastructure - a permanent artificial line across the natural environment. The different options involve a variety of different impacts on the Landholders involved and on the natural environment, and correspondingly vastly different costs of acquisition and maintenance.

GHD and Goulburn Mulwaree Council have dismissed as inconsequential the differences between the two options presented. Their considerations are inappropriately narrow, thinking that they can just dig a hole and bury a pipe anywhere that is convenient for them. Such disregard for sustainable environmental practice is 1950s thinking.

GHD have clearly not completed the work and due diligence needed for a project taking \$50 million dollars of Taxpayer money and that their excuse is that they 'have not had time'.

- How can any assessment submitted to the Minister's Office be considered adequate when the applicant - GHD - admit that they have not had 'enough time' to do the job properly?
- Is that appropriate and accountable use of Taxpayer funding?

The issue of undecided alternatives is critical to the very basics of the chemical and hydraulic engineering techniques inherent in the project, with regard to the use of treated water, or untreated water and the long-term effects of either.

The ultimate choice of alternatives affects the capital cost and ongoing maintenance of equipment and installation at the Wingecarribbee starting point, and choice of personnel at that plant, and may be inconsistent with similar costs of existing equipment and personnel at the old plant at South Goulburn. This must be a State Government matter, not a local council decision, as the project affects the whole of the Southern Highlands and Southern Tablelands area.

2. Water Use in 'Preferred' Option 1B

I object to the conclusion by Goulburn Mulwaree Council on p.58 of the *Goulburn Mulwaree Council: IWCM Strategy Study* published 5th May 2010. The report admits that neither Option 1A nor 1B has any significant advantage over the other. This report was never sent to affected Landholders, nor publicised, nor opened for debate.

Goulburn Mulwaree Council's 'preferred' Option 1B relies intensely on potential 'industrial' use and farm use of effluent, but the immediate (2010) capital cost of this effluent option appears to be \$11 million plus \$6 million staggered over future years.

So this alleged 'preference' for Option 1B, and justification of its cost, relies on 'potential' users, but does not state what they are, nor any details about them or their water needs and the report admits that Council has yet to research such usage. This is a poor position on which to spend millions of dollars of State funds.

The reality is that Goulburn has lost several significant industrial users of water in recent years and has gained no replacement industries.

- Lack of water resources has not been the issue for this loss - other socioeconomic and technological issues are the determinants.
- The Goulburn stock saleyards and the wool store facilities were big users of water and they are effectively finished in Goulburn.
- Any new industrial facilities coming to Goulburn will have greatly enhanced water management practices, compared to these inefficient older industries. Their focus will be on industry best-practice operations that are already environmentally sustainable, without recourse to buying waste from an unreliable source that may not even be made operational on terms suitable to them.
- Goulburn has had decades to entice industry to Goulburn and has failed to do so. Factories and other large industrial facilities in Goulburn lie empty and lack of wastewater is not the reason.

Based on GHD's report, I requested a cost/benefit analysis of the options and received replies indicating that such analysis either does not exist, or Goulburn Mulwaree Council offices are obfuscating requests for such information. Such analysis must be opened to the public before a final decision can be made to start spending taxpayer funds.

Goulburn's surrounding area is not industrial, but a cluster of small semi-rural blocks.

- The soil is relatively poor, though well-suited to wool production.
- It is not suitable for large-scale economic use of effluent, even if that water were available.
- It is simply not economically viable to propose any significant degree of primary production on the poor soils of the area, requiring these volumes of treated effluent.

The significant expansion of Goulburn is in terms of residential dwellings to house people working in Canberra or the Southern Highlands. Unlike the Goulburn Mulwaree Council's 'potential' industrial users (*Strategy Study* 5th May 2010) these new residential developments are real, and they require treated water - not industrial effluent.

The Council Strategy Study fails to make any case at all for using large volumes of effluent in any economic endeavour. Such effluent may be suitable for parks and gardens if the community acquiesces.

Option 1B - Untreated Water can not be presented to the Minister as a viable option until:

- Goulburn Mulwaree Council produces evidence, from independent specialists, that a significant degree of industrial effluent use will take place in the Council area,
- within the foreseeable future, and
- that such industrial development will require large volumes of treated effluent at a price for which Council can provide it, long-term, with contract security.
- and that the community will accept these developments, after suitable publication and discussion about the types of industry that would use such effluent.

The Strategy Study also states that in Option 1B that any excess effluent will be returned to the river - presumably the Wollondilly River, to end up in Warragamba Dam. There is no mention from Sydney Water about having approved the flow of such effluent into their catchment.

3. Preempting Minister's Decision - Inappropriate Signing of Contracts

I object to [REDACTED] Goulburn Mulwaree Council requesting Landholders sign easement agreements before the Minister has made a decision about routing options, given the inadequate nature of the GHD Assessment, as detailed above. The public notice issued by the Minister's Office calls for **two options** - there is no mention of designating any *preferred* option. Goulburn Mulwaree Council has no right to present these contracts to the Landholders with such an artificial distinction imposed [REDACTED]

It is impossible for affected landholders to make a decision to support or reject the *route* of the pipeline *even if they support the basic concept* that such a pipeline is necessary to bring water to Goulburn. We can not engage professional assistance when the precise location is not known. This indecision on the part of **GHD impedes and diminishes the ability of Landholders to make a successful objection** and thus contravenes the Act, which allows submissions.

4. Preempting Minister's Decision - Treated Water Access

I object to the report that [REDACTED] submitted to Goulburn Mulwaree Council on 20th April 2010, where he said that he had secured an access agreement for raw water but did not secure an access agreement for treated water, but then on 28th April 2010 GHD state in their assessment that treated water was still an option. Obtaining the treated-water option requires the Wingecarribbee Council to make the relevant decisions [REDACTED]

Once again [REDACTED] is preempting the Minister's decision, and is neglecting to secure basic access for the pipeline so that the Minister will be able to confidently make his decision without fear of damaging repercussions.

5. Lack of Transparency - Insufficient Public Information & Consultation

I object to the way that information about this project has been delivered to affected Landholders and the public in general, with regard to how it will affect their local environment. The public information campaign has been conducted inappropriately in that it has been deliberately evasive with regard to important details - costs, dimensions, future usage etc - and has tried to escape with doing just the bare minimum of public communication so as not to attract scrutiny that may highlight its serious shortcomings. For such a major taxpayer-funded project that is supposedly so critical, but also extremely invasive and controversial, this is totally unacceptable.

The publication of meaningful announcements and the availability of those to the general public has been badly mismanaged - to the point of passive withholding of *en globo* costing and Council

comments on Options 1A and 1B, which are the essence of the public submission requested by the Minister.

- on 28th May 2010 there was a public request by the Minister for Objections,
- but only 21 days before, on 7th May 2010 I was supplied with a basic concept-only map with no dimensions or exact positions to show how my property would be affected.
- On two previous occasions, as early as November 2009, I had asked for an appropriately detailed map but one was not provided.
- 30th May 2010 in response to another request I was told to 'read the website'.

On these occasions I have written requesting specific information and out of approximately six requests, only two have resulted in a reply of any meaningful information.

It was not until the 24th of June 2010 that I was sent a CD (containing three documents totalling over 400 pages, mostly irrelevant) containing the *en globo* costings of Option 1A and 1B - and this was only after repeated written requests.

Because of these repeated delays by GHD and Goulburn Mulwaree Council in supplying information of sufficient detail, there has not been enough time, nor enough information, to engage the services of independent professionals to evaluate the true merits of Options 1A or 1B - particularly with regard to environmental sustainability in ways not adequately considered by Goulburn Mulwaree Council.

The Strategy Study of Options 1A and 1B were not published until 5th May 2010. This is 15 days after the application was presented to the Minister (on 20th April 2010) for approval of either 1A or 1B - proof that GHD's submission to the Minister is incomplete.

One can only presume that these *en globo* costings were not supplied to the Minister at the time, nor were they available to me, even though GHD and Goulburn Mulwaree Council have been aware since, at the latest, November 2009, that I was an affected Landholder.

6. Undisclosed Costs - Ongoing

I object to the absence of adequate costing in the GHD / Goulburn Mulwaree Council submission.

- The ongoing costs of the different alternatives have never been appropriately detailed or openly evaluated in any way.
- The GHD report states that decisions about these aspects can be made after construction commences. That is a totally inappropriate use of State and Federal Government money.
- There are immense variations in the costings of such operations over 30 years and Goulburn ratepayers have not been made aware of the impact on annual rates, nor that the water they are paying for will be used at Brayton to supply power to the people of Sydney.
- The GHD submission includes only *en globo* costings. There are no 'walk-the-line' costings that are necessary for a project like this that covers such an expanse of varied terrain.
- No maintenance program or schedule has been detailed or displayed for either of the two alternatives.
- Evidence of this has been raised in public by Councillor Neil Penning, as seen in the attached article.
- Over \$50 million dollars is being sought for a project that **may never be used**, but whose construction will damage the natural environment and acres of productive agricultural land.

7. Reports from Independent Specialists - Where Are They?

I object that no independent, specialist consulting personnel have been engaged by Goulburn Mulwaree Council for this project:

- no agricultural scientist for land use.
- no hydraulic engineers for energy consumption of the installations.
- no chemical engineers for water treatment.
- no health specialists to evaluate and communicate possible health issues related to bringing in water from another area to mix with Goulburn water.
- no environmental scientists to evaluate total impact on the local environment.
- no sociologist's input to engage the local community, assess impacts and benefits and create awareness of the issues surrounding the community's drinking water.

Or, if they *were* engaged, where are their reports? Reports that would fully inform the Minister and assure the Department that full due-diligence had been done on all aspects of the project, so that the Minister can be sure that State Government funds have been used appropriately.

Such reports pertaining to health and safety issues must be displayed as public documents as part of a risk management process to protect Goulburn Mulwaree Council from future class action legal proceedings.

8. Energy Costs - Sustainability

I object that energy cost calculations, including for the more environmentally sustainable alternatives, have not been sufficiently addressed.

- Pumping water uphill for 81 km in a cold climate for the next 30 years is an enormous engineering task.
- As the cost of energy spirals upward, what will ratepayers be paying for water?
- Will the cost become so intolerable as to be unsustainable? The sustainability, or potential lack thereof, of this pumping method has not been adequately addressed nor communicated by GHD.
- No cut-off levels have been nominated, nor have the potentially catastrophic consequences of such a cut-off been discussed with the public that will rely on this - and is paying for this.
- No trigger points have been nominated for when the pipeline may actually be brought into play - will it ever be used?

With no clear criteria for actually ever using this pipeline, the potential cost overruns are serious and reason to question the validity of the project as presented here by GHD and Goulburn Mulwaree Council. *Will the State Government be funding an expensive 'white elephant'?*

9. Pipeline Routing - Maintenance Issues

I object to issues associated with the pipeline itself. The ongoing maintenance of pumping water out of the line at multiple clearing points within the city boundary constitutes an enormous expense if this is to be done on the northern alignment. This regular maintenance and flushing should be done outside the city limits and not on private property, with the constant invasion for ongoing access.

- New water - treated or untreated - is to be pumped within a few metres of the Bradfordville reservoir to the old treatment plant 10 km away, then pumped 10 km back to the Bradfordville area and nearby Mary's Mount developments. This is clearly inefficient - a waste of energy and maintenance expense for years to come.
- The Goulburn Mulwaree Council has an opportunity to upgrade the existing Bradfordville or speedway reservoirs with modern technology and energy-saving facilities, for direct input into the whole of the Goulburn network from the Bradfordville reservoir.

My recommendation to Goulburn Mulwaree Council on 19th May 2010, and again on 28th May 2010, was that, if the pipeline must come past the northern limit of the town, it pass along Mary's Mount Road, currently the site of ongoing development and major road reconstruction that could accommodate the necessary earthworks, rather than disturb and permanently degrade hectares of productive private farmland, as is the case with the currently 'preferred' Option.

10. Pipeline Route Incompatible With *RU6 Transition* Zoning Regulations

I object to the routing of this pipeline, because it is incompatible with the Permitted Use of *RU6 Transition* zoned land, in that it is allowing 'waste or resource management facilities'. See: *Goulburn Mulwaree LEP Part 2.1 - Land Use Zones - Rural Zones*

- Maintenance of the pipeline will involve withdrawal of untreated water onto private agricultural land.
- There is the potential for contamination of agricultural land by industrial chemicals and/or introduction of foreign organic matter.

11. Pipeline Route Exacerbates Existing *RU6 Transition* Zoning Restrictions

I object to the routing of this pipeline, because it unfairly adds further restrictions to land that is already zoned in a particularly restrictive manner. *RU6 Transition* designation is severely restrictive on how the Landholder may develop or divide their land.

See: *Goulburn Mulwaree LEP Part 2 - Land Use Table - Zone RU6 Transition*

- Parts 2 & 3 nominate only six types of development that *are* permitted, but
- Part 4 nominates **46** types of development that are *not* permitted.

The imposition of this pipeline, with its invasive easement and obtrusive flushing stations, requiring regular access and maintenance, further limits the future use of any land it crosses, to the perpetual detriment of the Landholder and the local community. If the pipeline is to proceed across this already-restricted *RU6 Transition* land, compensation should reflect that the pipeline has compounded the devaluation and development potential of this land, **over and above** any standard devaluation that may occur to this land, or to any other affected land in other areas zoned otherwise.

12. Environmental Impact - Visual

I object to this pipeline route as it makes a permanent visual scar on the natural environment.

- The strip of soil affected never returns to its former state, as can be easily seen on *Google Earth* satellite imagery, clearly refuting the claims of GHD, Goulburn Mulwaree Council and others,
- The above ground flushing stations are concrete and steel, above-ground structures, placed at close intervals along the pipeline, on productive farmland.
- These structures could be placed along existing corridors of development such as the highway or rail corridors, or Mary's Mount Road, if the pipeline route followed those existing affected areas.

13. Pipeline Routing - Easement Specifications

I object to the impractical specifications of the easement proposed. The Goulburn Mulwaree Council / GHD submissions, and the contracts offered to Landholders, state that a six metre wide easement will be acquired.

- Such a narrow easement is insufficient for the regular passage - entry, exit, turning - of large vehicles loaded with untreated water and would result in damage to adjacent land, crops and fencing and intrusion onto land not covered under the easement contract.
- Along some areas of the proposed route the terrain is very steep and rocky so it may be physically impossible for vehicles to operate in such an easement.
- This will force maintenance vehicles on to land that they do not have permission to be on, land which they may damage, land which may be hazardous, and which is outside the legal and insurance parameters that apply to the official easement.

14. True Impact Area of Easement

I object to the statement of Goulburn Mulwaree Council that the six metre easement can be anywhere within the 20 metre temporary construction corridor.

- Without producing an appropriate plan, with specific dimensions and positions, they are effectively granting themselves free rein to wander a 6m gouge all over a 20m wide strip, thus creating **not** a 6m-wide strip of damage, but a 20m-wide strip of permanent damage.
- Goulburn Mulwaree Council do not seem to realise that their easement is a blot on the title, registered at the Land Titles Office.

15. No Details of Marker Posts

I object to Clause 19 of the Agreement presented to Landholders, that fails to detail the size or construction of marker posts, and that such details are not included in the contract documents.

16. Compulsory Acquisition of Land - Inappropriate Media Statements

I object to the [REDACTED]
the local press (*Goulburn Post* June 2010) that compulsory acquisition will apply if Landholders do not sign 'negotiated' easement agreements. There are always socially and financially sensitive issues involved with resumption of private land, causing a great deal of distress and disruption for the Landholders involved. [REDACTED]
[REDACTED]

It is an attempt to publicly intimidate Landholders, by using the media to imply an entitlement which may not necessarily exist - and if it does exist and will be imposed, may be the subject of serious legal action.

[REDACTED] states that if a 'negotiated settlement' is 'unsuccessful' then Council will go further and take a 20 metre easement, rather than the six metre easement. This is presented in a punitive tone, which is entirely inappropriate given the sensitive legal and social issues involved. [REDACTED] without having even stated the terms by which any settlement will be determined to have been 'successful'.

I am 82 years of age, a ratepayer for over 50 years along the Middle Arm Road, Goulburn. [REDACTED]
[REDACTED]
[REDACTED]

17. Restoration of Land - Goulburn Mulwaree Council Avoids Responsibility

I object to the statements by Goulburn Mulwaree Council that they will not pay subcontractors until remedial work is completed. This unsavory practice is misleading and deceptive.

The Council is aware that the Landholders at law have no relationship to the subcontractors. This practice was developed by the original gas pipeline company APC - which would be known [REDACTED] - and is a dangerous practice causing much anger and resentment amongst Landholders, who must bear the ill-will of subcontractors. Goulburn Mulwaree Council avoids their responsibilities for supervision:

- because they don't know how to restore the land
- because they don't want confrontation with the subcontractors
- so they say 'blame the farmer - he's the one saying your work is not good enough'

I and many other Landholders have experienced this ugly situation far too often.

18. Restoration of Land - Subrogation of Goulburn Mulwaree Council's Responsibility to Insurers

I object to Goulburn Mulwaree Council staff saying they will be responsible for all claims of restoration.

- They know very well that Council staff will **NOT** negotiate a claim for damages.
- They have already subrogated all such responsibility to their insurers.
- This leaves Landholders to battle directly with insurance companies whose sole motive is to maximise profits by minimising claims.
- I have ample evidence of such dealings.

I submit that the Minister include in the Contract of Compensation a clause that Landholders will not have to negotiate directly with insurers and that Goulburn Mulwaree Council will not be able to just walk away from damage claims. Landholders must be able to negotiate with Goulburn Mulwaree Council, not just assessors from insurance companies.

19. Restoration of Land - Goulburn Mulwaree Council's Inadequate Resources & Expertise

I object to Goulburn Mulwaree Council staff asserting that they will reinstate the soil profile - at their discretion.

- There must be a descriptive work clause inserted into the easement compensation contract that states that work will be done for not less than five years.
- No 'at our discretion', no promises, no policy statements, no 'undertakings' - a **contractual liability** that must be discharged annually, *not* measured in dollars and *not* leaving it to the Landholder. The liability attaches to the land *title*.
- Goulburn Mulwaree Council intends to destroy the productivity of acres of private farmland and has displayed no genuine interest, willingness or ability to restore that productivity.
- Goulburn Mulwaree Council has neither the resources nor the expertise to legitimately fulfil this obligation.
- It is a conflict of interest for a council to engage a local farm consultant to say 'no' to a farmer because it is inevitable that the consultant relies on the council for continuing work.

The record of failure by other authorities to restore land along the easement is easily seen in satellite images from *Google Earth*. You can trace the pipeline scar all the way from Moomba to Sydney - a strip of damaged soil:

- neglected by the gas pipeline companies for 35 years since it was built
- neglected by the ethane pipeline after that was added to it
- neglected by Powertel for 10 years after their fibre-optic cable was added to it

With such a shameful record of destruction and neglect, why would anyone believe that any pipeline company or local council, including Goulburn Mulwaree Council, would restore the soil? At any time in the last 35 years Goulburn Mulwaree Council could have intervened on behalf of exasperated ratepayers, *but they have done nothing*.

I implore the Minister to save this section of the local environment from unnecessary destruction and force contractual obligations on Goulburn Mulwaree Council for full and ongoing restoration. Under Section 75F (6) of the *Environmental Planning and Assessment Act 1979* the Director General has the power for commitment enforcement. This is a legal environmental requirement - not a farmer's privilege and not something a Council has any right to ignore.

20. Future Sale of Pipeline to Private Enterprise

I object to omissions regarding future privatisation of this pipeline. It is inevitable that Goulburn Mulwaree Council will exercise its option - currently in the easement contracts - to resell the pipeline to private enterprise.

- It specifically states that there will be no recompense to the relevant Landholders when transferring the pipeline.
- There has been no public discussion or approval of this policy. This is presumptuous in the extreme - restricting Landholders from obtaining future changes in the law and / or with regard to compensation for use of easements.
- This is unacceptably overbearing and dictatorial, to the detriment of Landholders and their rights.

A similarly repulsive and unjust restriction was forced on Landholders by the Commonwealth Government in 1994, when they sold the gas pipeline to the APA group. They overrode any goodwill of Landholders, who were willing to give up some of their land for the public good, then let a large corporation make millions of dollars from the free passage of gas under the Landholders property.

21. GHD & APA - Opportunity For Conflict of Interest

I object that the GHD [REDACTED] [REDACTED] [REDACTED] [REDACTED] is now advising Goulburn Mulwaree Council to lay this new pipeline alongside the APA gas pipeline at Brayton, for the new DA-approved gas-fired power station, causing yet another strip of irreversible environmental damage.

I request that the correspondence be made available that explains why the existing gas/fibre-optic easement can not be used and why Goulburn Mulwaree Council must purchase an additional easement with State Government funds. The absence of such obvious material exhibits a dangerous lack of transparency in this process.

22. Future Privatisation - Compensation

I object strongly to the clause inserted by Goulburn Mulwaree Council that they can on-sell the pipeline at any time, without reference to any compensation to affected Landholders. This is exactly what happened to Landholders when the Commonwealth sold the Moomba-Sydney gas pipeline to APA in 1994. They gave no recompense to Landholders but rather gave APA the opportunity to earn millions of dollars from gas passing under Landholders' easements - at no charge - yet paid for with Commonwealth funds.

Wind tower operators are paying Landholders annually for the use of their land to produce and supply energy. By contrast, the gas pipeline company pays nothing for the land needed to transport their gas.

It would be naive to think that the APA group would not be the first buyer of the new easement when this water pipeline is sold on by Goulburn Mulwaree Council.

- APA owns other water pipelines in Australia.
- There is a long and documented history of Landowner exasperation with APA and their associates over their damage and neglect of the land along the easement.
- Now Goulburn Mulwaree Council publicly acknowledges that such neglect has occurred, and the subsequent deterioration in relations, and state that such failures will not occur in the future with this project.
- So the pipeline being built for Goulburn, ostensibly by Goulburn Mulwaree Council, is likely to be sold to a corporation that even Goulburn Mulwaree Council admits has a regrettable history of poor easement maintenance and social relations.

23. Questioning of Registered Valuer

I object to the incompetence of the Registered Valuer and the GHD submission to me to accept their compensation amounts.

- No person from GHD, Goulburn Mulwaree Council or any Registered Valuer has ever set foot on my property and so they would not have any knowledge of the operations conducted there and thus are unable to correctly evaluate the impacts for which compensation must be paid.
- The pipeline companies have flown over my property every month for 35 years in a helicopter, taking photographs at a low level and monitoring activity on my land.
- The GHD-employed valuer has not even sought that imagery to make their assessment.

A Registered Valuer must adhere to the concept that it is **the value to the Landholder affected** that is the principle of compensation, **not** the minimal payment that the acquirer wants to pay.

24. Future Privatisation - Contract Changes Necessary

I object to particulars of the current contract being offered Landholders, with regard to future changes. That 'on-sell' clause in Goulburn Mulwaree Council's contract should be eliminated. [REDACTED] should be prevented from signing up Landholders before the Minister has made his decision.

Recent events have shown that the Federal Government and others recognise that the mining industry does **NOT** own the earth for their exclusive profit. APA and Goulburn Mulwaree Council - who sell the water - will one day be required to pay Landholders for the continuous, 24-hour-a-day, use of their land - not just a miserable one-off payment. Accordingly, the contract signed by Landholders for this project must not impede that eventuality.

25. Future Privatisation - Brayton Power Station

I object that Goulburn Mulwaree Council and GHD did not mention the projected water usage of the DA-approved Brayton gas-fired power station, for which the State Government has already purchased 200 acres at Brayton, near Marulan. This industrial facility requires huge amounts of water.

- Will **Goulburn** ratepayers be paying for a pipeline that supplies Wingecarribbee water to this privately-owned power station that services the people of **Sydney**?
- No such possibilities for treated and/or untreated water are mentioned in the GHD report.
- The particular water needs of such a pipeline could be provided by a branch line from a principal line following the existing rail corridor?

The route currently preferred by [REDACTED] Goulburn Mulwaree Council is alongside, not inside, the gas pipeline easement. One must wonder if the intent is to one day sell the water pipeline easement to the gas pipeline company as soon as Brayton power station is built, after getting a water pipeline paid for by the State Government. Even if this is the case, such intentions would not be hindered by the use of the rail corridor for the water pipeline.

26. Public Liability Issues

I object that the contracts Goulburn Mulwaree Council are offering Landholders include no indemnity from public liability for issues surrounding the obtrusive concrete flushing stations positioned above the ground along the pipeline at close intervals.

- These pose a safety hazard to Landholders, farm workers and anyone traversing the property.
- Liability for potential damage to the structures is not addressed. The contracts offered to Landholders should protect them from claims related to such damage and put the onus on the Council to prove negligence, rather than on the Landholder to prove innocence.

- Responsibility for these invasive structures, and liability for safety issues surrounding these structures, is being avoided by Goulburn Mulwaree Council and passed on to the Landholder, who must deal with insurance companies in the event of any incident, as Goulburn Mulwaree Council has subrogated their liability for claims to their insurers.

27. Security Issues

I object to the GHD / Goulburn Mulwaree Council's inadequate consideration of security issues. Water pipelines are obvious targets for water theft, terror attacks, vandalism or other malicious tampering.

- Routing pipelines through private land, away from the general public, increases their vulnerability by placing much of the structure out of the public sight.
- Routing the pipeline along the existing public corridors of the highway and/or rail lines keeps it in clear view, enhancing its security and guaranteeing fast access for authorities.

The Hawkesbury Nepean Catchment Management Authority have ample evidence of pilfering of water out of their system and vandalism of remote infrastructure, away from the public eye. Australia has a history of securing water facilities in times of national security emergencies, dating back to WW2 when the Woronora-Prospect pipeline was continually patrolled.

28. Inadequately Considered Alternatives - Rail Corridor

I object to GHD / Goulburn Mulwaree Council neither recognising, nor costing, the annual savings to be made by routing the pipeline along the existing rail corridor rather than along the proposed route west of the Hume Highway, through difficult terrain requiring more time and expensive logistics to gain access for maintenance and causing unnecessary environmental damage from disturbing new ground.

As stated by GHD, Bundanoon village and south already has a reticulated water network from Wingecarribbee - the same source that Goulburn would be pumping from. It seems blatantly negligent to ignore the opportunity to upgrade the facilities for the expanding area around Bundanoon and carry the water through along the rail corridor to Marulan, thus serving the villages of Wingello, Penrose and Towrang along the way. GHD states that they did not have enough time to examine it.

The broader vision of cooperation between the communities of Goulburn and Wingecarribbee has been overlooked. The whole tenor of the the report can be expressed as 'the engineers have found a place to dig a hole and bury a pipe'. They have not recognised that there are communities of people, with needs, around this pipeline and they may be vastly different 30 years from now.

29. Inadequately Considered Alternatives - Decentralisation

I object to Goulburn Mulwaree Council's lack of foresight of how to spend \$50 million of borrowed funds, in not aiding decentralisation, not efficiently servicing the growing developments around Bradfordville and ignoring the Bundanoon - Marulan route.

- There is widespread belief that NSW would benefit from decentralisation.
- The State Government funding of this pipeline is an opportunity to expand development in the villages along the rail corridor.
- Goulburn Mulwaree Council has taken a parochial view, benefiting only itself, and ignoring the opportunity to service these other villages that already have rail and bus transport options to Wollongong.

ROSTHWAITE FARM

Thoroughbred Spelling

The General Manager
Locked Bag 22
GOULBURN NSW 2580

Monday, 28 June 2010.

Complaint: Highlands Water for Goulburn

We are writing to complain about the methods employed by GHD to co-erce people into signing agreements for the pipeline.

- For 7 months we were advised of the location of the pipeline and then three days before being asked to sign the documentation – it was changed to radically affect our property.
- We receive inconsistent information from [REDACTED] – saying that the route can be adjusted slightly and negotiated, and then from [REDACTED] we are told there is no negotiation and no changing the new route – despite it being changed after 7 months.
- They say that they will not change the new route because:
 - They will not cross an electricity easement – but they have elsewhere..
 - The pipeline is innocuous once installed – but it's moved away from homes....
 - That they do not take minor stock dams into consideration – but they have in various locations...
 - That they do not take into account agricultural businesses located on the route – but they have for other businesses in the area..

They have changed the route of the pipeline for these reasons in other locations – and it seems they even want to avoid small stock dams in our area to the detriment of our property.

- We understand there were 5 other options considered more “optimal” than the current location – yet we have not been advised of any of these changes, until this route was offered to sign on – and is now NOT Negotiable.
- They have negotiated and made changes for other people, but refuse to consider any changes to consider our business.
- We have offered to forego any compensation if the original route location can be used.

The new route slices through a two metre high cut in the road at the driveway to our thoroughbred spelling facility – and cuts through three paddocks in a quarantine area.

We have attached detail of our concerns about how the construction will affect our property.

As the property is for sale, we cannot sign a document on behalf of a prospective purchaser and so the GHD documents become part of our contract of sale – this places us at a disadvantage in negotiations because of the proposed pipeline. Nothing in the documents provided by GHD recognise this fact.

We are very angry that because we were compliant with the original information provided, we had no opportunity to challenge the changes made in the following 7 months.

AND – You may wonder why there is a low number of complaints about the project – but if we are unhappy with GHD there is no overseeing body to whom we can complain and no complaint mechanism in any documentation provided. The only contact is to GHD.

Yours faithfully,

Peter and Pamela Bice
Rosthwaite Farm

We need you to be aware of the workings of our business, the difference between our property and a cattle or grazing property – the risk and expense involved – and why we are paid what we are paid – for the facility we have built and what we do.

It is frustrating to us that GHD did not investigate the impact of this easement upon our property and business before changing the route. We do not graze the land as cattlemen do – we manage the wellbeing of highly strung, horses. People pay us to care for horses they have spent large amounts of money buying and training. And while purchase prices vary, training expenses begin at approximately \$50,000 per year.

Cattle are grazed in barbed wire for \$4.00 per week per head. Their cosmetic nor athletic ability is never at risk of loss.

The affected area has been specifically built with paddocks which are double fenced and hedge screened in an area at the front of the property.

This allows us to monitor easily and gives us a quarantine area that can be used to separate diseased horses. It has been designed to comply with Department of Primary Industries export quarantine regulations. We have been approved during EI as a DPI approved quarantine facility.

The easement itself will affect eight fence-lines within approximately 200 metres.

According to the diagram provided it will interfere with our driveway and shave the entire hedge screening from the first paddock to the road – this visual barrier is essential to operation. It will also destroy the hedge screening from two other visual barriers.

While these hedges are essential and practical for our business, they are also designed to add aesthetic value – it is the front of our property.

Removing the hedging we have planted and irrigated, will also have a huge visual impact on the privacy of our property.

Access for maintenance will be a problem as the bloodstock contained are not animals like cattle – they are at times dangerous to untrained visitors to the property and all visitors to the property are to be accompanied by either Peter or Pamela – not only for liability against the visitor's injury – but also against their untrained behaviour which might cause injury to the athletic ability of the horses in our care.

As it is also a quarantine area – this further complicates access issues.

If the valve noted on the diagram, creates noise – even if re-located to the roadside – it will be of considerable danger to our horses.

Furthermore – the actual paddocks that are affected by the construction work will not be the only ones we are unable to use during the construction phase – we cannot have our Clients' expensive athletes attempting to rest and recover next to a construction site with all it's unsupervised staff, noise, machinery and comings and goings.

We need, in addition, at least 200 metres distance from the construction work to ensure the safety of the Clients' horses. And no work can be carried out before 8.00 am or after 4.00 pm as the horses tend to over-react to startling un-natural noise in darkened winter conditions.

We cannot, under any circumstances allow marker posts in areas other than on fence-lines and we cannot accept any protrusions at all in the clear paddock areas. These are dangerous to horses.

At the rear of the property there is an easement for large powerlines and an optic fibre line which has marker posts which render the paddocks unusable commercially for Clients' horses. We have already experienced injuries on these devices. Once again they may be fine for grazing cattle – but not for athletic bloodstock.

We feel we can offer them a fair and reasonable alternative if they are prepared to take on board our realistic concerns.

- **Bending the line slightly as Greg Horvey offered would move closer to the original route.**
- **Changing back to the original route.**
- **As described in the project documentation it could follow the existing electricity easement and be located at the south of the property.**

We are also in the process of selling this property and it is vital to our financial well-being, to maximise our opportunity of sale without any complications – or major visual impacts to the front of the property. We are marketing to a very specific target market in the thoroughbred industry, and any intended purchaser would have the same concerns we have.

We can have Veterinary, Client and Trainers' opinions provided to substantiate our claims on our business.

www.rosthwaitefarm.com.au

Phone: 02 4868 3966
Rosthwaite Farm

268 Yarrawa Road

Fax: 02 4405 5898
Moss Vale NSW 2577



Anna Timbrell
Room 313
NSW Planning
23-33 Bridge Street
Sydney NSW 2000

c/o 54 Cathcart Street
Goulburn NSW 2580
BH 0248214559
Email : ianshuttle@ozemail.com.au

Dear Anna,

Re Highland Source Project Goulburn
Assessment Type : Part 3A
Application Number MP09_0193
DGRS Issued 14.12.2009

Department of Planning
Received
29 JUN 2010
Scanning Room

On behalf of Mrs Flora Jean Craig owner of lot 1/DP 603886 being effected by the proposed easement for the above project we wish to submit our objection and submission as outlined below.

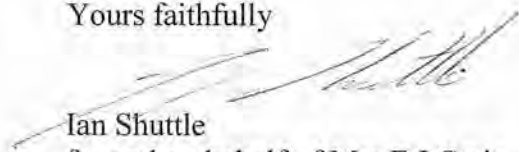
1. The method of consultation was unsatisfactory as we should have been contacted by phone so as discussions could have been made in person at the time of inspection with reference to the route the easement would take. The letter from G.M.C dated 9th November 2009 states this would happen.
2. Our first contact was via a letter dated 20th January referring to Consent to Survey which we received by hand on the 22nd January 2010, we never received a letter dated 6th November from GHD or GMC as referred to in this letter dated 20th January 2010. We in turn gave them permission, though we don't believe that any surveys were carried out on the proposed route on Mrs Craig's Land, it was more than likely done on the road which adjoins which is part of another property being DP 569505.
3. The amount of easement required is stated in correspondence received as 6M, 10M and 20M which would make any assessment of value irrelevant. see copies marked "B,C and D"
4. The Agreement was received by registered mail on the 5th May 2010 though the covering letter was dated 29th March 2010, the agreement was never going to be signed due to the submission items and objections referred to in this letter.
4. As mentioned in the electronic submission to you via your site on the 15th June 2010 we believe that the proposed easement should be as per one of the alternative routes as shown on the plan enclosed marked "A" in particular the use of the dirt road which adjoins Mrs Craigs property at the northern end and would be a cheaper option for GMC. The pipe is only 375mm and the road could still be utilized as it is not a designated road and we believe it is on DP 569505 land. There is also fencing, dam and shed to be considered on my property.
5. Mrs Craigs land is zoned R2 – low density residential and for stage 2 release in G.M.C L.E.P. and as such has a greater value than adjoining land on the Northern end.

6. It can be seen that the proposed route takes a dog leg in order to reach the property.
as shown in chapter 3 figure 3.3-6.

7. In any case we are having an independent valuation done which is payable by G.M.C
though if the proposed easement is not moved, then valuation and compensation will be another
matter to be addressed at a later date.

We remain

Yours faithfully



Ian Shuttle
for and on behalf of Mrs F.J.Craig.

c.c to G.M.C.
G.H.D

Photos enclosed re roadway and other relevant structures.

"A"

 Alternate Routes



SCHEDULE 1

"B"

1. Land:
Lot 1 DP 603886
Folio:
1/603886
2. Total Easement Compensation
(Agreed compensation under section 30 of the *Lands Acquisition (Just Terms Compensation) Act 1991*): \$ [REDACTED]
3. Total Temporary Work Space Compensation: \$ [REDACTED]
4. Deposit: \$ [REDACTED]
5. Balance of Total Easement compensation: \$ [REDACTED]
6. Temporary Work Space Width: 14 metres or less as required
7. Final Water Pipeline Easement Width: 6 metres
8. Valve Pits: Air Valve x 1
Stop Valve x 1

*This forms part of H.S.P.
Agreement for Pipeline Water Supply*



2.5.2 Local Government Act 1993 and Land Acquisition (Just Terms Compensation) Act 1991

Under Section 24 of the *Local Government Act 1993*, Councils have the power to 'provide goods, services and facilities, and carry out activities, appropriate to the current and future needs within its local community and of the wider public'. Chapter 6 of the *Local Government Act 1993* states that such service functions include 'environmental conservation, protection and improvement services and facilities'.

A permanent easement, approximately 10 m wide, would need to be acquired from landowners within the temporary construction corridor. This would be done under the terms of the *Local Government Act 1993* and the *Land Acquisition (Just Terms Compensation) Act 1991*. The permanent easement would be required for the ongoing operation and maintenance of the pipeline. It is intended that amicable agreement on compensation for the temporary use of land and the permanent easement would be negotiated between GMC and the landowner.

An easement is a legal right to use land for a particular purpose. Ownership of the land remains with the landowner, however the use of the land would be subject to certain conditions.

The likely conditions for the permanent easement would include:

- ▶ The landowner not being permitted to erect any building or permanent structure on the easement;
- ▶ The landowner not being permitted to plant substantial or deep rooted trees on the easement; and
- ▶ Subject to the above, it is likely that the landowner would be able to continue to carry out the following activities on the easement:
 - Normal passage over the easement;
 - Grazing of livestock;
 - Normal cultivation for crops and market gardens etc (excluding orchards); and
 - Normal cultivation and propagation of pasture.

2.5.3 Roads Act 1993

Section 138 of the *NSW Roads Act 1993* states:

- (1) A person must not:
- (a) erect a structure or carry out a work in, on or over a public road, or
 - (b) dig up or disturb the surface of a public road, or
 - (c) remove or interfere with a structure, work or tree on a public road, or
 - (d) pump water into a public road from any land adjoining the road, or
 - (e) connect a road (whether public or private) to a classified road,
- otherwise than with the consent of the appropriate roads authority.'

Sections of the Project would be constructed within and/or across a number of public road reserves.

Section 138(5) of the *Roads Act 1993* states that section 138 applies 'despite the provisions of any other Act or law to the contrary, but does not apply to anything done under the provisions of the *Pipelines Act 1967*...'

NSW P

Contact: Greg Horvath
Reference: HSP0910 - 007

25 May 2010

"D"

Ian Shuttle
For and on behalf of Flora Jean Craig

Dear Mr Shuttle,

Subject: Highlands Source Project

Forwarded
+ B. Mail from
writer

I refer to your facsimile dated 5 May 2010 regarding your concerns associated with the Highlands Source Project (HSP) pipeline easement valuation.

The determination of the compensation payable to each effected landowner along the proposed HSP pipeline route has been independently valued in accordance with the NSW Valuer Generals requirements under the NSW Land and Property Management Authority.

This valuation is totally independent from the HSP Project Team and as such receives no input or adjustment to the valuation determined by the independent valuer.

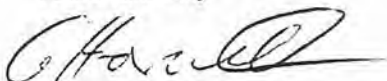
Each effected landowner has the ability to seek an alternative independent valuation (again as per the NSW Valuer Generals requirements) to verify to easement compensation being offered (at Council's expense) and also has the opportunity to seek legal advice in regard to the Deed of Agreement, again at Council's expense.

To help reduce the impact on affected landowners, the final pipeline easement width has been reduced to 6 metres, with a temporary construction width of an additional 14 metres. The final easement will not be fenced off, which will provide the landowner with an opportunity to continue to use their land as before, subject to those activities not interfering with the operation of the water pipeline. Unfortunately should a negotiated settlement on the purchase of the proposed 6 metre wide easement be unsuccessful, Council will have little alternative than to consider compulsory acquisition, under the *Land Acquisition (Just Terms Compensation) Act 1991*, where a 20 metre wide easement will be sort.

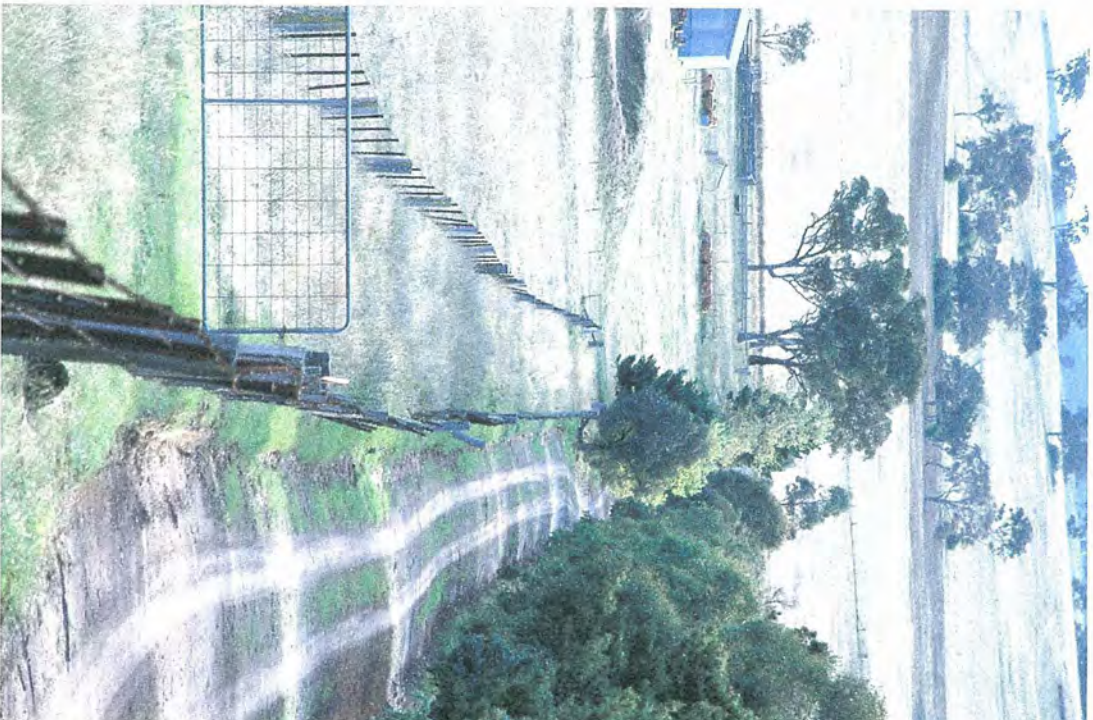
Council has a vested interest in ensuring individual landowner concerns relating to any aspect of the Project are addressed and we are committed to ensuring that the best possible outcome for both the affect landowners and the community at large will be achieved though our consultation and negotiation strategy.

If you require any further information regarding the above please contact me on 4823 4411 during office hours.

Yours faithfully



Greg Horvath
HSP Project Director & Manager Water Services



MRS F. JCRAIG'S LAND AT
NORTHEAN END - ROAD BELONGS
TO ADDINING PROPERTY

79 Clyde Street Goulburn
NSW 2580
30th June 2010.

Planning NSW
23-33 Bridge Street Sydney 2000.

Dear Director General,

This is a submission on the Environmental Assessment of the Highlands Source Project Goulburn and I thank you for the opportunity to make this submission.

For a longtime, I've been involved in Goulburn water matters. I hope that my local knowledge and experience will be of benefit in your determination of this assessment.

This submission will focus on the need, justification and cost for the project. Notwithstanding that there is all round agreement that a water project or two must proceed to secure Goulburn's water future, the real question is, what.

The extraordinarily drawn out nature of this project is clearly evident. Bearing in mind that even though it is a significant project, few such projects would be so protracted. I will try and shed some light on the reasons for that and the reasons that still cast of thick shadow of doubt over this project.

This project was first floated in the 1984 State election campaign (following the early '80s drought) by then Minister Whelan as a Sydney Water Board permanent use pipeline, for a cost of \$40M. This idea seemed extreme at the time as Goulburn had just built a new dam, Pejar Dam in 1980, and even though it was an idea by a government that was re elected, it came to nought.

Then we had the 2002 to 2007 drought. Goulburn's water storage level gradually fell, eventually to a low of 15% by May '07. Pejar Dam was famously empty (although our other dam Sooley Dam was full) and we were looking at all sorts of water projects.

The pipeline was floated again in the March 2007 State election campaign by the February '07 Premier's Taskforce Report, as a Goulburn Mulwaree Council emergency use pipeline for the same cost, \$40M. On balance this seemed like a reasonable idea at the time.

Although the Taskforce also found that if the Highlands pipeline was built it was likely to eliminate the need for other long term water projects. So this placed considerable stress and doubt on suggestions that other projects would be or are a genuine part of Goulburn's future water plans.

But in June '07 it poured rain, just as Council was deciding to fund the contingency costs that may be incurred with this project, with a levy on ratepayers. There was a fair amount of community discontent at what appeared to be again an extreme idea, particularly in light of other local water projects that had not been properly considered.

Just backtracking for a moment, these other water initiatives were part of the Goulburn Mulwaree Council, Integrated Water Cycle Management Plan, the document that this E.A. is based on.

This IWCM plan began in August '06. It was based on various consultants and a Project Reference Group looking at various water projects, which could be components of an integrated package to better manage water for Goulburn and the district. The IWCM plan process ran hot and cold over 5 years. The PRG, which was dominated by government agencies, meet 3 times in '06, 3 times in '07 (first to scrap the potable reuse option, then meet twice after this Highlands project announcement, to formally suggest it and promote it). The PRG did not meet at all in '08 and '09, then meet once in '10 to recommend the Highlands pipeline project.

During these gap years of the IWCM plan process, this pipeline project was heavily promoted by Council, and other projects, specifically more efficient raw water transfers and more stormwater harvesting were heavily demoted by Council and consultants. Particular reference here should be directed at the January '09 Department of Commerce Goulburn Water Supply Review.

Briefly, the only real alternative to this 80 kl Highlands pipeline from another catchment, is the 20kl Pejar pipeline within the Goulburn catchment that would integrate our raw water supply system. This pipeline would do two things, save all the water lost in transfer from Pejar Dam to town via the Wollondilly River (on average half the water transferred is lost) and give Goulburn the ability to store harvested flood water back into Pejar Dam.

The DoC '09 Review presented construction costs that were,

- \$36M for the Pejar pipeline or 80% higher (with arguable substantiation) than the Taskforce \$20M cost
- \$54M for the Highlands pipeline or 35% higher than the Taskforce \$40M cost.

The DoC '09 Review also presented water figures that were,

- worst case yield for the Pejar pipeline, excluding any rainfall and flooding yield since the drought broke in June '07
- best case maximum yield from the Highlands pipeline that would only be possible with a higher cost of construction
- best (or worst) case maximum demand for Goulburn if all of the hydrological and population hypotheticals materializing.

In essence, the DoC '09 Review drew cost/yield comparisons and findings that were manipulated and misleading.

The DoC '09 Review also did not give any consideration to any other water project e.g. evaporation control and waste water reuse. This was in accordance with the instruction from Council and goes to the heart of the drawn out nature of this project.

Quite simply, through the entire IWCM plan process, there is no evidence that any other local water projects have been given due or equal consideration compared to the Highlands pipeline (except the Pejar pipeline that was nobbled). In circumstances like this, it's reasonable to expect that with a reasonable level of local knowledge, a high level of local community doubt or suspicion naturally attaches itself to the obvious fix (the Highlands pipeline) and that is very hard to shake.

Whenever progress or momentum builds on the Highlands pipeline project, like this E.A., it is quickly weighed down or stopped. That's because whatever the latest document is, it is invariably under prepared or underdone, because it has no competition. So, when the powers that be are given the chance to decide to progress the project, with another flimsy document, they just don't have the confidence to do it.

For example this Highlands pipeline E.A. is missing things like,

- details of when it will operate, continuous or intermittent, because this will determine its real cash and environmental costs
- details of the water quality risks associated with transferring blue green algae directly from Wingecarribee Reservoir to the final barrier at the Goulburn water filtration plant
- details of the ongoing land management costs along the whole pipeline route, especially scour valve runoff, maintenance track erosion and weed and disease containment
- details of the contingency if this pipeline fails
- considering better use of the 50,000 m³ of spoil other than tipping e.g. a levy bank in Eastgrove, Goulburn to negate the adverse impact on land values there as result of recent flood rezoning
- considering the adverse impact introducing another catchment's water into this catchment's overloaded waste water catchment (an average of plus 1.9 ML per day) will have on our environment
- explaining how the operating CO₂ emissions increase of 38% from this project compares anything other than badly to the existing local raw water pumping, when Council, in its own small way, has a target of reducing CO₂ by 30% by 2020
- applying realistic and sustainable population growth to the whole IWCMM plan first (maybe 0.5% or less) instead of the 1.0% and then chasing its tail to make up the water.

Then and only then can anyone decide on the real environmental cost and benefit of this (or any) project.

Goulburn does need a secure and sustainable water future with no Level 5 restrictions and it does need some project or two to do this, but the justification for this project, above others, is flawed. At this point it's appropriate to add that everyone is sick and tired of more talk, no action, on this (any) project. But obviously, here we are again, seriously talking about stepping further into the dark with this Highlands pipeline.

Please reject this E.A. in its current incomplete form. Please work with Goulburn to give it enough information to make the right decision on its water future so that we can be truly sustainable and proud of our water and environmental management.

Yours faithfully,

Neil Penning.



PCU007251



PO Box 323 Penrith NSW 2750
 Level 4, 2-6 Station Street
 Penrith NSW 2750
 Tel 1300 722 468 Fax 02 4725 2599
 Email info@sca.nsw.gov.au
 Website www.sca.nsw.gov.au

Ref : D2010_02021

Director, Infrastructure Projects
 Department of Planning
 GPO Box 39
 SYDNEY NSW 2001

Attention: Anna Timbrell

Dear Ms Timbrell

Signed correspondence emailed to Anna Timbrell

Date: 11 / 7 / 10

Officer: [Signature]

Highland Source Project (MP09_0193)

Thank you for providing the Sydney Catchment Authority (SCA) the opportunity to review the Environmental Assessment (EA) report for the above proposal.

The SCA recognises that the proposal has been classified a Major Project to be assessed and determined under Part 3A of the Environmental Planning and Assessment Act and as such is not formally subject to the requirements of the *Drinking Water Catchments Regional Environmental Plan No 1* (REP). Notwithstanding this, the SCA provides the following comments in relation to the proposal.

The proposal is located within the Wingecarribee River, Wollondilly River and Upper Wollondilly River sub-catchments which are part of Sydney's drinking water supply catchments. It is therefore desirable that the proposed Highlands Source Project (HSP) is constructed and operated in a manner so as to have a sustainable neutral or beneficial effect (NorBE) on water quality over the longer term as required by other developments under the REP.

The SCA has completed its review of the EA report and is satisfied that the report provides adequate information with regard to the potential contamination and water management issues for the construction and operation stages of the development. It notes that construction of the 83 km pipeline will have the biggest potential impact on water quality and that a properly developed and implemented Construction Environmental Management Plan incorporating effective and appropriate erosion and sediment control measures is vital in ensuring water quality is not impacted.

Given the information contained in the EA report, the SCA considers the proposal is likely to achieve a neutral or beneficial effect on water quality providing the following conditions are included in the approval:

1. A Construction Environmental Management Plan (CEMP) is to be prepared for the construction phase of the project in consultation with the Sydney Catchment Authority by a person experienced in the preparation of such plans. The CEMP is to:
 - include Erosion and Sediment Control Plans that meet the requirements outlined in NSW Landcom's *Soils and Construction: Managing Urban Stormwater (2004)* manual, and NSW Department of Environment and Climate Change publications *Managing Urban Stormwater: Soils and Construction Volumes 2A Installation of Services* and *2C Unsealed Roads*"; and

- incorporate the elements of Section 6 and Appendix G of the *Environmental Assessment report* prepared by GHD Pty Ltd (dated April 2010), especially procedures for the remediation of any contaminated soils disturbed during construction;
2. An Operational Environmental Management Plan (OEMP) is to be prepared for the proposed pipeline and associated infrastructure in consultation with the Sydney Catchment Authority by a person experienced in the preparation of such plans. The OEMP is to incorporate amongst other measures:
- a detailed management plan for the handling of scour water released from the pipeline;
 - procedures and responsibilities for the inspection, monitoring and maintenance of all watercourse crossings, both pipeline and access tracks;

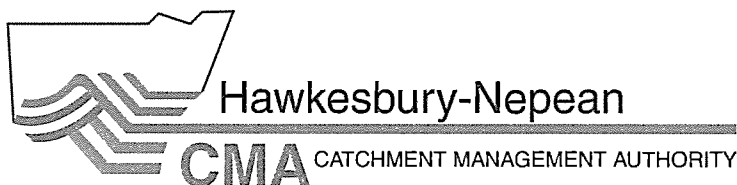
The SCA would appreciate being involved in any further environmental assessment and consultation process associated with the application and would also appreciate being provided with an opportunity to comment on any draft conditions.

If you wish to discuss any matter raised in this letter please do not hesitate to contact Jim Caddey on 4824 3401.

Yours sincerely

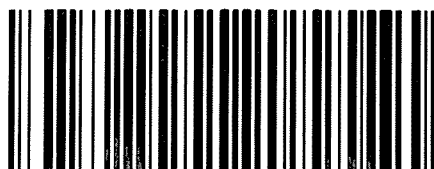
 30/6/10

GREG SHEEHY
Senior Manager Regulatory Operations



NSW Planning
A/ Team Leader – Energy & Water
GPO Box 39
SYDNEY NSW 2580

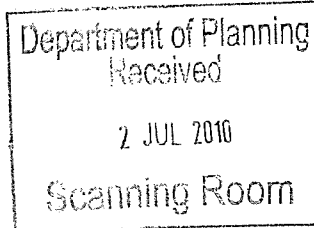
30th June 2010



PCU007244

Contact: Gillian Young
Phone: (02) 4828 6770
Fax: (02) 4828 6765
mail: gillian.young@cma.nsw.gov.au

Subjective Folder: HN00663
our ref: S07/01018



Attention: Dinuka McKenzie,

Subject: Highlands Source Project (MP 09_0193)

Thank you for your letter of 26 May 2010 inviting Hawkesbury Nepean Catchment Management Authority (HNCMA) to comment on the Highlands Source Project which includes the construction and operation of an 83km water supply pipeline between the Wingecarribee Reservoir to the existing water storage, treatment and supply system in Goulburn.

Catchment Management Authorities are approval authorities for clearing of native vegetation under the *Native Vegetation Act 2003* (NV Act), and are responsible for implementing the objectives of this Act. These include:

- “to prevent broad scale clearing unless it improves or maintains environmental outcomes, and
- to protect native vegetation of high conservation value having regard to its contribution to such matters as water quality, biodiversity, or the prevention of salinity or land degradation”

HNCMA supports activities that achieve the objects of the NV Act, and consider proposed developments should be located and designed to minimise impacts on native vegetation, with any clearing required mitigated by establishing offset areas.

HNCMA also has responsibility for the coordination of natural resource management within the catchment, and has produced the HNCMA Catchment Action Plan 2007-2016 (CAP) to support this. The CAP identifies catchment condition and management targets to conserve biodiversity.

The project is a development to which Part 3A of the *Environmental Planning and Assessment Act 1979* applies and the project will therefore be assessed and determined by the Minister for Planning. An approval under the NV Act for the clearing of native vegetation as part of the proposed development is therefore **not** required (NV Act s25(g)). As such, HNCMA has no approval role for any clearing of native vegetation required for this development.

It is understood that Priority E4 of the NSW State Plan, the Catchment Condition Targets of the Hawkesbury-Nepean Catchment Action Plan (CAP), and the objects of the NV Act represent NSW government policy on native vegetation. Collectively, these require a maintenance or increase in the extent of native vegetation, an improvement in native vegetation condition, and the need for clearing of native vegetation to result in an “Improved or Maintained” environmental outcome through the use of secured off-set areas.

Determination of whether a clearing and offset proposal will result in an improved or maintained environmental outcome is made by the *Environmental Outcomes Assessment Methodology*, or the *BioBanking Assessment Methodology*. These have been authorised by the Minister for this purpose, and are used for assessment of clearing proposals under the NV Act, and NSW Biodiversity Banking and Offsets Scheme (i.e. BioBanking) respectively. The Environmental Outcomes Assessment Methodology (EOAM) provides a scientifically recognised and established means of determining vegetation values and the impacts of clearing. The “PVP developer” is the assessment mechanism used to apply the EOAM to specific vegetation clearing proposals requiring approval under the NV Act. The EOAM also provides the basis of the assessment methodology used in the BioBanking Scheme.

Our comments on the proposed development are based upon a review of the Environmental Assessment (EA) document provided, HNCMA’s aerial photography, P5MA vegetation mapping, Wingecarribee Shire Council’s Biodiversity Strategy vegetation mapping and the Goulburn Mulwaree Biodiversity Strategy. A site visit to inspect vegetation along the pipeline corridor has not been undertaken, however a desk-top analysis of the data sets contained in the BioMetric Tool of the PVP Developer has been undertaken to identify values for native vegetation types within the proposed development site.

Significant Vegetation

HNCMA CAP targets for Biodiversity includes a specific priority directed towards ‘an increase in the recovery of threatened species, populations and ecological communities’.

The EA notes the presence of nine native vegetation types within proposed survey corridor, existing as ‘small isolated stands of remnant native vegetation, larger stands of remnant native vegetation, riparian vegetation, native sedgeland, fragmented and regrowth native vegetation’ ranging in condition from poor to good.

Five of these vegetation types have been classified by the EA as Southern Highlands Shale Woodland, an Endangered Ecological Community (EEC) listed under the *Threatened Species Conservation Act 1995* (TSC Act) and one type classified as Robertson Basalt Tall Open Forest, also an EEC. I note that ‘the native vegetation to be permanently removed during construction includes 4.32 ha of Southern Highlands Shale Woodlands EEC.’ It has also come to our attention (from consultation with the Land & Property Management Authority) that a section of Crown Land directly adjoining the northern end of Progress Street in Goulburn will be directly affected by the pipeline. This area contains vegetation that may be classified as White Box – Yellow Box - Blakely’s Red Gum Grassy Woodland listed under both the TSC Act as well as the EPBC Act.

HNCMA considers such an impact on Southern Highlands Shale Woodlands and White Box – Yellow Box - Blakely’s Red Gum Grassy Woodlands to be significant, given the NSW Scientific Committee’s final determination that the community has been ‘extensively cleared for....rural development’ and that already ‘much of the remaining area...is highly fragmented’. I therefore recommend that the development be amended to avoid or reduce the proposed impacts on these Endangered Ecological Communities.

Threatened Species

The EA states that two threatened species, one listed as vulnerable under the TSC Act and one as endangered under the EPBC Act, were identified by the surveys. Although one species, *Leucochrysum albicans* var. *tricolor* (Hoary Sunray), will not be disturbed by the development, the native vegetation to be permanently removed during construction includes ‘potentially up to 100 individuals and associated habitat’ for the Threatened Species *Eucalyptus macarthurii* (Paddy’s River Box or Camden Woollybut).

HNCMA considers such an impact on *Eucalyptus macarthurii* to be significant, given the NSW Scientific Committee's final determination that 'the current mature cohort of individuals is unlikely to be replaced unless protective measures are implemented' and that 'threats include loss of habitat through development (and) clearing'. I therefore recommend that the development be amended to avoid or reduce the proposed impact on this Threatened Species.

Regional Biodiversity Corridors

Regional Biodiversity Corridors were identified within the Greater Southern Sydney Region following an extensive investigation of species distribution and habitat use by the then Department of Environment and Climate Change (DECC). These were mapped and a paper prepared by DECC to inform development of the Hawkesbury-Nepean Catchment Action Plan, 2008

The HNCMA Catchment Action Plan identifies the retention of native vegetation in regional corridors, and achieving an improvement in condition of this vegetation, as priority actions. These corridors are a critical link providing for the movement of plant and animal species through the landscape, underpinning their sustainability and survival in the face of climate change.

I note that the pipeline corridor transects both the Bargo to Morton National Park and Abercrombie River to Morton National Park Regional Biodiversity Corridors. HNCMA is concerned at any development in and around this corridor that has the potential to adversely affect its ecological integrity.

Mitigation of Impacts and Offsets

I note that a Biodiversity Management Strategy, incorporating measures to avoid, mitigate and offset biodiversity loss arising from the pipeline construction, has been prepared. This Strategy proposes the development of a Flora and Fauna Management Plan (FFMP) in consultation with Department of Environment, Climate Change and Water (DECCW). In view of our responsibilities and experience in natural resource management within the development area, HNCMA can offer assistance in this consultation process.

It is also noted that the preparation of an Offset Plan is proposed in consultation with DECCW. Again, HNCMA can offer the benefit of our experience with the Environmental Outcomes Assessment Methodology – which provides a scientifically recognised and established means of determining vegetation values and the impacts of clearing – and the development of appropriate offsets to achieve an "improved or maintained" environmental outcome.

I have asked Gillian Young, Catchment Officer at our Goulburn office to assist you should you require further information on any of the above. Gillian may be contacted by telephone on 4828 6770.

Yours sincerely



Bernie Bugden
General Manager



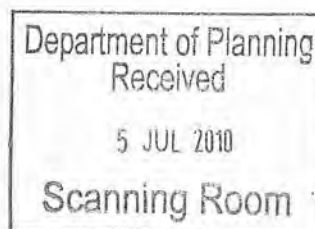
PCU007292

**Industry &
Investment**

Your Ref: S07/01018

Our Ref: OUT10/9623

Dinuka McKenzie
A/Team Leader – Energy and Water
Infrastructure Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001



Dear Ms McKenzie,

**Re: MP09_0193 – Environmental Assessment – Proposed Highland Source
Project – Goulburn Water Supply.**

Thank you for your letter dated 26 May 2010 seeking Industry & Investment NSW (I&I NSW) comments on the Environmental Assessment (EA) for the above Major Project.

This is a joint response from I&I NSW providing comments on Fisheries, Mineral Resources and Agriculture issues related to this proposal which are detailed in Attachments A, B and C. I&I NSW advises that there are no issues related to State Forests.

Should you have any general queries please contact Dr Trevor Daly on (02) 4478 9103. For further specific information on Agriculture or Mineral Resources issues please contact the relevant officers listed in the Attachments.

Yours sincerely

Bill Talbot
Director, Fisheries Conservation & Aquaculture

30 June 2010

ATTACHMENT A – FISHERIES ISSUES

I&I NSW is responsible for ensuring that fish stocks are conserved and that there is “no net loss” of key fish habitats upon which they depend. To achieve this, the Department ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (namely the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the Act respectively) and the associated *Policy and Guidelines for Aquatic Habitat Management and Fish Conservation (1999)*.

I&I NSW has reviewed the Environmental Assessment (EA) prepared by GHD P/L (dated April 2010) and notes that the proposed pipeline will cross a total of 138 waterways over a total distance of approximately 83 kms. The waterways to be crossed, range from major rivers and creeks to intermittent drainage lines. I&I NSW advises that the proposed pipeline crosses 13 waterways which this Department has mapped as key fish habitat. These are:

1. Kelly's Creek (W3),
2. Medway Rivulet (W14),
3. Black Bobs Creek (W22),
4. Paddys River (W52),
5. Uringalla Creek (W56),
6. Back Creek (W57),
7. Jaorimin Creek (W67, W69),
8. Lockyersleigh Creek (W79, W81),
9. Narambulla Creek (W84),
10. Osborns Creek (W95),
11. Boxers Creek (W108),
12. Kenmore Creek (W120, W122, W123, W124) and
13. Wollondilly River (W105, W106, W119, W131).

The potential impact of the development upon water quality and aquatic habitats in the vicinity of these major waterway crossings is of particular concern to this Department in relation to this Major Project. Services corridors such as water pipelines provide numerous direct pathways for the transfer of silt and sediment into waterways both during the construction phase and subsequently, with potentially serious adverse impacts upon fish and aquatic habitats.

Overall, I&I NSW does not object to DoP issuing an approval for the proposal as outlined in the EA and Appendices (including Statement of Commitments and site plans) providing the following matters are explicitly addressed by means of Conditions of Consent:

1. Development of construction and operation environmental management and monitoring plans (Commitment No.1 – Table 28.1).
2. Requirement (Table 6.4) to use Horizontal Directional Drilling (or underboring) for the pipeline crossings of Kellys Creek (W3), Paddys River (W52), Uringalla Creek (W56), Back Creek (W57), Jaorimin Creek (W69), Narambulla Creek (W84), Kenmore Creek (W120) and Wollondilly River (W105, W106, W119, W131).
3. Insufficient information has been provided in the EA to determine if the proposal to use trenching to cross the other five (5) key fish habitat waterways listed above is the most appropriate construction method. I&I NSW notes that further investigations, including engineering surveys and aquatic ecological assessments, will be undertaken during the detailed design to determine the appropriate method that can be used to cross waterways (Commitment No.14 – Table 28.1). I&I NSW requests that DoP include a Condition of Consent that requires copies of these reports to be sent to this Department for review of potential impacts upon those waterways we have identified above as key fish habitat.

4. Commitment No. 17 (Table 28.1) be amended to also require the proponent to consult with I&I NSW with regard to watercourse crossing methodologies and site-specific mitigation measures for watercourses that can then be incorporated into the Construction Environmental Management Plan (CEMP).
5. Copies of the CEMP and waterway rehabilitation plan (Commitment No.16 – Table 28.1) to be provided to this Department for comment and approval prior to construction.
6. Any proposed new or upgraded temporary access road crossings of waterways must be designed and constructed in accordance with the Department's *Policy and Guidelines for Fish Friendly Waterway Crossings* (2003) and *Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (2003). The design of any road/track crossings of the 13 key fish habitat waterways listed above to be submitted to I&I NSW for approval prior to construction. All temporary crossings to be removed as soon as possible after construction is complete. No temporary crossings are to be left in place.
7. Proposed mitigation measures for surface water (Section 14 of EA) and geomorphology (Section 15 of EA), in particular:
 - Restriction of the pipeline construction corridor width at waterway crossings to 6 m;
 - Appropriate erosion and sedimentation controls;
 - Timing of construction to dry periods, where possible, and avoiding open trenching during rainfall events;
 - Diversion of flowing water around the trench, thereby maintaining flow and fish passage; and
 - Rehabilitation to occur immediately following the completion of waterway crossing construction to re-establish the integrity of the riparian zone.
8. In addition, I&I NSW recommends that DoP include a condition of consent requiring an independent audit of the adequacy and effectiveness of implementation of erosion and sediment controls midway through the construction period with a copy of the report to be provided to I&I NSW.

Contact:

The contact person for matters relating to fisheries and aquatic habitat is Dr Trevor Daly, Fisheries Conservation Manager – South Coast, ph (02) 4478 9103 or email:

trevor.daly@industry.nsw.gov.au

ATTACHMENT B – AGRICULTURE ISSUES

The following aspects have not been addressed in the Environmental Assessment and should be considered as part of the proposal:

1. Farm access considerations

Infrastructure proposals can result in interruptions to internal or external farm access and to farm services which may affect the efficient operation and sustainability of agricultural businesses.

Farm businesses rely on access to road networks for supplies, employees, specialist support services and selling products. Access to infrastructure such as power, communication and water can also be critical for animal welfare and business survival.

Reliable, effective access to the road network and services is particularly critical at peak selling or harvesting times and for Intensive livestock operations (eg dairies, poultry), horticultural and vegetable enterprises. Internal access to water, pastures, feed storage and farm infrastructure (eg irrigation equipment) can also be vital for animal welfare and sustainable farming. Operating farms often comprise more than one allotment and need to access resources, livestock and crops spread across the holding.

Infrastructure proposals should:

- Avoid, or promptly mitigate significant changes to farm access to the road network, internal farm tracks and critical infrastructure.
- Consider the timing of operations, temporary fencing and temporary access routes to minimise impacts on farm operations.
- Where the proposal will inevitably divide existing farm operations or properties the DA should include measures to ensure ongoing access between each section.

Access must be of an appropriate design standard to support ongoing agricultural use and should be developed in consultation with the landholder.

- Develop site access protocols that lists the relevant landholder contact details and includes measures to minimise adverse impacts such as:
 - Leaving gates open or shut as found.
 - Driving carefully to minimise disturbance to livestock, crops and pastures, and
 - Minimising disturbance to the environment e.g. land clearing or work during bird nesting seasons.

2. Increased Biosecurity, Weed and Livestock Risks

- Bio-security for plant and animal diseases relies on limiting vehicle and people movements on rural properties and being able to trace such movements if problems arise.
- Infrastructure developments typically result in a temporary, but significant increase in vehicle movements on and off rural properties. New access tracks may also be created and machinery may move across multiple rural properties.
- Pest animals may also be encouraged by food sources from construction works and new access tracks. The additional vehicle movements and development activities may also increase the risk of bushfires.
- Construction activities may additionally increase the risk of straying livestock especially if fences need to be cut or replaced, if farm gates are not closed or if livestock are stressed by loud noises.

The following are recommended by I&I NSW to be assessed and appropriate measures identified to effectively mitigate;

- Potential bio-security risks within the locality and possible contact with animal or plant diseases.
- Identify the location, status and management of current and former livestock dip sites and other potentially contaminated sites within the infrastructure corridor or area.
- Assess bushfire or other emergency management risks.
- Identify significant weed species and risks within the proposed development footprint.
- The risk of straying livestock (eg by minimising the need to cut farm fences, liaising with farmers re the timing of works, ensuring farm gates are left open or closed as found).
- Limit pest animal impacts, such as effective rehabilitation of unwanted tracks.

Where infrastructure proposals transect more than one property I&I NSW recommends that consent conditions require the development of a weed management plan in consultation with relevant Weed Authorities.

A Weed Management Plan should identify;

- Notifiable and problematic environmental weeds that could affect farm productivity and assess the additional risks resulting from the proposed development. Advice is available from the local council weeds officer or on the website listed at the end of this guideline.
- State, regional or local plan or strategies for relevant to specific weeds that occur on the property area or that may be transported to the proposed works from surrounding areas.
- Weed suppression, management and containment strategies for all disturbed areas. For instance soil stockpiles, roadsides leading to the landfill site and disturbed areas.

Measures to limit the spread of existing weeds include measures cleaning vehicle tyres before moving from property to property, footwear checks, minimising and monitoring soil movement between properties.

- Monitoring programs for noxious and problematic weeds on site and in the surrounding areas.

3. Consent Authorities should also consider consent conditions requiring Infrastructure proponents to develop protocols to;

- Assess the site specific risks (eg the specific location of weed species or any GM crops, the type of livestock and disease spread factors).
- Separate work sites from the wider farm, to limit the movement of vehicles onto and across private property.
- Monitor vehicle movement onto and across farming properties.
- Ensure appropriate decontamination of vehicles moving between properties.

Contact:

The contact person for matters relating to agriculture is Wendy Goodburn, Resource Management Officer, ph (02) 4828 6635 or email: wendy.goodburn@industry.nsw.gov.au.

ATTACHMENT C – MINERAL RESOURCES ISSUES

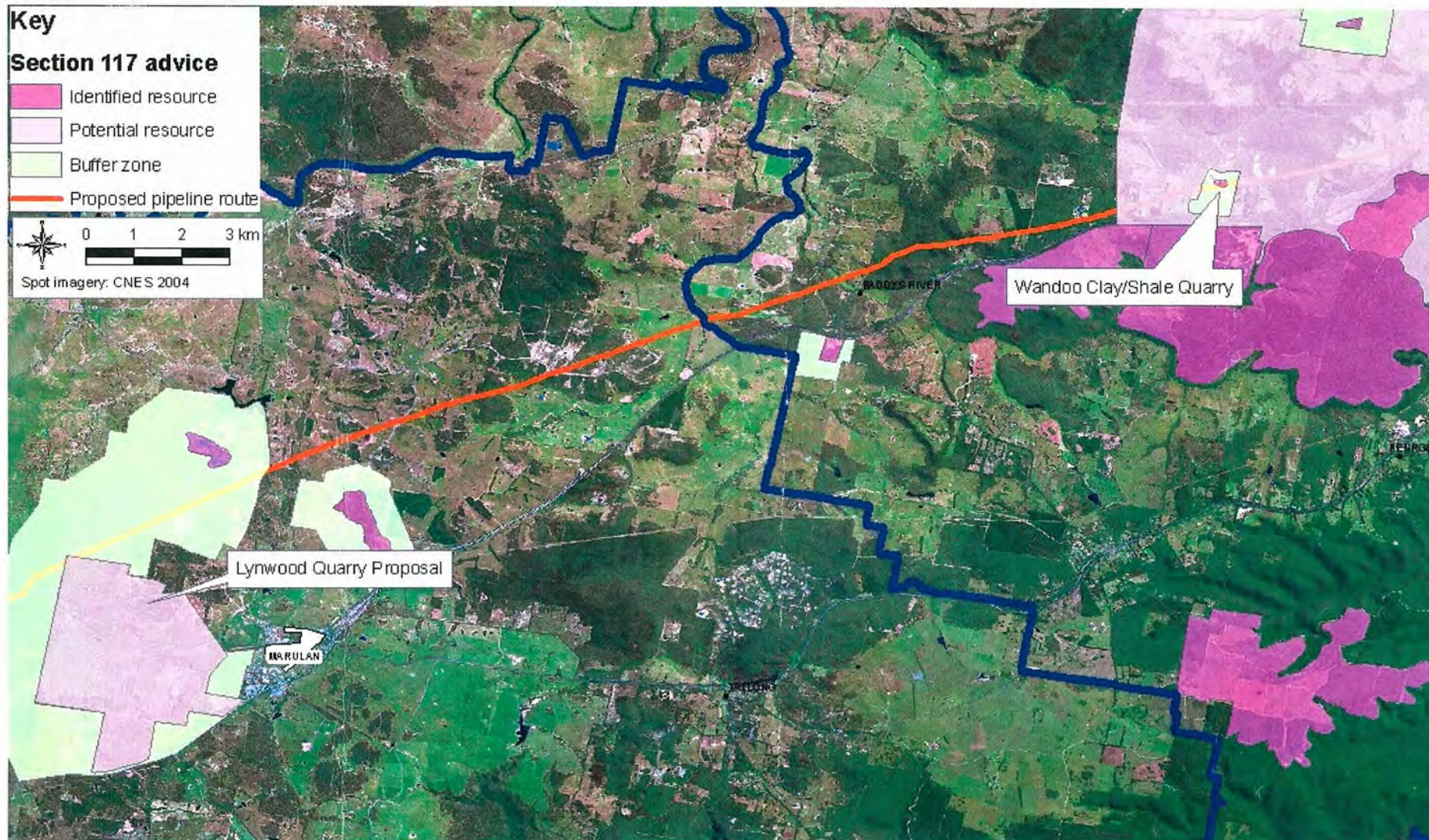
I&I NSW notes that much of the proposed pipeline follows the path of the existing natural gas pipeline and power line easements. Access to mineral resources may be affected by the proposed pipeline at two locations along the route, both of which are covered by current s117 notifications which identify regionally significant mineral resources.

The Wandoo clay/shale/sand quarry operated by Russell Kuhn is located on the pipeline route near Hanging Rock (refer to attached figure). The proposed pipeline may affect the operator's ability to access some areas of the resource which is an important source of construction materials. I&I NSW requests that the proponent consult with the operator (Russell Kuhn, ph (02) 4884 1519) to minimise impacts on current and future extraction of the resource.

Consultation should also take place with Holcim (Australia) regarding potential impacts of the pipeline on the company's proposed Lynwood hard rock quarry near Marulan (refer to attached figure).

Contact:

The contact person for matters relating to mineral resources is Gary Burton, Senior Geologist, ph (02) 6360 5330 or email: gary.burton@industry.nsw.gov.au

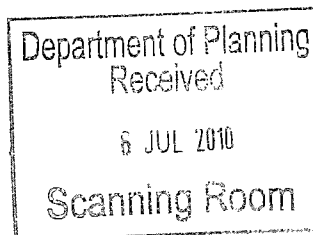




Environment, Climate Change & Water



Your reference:
Our reference: DOC10/ 23644 FIL07/7253
Contact: Alison McLeod, (02) 6229 7002



Dinuka McKenzie
A/ Team Leader- Energy and Water
Department of Planning
GPO Box 39
SYDNEY NSW 2001

2 July 2010

Dear Ms McKenzie,

**RE: Environmental Assessment - Highland Source Project (MP09_0193) –
Part 3A, Environmental Planning & Assessment Act 1979**

I refer to the Environmental Assessment (EA) for the abovementioned proposal and your invitation (dated 26 May 2010) to the Department of Environment, Climate Change and Water (DECCW) to make a submission to the Department of Planning (DoP) regarding the proposal.

DECCW has conducted a detailed review of the EA, including the relevant attached specialist reports and provides recommendations for DoP's consideration. In summary, these recommendations relate to the following issues:

- a) Cultural and Heritage Management
- b) Biodiversity impacts and management measures
- c) Construction Noise and Vibration management

Attachment A to this letter outlines specific details in relation to these recommendations.

It is DECCW's view the proposal will not likely require an Environment Protection Licence under to the *Protection of the Environment Operations Act 1997*. However, it remains the responsibility of the proponent to assess the need for a licence make application in the event one may be required.

Should you have any questions, or wish to discuss this matter further, please contact Alison McLeod at the DECCW's Queanbeyan office on 02 6229 7002.

Yours sincerely

JULIAN THOMPSON
Unit Head – South East Region
Environment Protection and Regulation Group

Attachment A

Department of Environment, Climate Change & Water (DECCW) comments

Environmental Assessment- Highland Source Project - (MP09_0193)

NB. DECCW recommendations are underlined.

Cultural Heritage Assessment

The DECCW has conducted a review of the Cultural Heritage Assessment (dated April 2010) within the Environmental Assessment (EA) for the Highland Source Project and provides the following comments;

- The Cultural Heritage Assessment adequately considers the potential impacts to both previously identified Aboriginal sites and Aboriginal sites identified in the course of the survey along the proposed pipeline route.
- The DECCW's Aboriginal Heritage Information Management System (AHIMS) identified 77 Aboriginal sites within an area one kilometre either side of the proposed pipeline route, 8 Aboriginal sites and 7 potential archaeological deposits (PAD) were recorded during the EA survey. Both route options will impact on 15 out of 92 known Aboriginal sites directly or partially.
- The EA meets DECCW Interim Community Consultation Requirements (ICCR). The seven Aboriginal stakeholders all support the following EA recommendations, as does DECCW;
 - i) The assessment recommends further archaeological survey as only 43km (52%) of the route was surveyed for the purpose of the EA. DECCW supports this recommendation based on the EA survey results.
 - ii) All aboriginal sites located within the pipeline route which will not be impacted by construction activities will be conserved and protected, including being fenced off.
 - iii) The seven PAD sites will be subject to a program of archaeological subsurface testing with management options dependent upon testing results obtained.

DECCW recommends DoP incorporate these recommendations into any development consent conditions.

Ecological Assessment

The Department of Environment, Climate Change and Water (DECCW) has conducted a review of the Ecological Impact Assessment, (dated April 2010) within the Environmental Assessment (EA) for the Highland Source Project and provides the following recommendations.

1. Endangered Ecological Communities

The DECCW remains concerned that the entire length of the pipeline route has not yet been surveyed, characterised and mapped for flora, fauna and habitat value. This includes vegetated areas which are likely to contain Endangered Ecological Communities (EEC's).

DECCW notes that there is the possibility of two additional EEC's existing on the unsurveyed section of the pipeline route. These EEC's are the "White Box Yellow Box Blakelys Red Gum Woodland" and "Natural Temperate Grassland".

DECCW also notes that two of the vegetation communities listed in the EA, Ribbon Gum – Narrow Leaved Peppermint grassy open forest and Swamp Gum – Ribbon Gum woodland may have

been misidentified as Southern Sandstone Shale Woodlands (SSSW) instead of the Tablelands Basalt Forest (TBF).

DECCW recommends DoP introduce consent conditions that require a Flora and Fauna Management Plan (FFMP) to be prepared by the proponent which recognises all EEC's which have potential to occur within the pipeline corridor and implement strategies to minimise any impacts of the development on these communities.

2. Survey of Pipeline Route

The final pipeline alignment has not been precisely mapped and surveyed in the EA.

DECCW recommends that a qualified ecologist be present at all times for the in-field determination of the final alignment.

The attending ecologist will need to:

- i) ensure that impacts on biodiversity are minimised for the duration of the pipeline route, including any new or modified access tracks where vegetation is to be cleared.
- ii) note the vegetation community and condition thereof in any areas of intact vegetation to be cleared, including EEC's.
- iii) measure and record the total area of vegetation to be cleared to ensure that the final offset proposal is of sufficient size and composition to adequately offset any cleared vegetation.
- iv) record if the additional vegetation surveys indicate that the EEC's which are not identified in the EA (Box Gum Woodland and Natural Temperate Grassland) are encountered. If encountered, then the mitigation proposed in the FFMP for these communities should be implemented.
- v) in any cleared or disturbed landscapes, identify the species of vegetation to be removed and mark any individual trees to be removed. As far as possible, no trees should be removed as part of the 10 metre permanent clearing path, and no trees should be cleared at all within the additional temporary footprint. Any tree species which are identified as components of EEC's should not be cleared unless all other options have been exhausted.
- vi) ensure trees displaying evidence of containing hollows or providing habitat for threatened species be retained or targeted for additional surveys prior to any clearing to determine the potential loss of habitat. To enable pre-clearing surveys to be undertaken efficiently, all hollow bearing trees to be cleared should be identified, marked and have their dimensions recorded.
- vii) identify any additional threatened flora populations and species along the final pipeline route which have potential to be impacted, particularly any additional populations of Camden Woollybutt. The DECCW notes that the EA also recorded the presence of Black Gum (*Eucalyptus aggregata*) on the site. Since the Environmental Assessment Requirements (EAR's) were issued by the DECCW, this species has been listed as 'vulnerable' under the *Threatened Species Conservation Act 1995*. This determination should be taken into account for any further surveys along the pipeline route.
- viii) ensure the survey and determination of the final pipeline alignment should avoid impacts on any threatened species and EEC's. If impacts are unavoidable then specific conditions outlined in the FFMP should be implemented.

3. Flora and Fauna Management Plan

The Flora and Fauna Management Plan (FFMP) should include (but need not be limited to) the issues listed in Section 9.4.3 of the EA with particular emphasis on the following;

- (i) Preliminary surveys have identified Camden Woollybutt (*Eucalyptus macarthurii*) in at least three sites along the pipeline route. Two of these populations are adjoining roads and the third in a discrete location. DECCW notes that any underboring which will be carried out for roads where Camden Woollybutt is present in adjoining roadside vegetation should be extended to underbore the threatened species alongside the road. Strong justification would be required for the removal of any Camden Woollybutt species in these locations where underboring is a viable alternative.
- (ii) If additional surveys discover previously unknown populations of Camden Woollybutt, the proponent should ensure the final pipeline route does not require removal of this vegetation. If avoidance is not a viable option, the proponent should explore the option of underboring. As a last resort, the proponent may record the location of any Camden Woollybutt plants prior to clearing. If Camden Woollybutt species are removed, the FFMP and Offset Plan must incorporate a management plan for the species.
- (iii) The FFMP should include a tree dwelling fauna and hollow management protocol which proposes measures to ensure slow moving species (such as koalas) are not injured during any vegetation clearing operations.
- (iv) The FFMP should include the location (using differential GPS) and number of all species removed from the pipeline alignment. Such records should be recorded and submitted to DoP and/or DECCW. All species should be recorded regardless of their living status (alive, injured or dead).

Any vegetation clearing should be undertaken at a time of the year which is likely to have the least impact on fauna species such as in non-breeding times of year.

The FFMP should be developed in consultation with DECCW and submitted for review prior to implementation.

4. Biodiversity Offset

Upon determination of the final pipeline and easement alignment (and associated vegetation communities to be removed) and before construction commences, the proponent should prepare and submit a Biodiversity Offset Plan. This plan should be prepared in consultation with DoP and DECCW.

This plan is required to determine an appropriate offset for vegetation cleared as part of the project (particularly EEC's the Camden Woollybutt but also any other identified threatened species where it has been identified that removal is the only option).

In preparing the Biodiversity Offset Plan, the proponent should ensure that:

- i) all cleared vegetation communities are represented in the offset area. DECCW recommends that the final offset requirement be determined through the use of a standardised tool, such as the "BioBanking" methodology, but if this is not the case then a detailed assessment of the conservation value of the final offset proposal be undertaken,
- ii) the offset includes adequate hollow bearing trees of similar size and condition to compensate for any which are removed during clearing. The offset can include suitable vegetation which may, through proper management, allow future development of hollows to replace any which are lost as part of the proposal,
- iii) if any threatened plants are removed in clearing for the project, the offset should contain individuals of these plant species, particularly Camden Woollybutt. If it is not possible to locate threatened plant species within the offset area, the proponent may consider it possible to protect or enhance separate populations outside the main vegetation offset area.

The DECCW recommends the offset be within one of the two corridors identified as 'significant' within the EA by the Hawkesbury Nepean Catchment Management Authority (HNCMA). This may assist with reducing the impact of the project on dispersal of some species such as small mammals and reptiles. By placing the offset within one of these corridors, the proponent will also be enhancing the biodiversity values of any proposal which has been previously identified by the HNCMA.

It is possible that the biodiversity offset outlined in the EA may meet the requirements listed above. However, given the limited surveys conducted to date and the uncertainties about the final pipeline alignment, it is possible more surveys and detailed information will be required to assess the appropriateness of the currently proposed offset location and area.

Once the final location and conservation value of the biodiversity offset is identified, a Vegetation Management Plan for the offset area will need to be developed. It is suggested that this requirement be introduced into any consent issued.

This Vegetation Management Plan for the biodiversity offset will need to include, but need not be restricted to, such information as;

- (i) the management actions that will be undertaken to gain biodiversity improvements,
- (ii) the tenure of the land and the body responsible for its management,
- (iii) the resources (including funds and staff resources) to ensure that the management actions are implemented.

DECCW notes that a biodiversity is a long term commitment and that the best overall outcome would be to minimise any environmental impacts through the pipeline route selection process.

Noise Impact Assessment

DECCW has conducted a review of the Air, Noise and Vibration Assessment, (dated April 2010) within the Environmental Assessment (EA) for the Highland Source Project and provides the following recommendations.

1. Overview

DECCW notes that the Highland Source Project is not likely to require an Environment Protection Licence under the *Protection of the Environment Operations Act 1997*, however recommended noise limits are provided to assist the Department of Planning in providing conditions of consent in the case that the proposal gains planning approval.

The Air, Noise and Vibration Assessment (AN&V Assessment) does not specify the proposed location of construction site compounds, nor does it identify the location of all access roads to the pipeline route. DECCW recommends that a detailed Construction Noise and Vibration Management Plan (CNVMP) be prepared and implemented prior to the commencement of any construction work.

The construction noise and vibration impacts are presented in the AN&V Assessment as noise levels at different distances from the pipeline for each of the 8 construction stages. DECCW notes that the predicted construction noise impacts may exceed 75 dB(A), and that vibration criteria may also be exceeded when construction occurs within 50m of a sensitive receiver.

DECCW recommends that:

- i) respite periods be included in any consent granted for the proposal and also in any CNVMP prepared for the project,

- ii) construction works be limited to within the recommended standard hours, except for emergencies or works required outside standard hours by the Roads and Traffic Authority (RTA),
- iii) a traffic noise management strategy be included in the CNVMP for the project as there may be noise impacts associated with truck movements to and from construction sites, particularly sleep disturbance impacts (see below for further detail about traffic noise management).
- iv) the CNVMP include procedures on community notification and complaint handling.

2. Recommended Noise Limits

Recommended noise limits are provided below for the operation of the pumping stations, based on the predicted levels in the AN&V Assessment and the assumptions regarding enclosures and operating conditions.

Recommended conditions for blasting are also provided, however compliance monitoring locations for blasting are not nominated as the proponent has not clearly identified where any blasting may occur.

If DoP grants consent for this proposal, it is recommended these noise limits be included.

Noise Limits

L6.1 Noise from the premises must not exceed the sound pressure level (noise) limits presented in the Table below. Note that the limits apply to the operation of the project and represent the sound pressure level (noise) contribution, at the nominated receiver locations in the table.

Noise Limits (dB(A))

Location	Day	Evening	Night	
	$L_{Aeq}(15 \text{ minute})$	$L_{Aeq}(15 \text{ minute})$	$L_{Aeq}(15 \text{ minute})$	$L_{A1}(1 \text{ minute})$
Any residential premises	35	35	35	45

L6.2 For the purpose of Condition 6.1:

- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,
- Evening is defined as the period from 6pm to 10pm on any day,
- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays

L6.3 Noise from the premises is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling (rural situations) where the dwelling is more than 30m from boundary to determine compliance with the noise limits in condition L6.1.

Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.

The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable.

L6.4 Noise from the premises is to be measured at 1m from the dwelling façade to determine compliance with the $L_{A1(1 \text{ minute})}$ noise limits in condition L6.1.

L6.5 The noise emission limits identified in condition **L6.1** apply under meteorological conditions of:

- wind speeds up to 3 m/s at 10 metres above ground level; or
- temperature inversion conditions of up to 3 °C/100m and wind speeds up to 2 m/s at 10 metres above ground level.

Hours of Construction and Operation

L6.7 All construction work at the premises must only be conducted between Monday to Friday 7am to 6pm and Saturday 8am to 1pm, with no work on Sundays and public holidays.

L6.8 The following activities may be carried out at the premises outside the hours specified in condition L6.7:

- (a) the delivery of materials as requested by Police or other authorities for safety reasons;
- (b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

L6.9 The proponent must prepare and implement a detailed Construction Noise and Vibration Management Plan (CNVMP), prior to commencement of construction activities, that includes but is not necessarily limited to;

- (a) identification of each work area, site compound and access route (both private and public),
- (b) identification of the specific activities that will be carried out and associated noise sources at the premises and access routes,
- (c) identification of all potentially affected sensitive receivers,
- (d) the construction noise and vibration objectives identified in the Environmental Assessment,
- (e) assessment of potential noise and vibration from the proposed construction methods (including noise from construction traffic) against the objectives identified in the Environmental Assessment,
- (f) where the objectives are predicted to be exceeded an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise and vibration impacts,
- (g) description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction, including the early erection of operational noise control barriers and providing respite periods,
- (h) procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity,
- (i) measures to monitor noise performance and respond to complaints.

Requirement to Monitor Noise

M7.1 To determine compliance with Condition L6.1, attended noise monitoring must be undertaken in accordance with Conditions L6.3 and L6.4 and:

- a) at each one of the locations listed in Condition L6.1;
- b) occur *<Quarterly, bi-annually or annually>* beginning 1 January each year;

- c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy for a minimum of:
- 1.5 hours during the day;
 - 30 minutes during the evening; and
 - 1 hour during the night.
- d) occur for three consecutive days.

O3.6 Work generating high noise impact

Any work generating high noise impact, excluding blasting operations covered in Condition L7.5, must only be undertaken:

- (a) between the hours of 8:00am and 6:00pm Monday to Friday;
- (b) between the hours of 8:00am and 1:00pm Saturday; and
- (c) in continuous blocks of no more than 3 hours, with at least a 1 hour respite between each block of work generating high noise impact, where the location of the work is likely to impact the same receivers;

except as expressly permitted by another condition of this licence.

For the purposes of this Condition 'continuous' includes any period during which there is less than a 1 hour respite between ceasing and recommencing any of the work the subject of this Condition

Noise Monitoring Report

A noise compliance assessment report must be prepared and submitted to the Department within 30 days of the completion of the <quarterly, bi-annual or yearly> monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant which:

- a) assesses compliance with noise limits presented in Condition L6.1; and
- b) outlines any management actions taken within the monitoring period to address any exceedences of the limits contained in Condition L6.1.

L7 Blasting Limits

- L7.1 The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L7.2 The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L7.3 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L7.4 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time. Error margins associated with any monitoring

equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L7.5 Blasting operations at the premises may only take place between 9:00am-3:00pm Monday to Friday. (Where compelling safety reasons exist, the Authority may permit a blast to occur outside the abovementioned hours. Prior written (or facsimile) notification of any such blast must be made to the Authority).

L7.6 To determine compliance with condition(s) L7.1 to L7.4:

- a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at <enter exact location - consider ANZECC guidelines> - for all blasts carried out in or on the premises; and
- b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.

Traffic Noise Management Strategy

Any traffic noise management strategy developed by the proponent, should ensure that feasible and reasonable noise management strategies for vehicle movements associated with the facility are identified and applied. These should include (but need not necessarily be limited to) the following;

- driver training to ensure that noisy practices such as the use of compression engine brakes are not unnecessarily used near sensitive receivers,
- best noise practice in the selection and maintenance of vehicle fleets,
- movement scheduling where practicable to reduce impacts during sensitive times of the day,
- communication and management strategies for non licensee/proponent owned and operated vehicles to ensure the provision of the strategy are implemented,
- a system of audited management practices that identifies non conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimization procedures),
- specific procedures to minimise impacts at identified sensitive areas,
- clauses in conditions of employment, or in contracts, of drivers that require adherence to the noise minimization procedures and facilitate effective implementation of the disciplinary actions for breaches of the procedures.



Land and Property
Management Authority

Department of Planning
Infrastructure Projects
Bridge St Office
GPO Box 39
Sydney NSW 2001

Department of Planning
Received
9 JUL 2010
Scanning Room

*Land and Property Management Authority
Crown Lands Division*

59 Auburn Street Goulburn NSW 2580
PO Box 748, Goulburn NSW 2580
Phone: (02) 4824 3700
Fax: (02) 4822 4287
Website: www.lpma.nsw.gov.au

7 July 2010

Ref: MP09-0193
S07/01018

Trim ref:10/09914

PROPOSED HIGHLAND SOURCE PROJECT MP09-0193

I refer to your letter of the 21st June 2010 regarding the proposed Highland Source Project. Land and Property Management Authority (LPMA) have reviewed the supporting Part 3A Environmental Assessment April 2010 in conjunction with other information as supplied by the proponent's consultative team (GHD).

This project has the potential to have an impact / involvement on Crown Land and the LPMA has the following comments:

Identified Crown Land

According to records within the Goulburn Office various parcels of Crown land have been identified from the information supplied by the proponent's consultative team (GHD) on the 18th May 2010.

The affected Crown land has been identified on attached Table "Appendix A" and comments are outlined under the sections following.

Therefore any deviation of pipeline route from the information as supplied in the Proposed Highland Source project Environmental Assessment April 2010 will not be commented upon within this response.

If there is any deviation from the Environmental Assessment April 2010 involving and or adjoining Crown Land in the Preferred Project Report when finalised, further comments **must** be sourced from LPMA.

Crown Public Roads

Crown public roads provide legal access under the Roads Act 1993 to freehold and Crown land. These roads are part of the State's road network, with many roads not formed or constructed.

Crown public roads are located within the proposed Highland Source project area and therefore the project must not interfere with the public's right to use the Crown public road under Section 5 (1) of the Roads Act 1993.

Any works or operational activities associated with the Highland Source Project must not have any effect on use by the public and or cause any degradation on the road.

In 2004, major legislative reform created a simple, less expensive process to close Crown roads which are considered unnecessary for public access and sold to the adjoining landholders. Under

these reforms this Authority is encouraging adjoining land owners to apply to close and purchase unnecessary Crown roads and have easements in place where ongoing access may be required.

In the event that any Crown road affected by the Highland Source Project is regarded as unnecessary for access purposes, it is LPMA's preferred position that the adjoining landowner (together with the proponent) makes application to close these roads. If this were to occur, fees and purchase prices would be assessed in the normal manner.

Crown Waterways

According to records held at the Goulburn Office the following sections of waterways have been identified as Crown land along the Highland Source Project route/s - see attached Table "Appendix A":

- Wingecarribee River
- Paddy's River
- Uringalla Creek
- Jaorimin Creek
- Osbornes Creek
- Wollondilly River

All current access points to the waterways must remain and be available to the general public.

Any works and operational activities must not impact on the bed and bank of the waterway or affect flows to or within the waterway.

Any disturbance must be rehabilitated to the original condition that is to the satisfaction of LPMA, this is to ensure there is no long term impact on the waterways and adjoining riparian zones.

Crown Reserves

Various Crown Reserves have been identified as being potentially affected by this project. Any construction and operational activities must not have any impact upon the reserves, the reserve purpose or the reserve's ongoing management.

Pipeline

- **Reserve 17120** Lot 7009 DP 1074647 for Trigonometrical Purposes gazetted 21 January 1893. The Office of the Surveyor General should also be contacted and approval sought to ensure that the proposed Highland Source Project does not have an impact on their operations of the Trigonometrical Reserve.
- **Reserve 1012688** Lot 160 DP 821713 for Environmental Protection gazetted 3 November 2006. According to Environmental Assessment April 2010, the proposed Highland Source Project traverses Reserve 1012688 through what has been identified as an Endangered Ecological Community (EEC).

LPMA has some concerns in regards to the pipeline's current alignment through this reserve and will require that the route through Reserve 1012688 be realigned with our final consent to the realignment. This is due to the following:

- Clearing of an EEC can be avoided as there is currently an Asset Protection Zone (APZ) already existing upon the boundary of Reserve 1012688 that will require no removal of native vegetation and could be utilised for the pipeline in Highland Source Project.
- If an approval for easement acquisition is granted it should not encompass any further burden on public land that has been identified with EEC and purposes for environmental protection.
- LPMA drew its concerns to the proponent of the proposed pipeline route traversing Reserve 1012688 at a recent on site meeting/inspection.

- The proponent is aware of the concerns of the LPMA in regards to the Highland Source Project traversing Reserve 1012688 as discussed at a recent site inspection.
 - An informal discussion has been initiated with the proponent on LPMA's concerns and realignment options that should be addressed within the Preferred Project report.
 - The area is zone within Goulburn Mulwaree Council LEP 2009 as Environmental Management E3.
 - This reserve is held under trust with Goulburn Woodlands Reserve Trust. The Trust should be contacted and comment sought to ensure the proposed Highland Source Project does not have an impact upon the reserve's ongoing management.
- **Reserve 97366** Lot 157 DP 821713 for Future Public Requirements gazetted 3 August 1984. This reserve is currently held under a license to Goulburn and District Racing Club Ltd, for the purpose of racecourse. Goulburn and District Racing Club Ltd must be contacted for their comments to ensure that the proposed Highland Source Project has no impacted on the ongoing management of Lot 157 DP 821713.

Infrastructure

- **Reserve 86639** Lot 7041 DP 1026087 for Public Recreation gazetted 1 March 1968. This reserve is held under Trustee with Goulburn Rugby Park Trust. This Reserve has been identified as potential raw water outlet for the Highland Source Project and therefore the Reserve Trust must be contacted for their comments to ensure that the proposed Project has no impact on the reserve's ongoing management.

LPMA has a health and safety concern relating to this reserve and the exiting of the proposed Project raw water outlet considering the reserve purpose is for public recreation.

NSW Department of Health should also be contacted for comment to ensure that the proposed raw water outlet does not have an impact on the reserve and the health of the users.

- **Reserve 46316** Lot 7001 DP 94626 for Public Recreation gazetted 15 February 1911. This reserve is managed by Goulburn City Council Crown Reserves Reserve Trust. This reserve has been identified as a potential Treated Water outlet. LPMA has concerns in regards to clearing of native vegetation, access, as the current gazetted purpose of this parcel under the Crown Lands Act is not water supply. The proposed reservoir for this reserve does not form part of the Highland Source Project in its current project. It is the opinion of LPMA it should be assessed as part of the preferred Project Report as it forms an integral part of the overall operations of the project.

Lot 4 DP 553088 has been identified in the Environmental Assessment April 2010 as the location for pump station of the Highland Source Project. According to records within the Goulburn Office this land is not under control of Crown Lands.

Please note the adjoining Wingecarribee River is a Crown waterway and any works or operational activities upon that waterway must be referred to LPMA and commented upon prior to any works or activities commencing.

Any disturbance must be rehabilitated to the original condition that is to the satisfaction of LPMA, this is to ensure there is no long term impact upon Crown waterways and adjoining riparian zones.

Native Title

No assessment of the impacts of the Native Titles Act (Commonwealth) on the proposed Highland Source Project has been undertaken. This assessment must be undertaken (in conjunction with LPMA) prior to any works commencing once the final pipeline route is determined.

Acquisition of Easements or Land

Where easements and/or sections of Crown land are needed for the Highland Source Project, the easements/s or land should be acquired under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991. In those circumstances, the proponent should note that LPMA will seek compensation assessed in the normal manner under this Act plus the usual administration fee. If acquisition of easement/s or land is notified in the Government Gazette and compensation has not been paid by the appropriate date, LPMA would require the payment of statutory interest on the compensation figures up to the time this matter is settled.

LPMA seeks to be consulted and to endorse the terms and conditions of any easement that affect Crown land or roads prior to registration of any 88B Instrument.

Vegetation Offsets

The proposed offsetting of native vegetation identifies a section of Crown Land along the Wollondilly River (Figure 9 appendix E of the Environmental Assessment April 2010).

The offsetting vegetation upon Crown Land has the potential of placing extra burden on the titles for the Crown Land. Therefore, LPMA policy does not support any offset of vegetation upon Crown Land.

General

LPMA are concerned that they were not consulted as part of the agency and community consultation process nor have we been identified as an Authority affected by this Project. Had the consultation occurred many of the issues raised in this letter would have been addressed as part of the project brief.

Further investigations may be required upon development of the final Preferred Project Report relating to construction and operations of the Highland Source Project. In the circumstances LPMA retains the right to make further comment at that time on but limited to matters such as native title, aboriginal land claims, acquisition and easement, access, rehabilitation and other information deemed necessary by the Authority.

For further information, please do not hesitate to contact this Office at the above address.

Yours sincerely


John Flarrey
Program Manager
Land Administration (East)
Crown Lands Division
GOULBURN

7/7/10

HIGHLANDS SOURCE PROJECT SCHEDULE OF CROWN LANDS - ANNEXURE "A"

Seq. No	Owner	LGA	Lot / DP	Description
	Crown	WSC	adjoining Lot 4 DP 553468	Wingecarribee River
13.1	Crown	WSC		Crown Public Road
48.1	Crown	WSC		Crown Public Road
60.1	Crown	WSC		Crown Public Road
183.1	Crown	WSC		Crown Public Road
193.1	Crown	WSC		Crown Public Road
209.1	Crown	WSC	PML 41	Crown land
216.1	Crown	WSC		Crown Public Road
219.1	Crown	WSC		Crown Public Road
223.2	Crown	WSC		Paddy's River
226.1	Crown	WSC		Crown Public Road
228	The State of New South Wales	WSC	7009/ /DP 1074647	Crown land - Trig Reserve 17120 gazetted 21 January 1893
232.1	Crown	WSC		Crown Public Road
232.2	Crown	WSC/GMC		Uringalla Creek
236.1	Crown	GMC		Crown Public Road (known as Wollumbi Road)
240.1	Crown	GMC		Crown Public Road
251.1	Crown	GMC		Crown Public Road
255.1	Crown	GMC		Crown Public Road
257.1	Crown	GMC		Crown Public Road
257.2	Crown	GMC		Crown Public Road
257.3	Crown	GMC		Crown Public Road
261.1	Crown	GMC		Crown Public Road
271.1	Crown	GMC		Jaorimin Creek
298.1	Crown	GMC		Crown Public Road
299.2	Crown	GMC		Crown Public Road
314.1	Crown	GMC		Crown Public Road
318.1	Crown	GMC		Crown Public Road
326.1	Crown	GMC		Osbornes Creek
341.1	Crown	GMC		Wollondilly River
347.1	Crown	GMC		Crown Public Road
353.1	Crown	GMC		Wollondilly River
384.1	Crown	GMC		Crown Public Road
384.2	Crown	GMC		Crown Public Road
386.1	Crown	GMC		Crown Public Road
390	The State of New South Wales	GMC	Lot 7004 DP 94627	R64500 for Public Recreation gazetted 13 April 1934 & R46316 for Public Recreation gazetted 15 February 1911, reserve managers Goulburn City Council Crown Reserves Reserve Trust
391	The State of New South Wales	GMC	Lot 7007 DP94628	R46316 for Public Recreation gazetted 15 February 1911, reserve managers Goulburn City Council Crown Reserves Reserve Trust

HIGHLANDS SOURCE PROJECT SCHEDULE OF CROWN LANDS - ANNEXURE "A"

Seq No	Owner	LGA	Lot / DP	Description
393	The State of New South Wales	GMC	7001/ /DP94626	R46316 for Public Recreation gazetted 15 February 1911, reserve managers Goulburn City Council Crown Reserves Reserve Trust
394	Crown	GMC	7002/ /DP94626	R46316 for Public Recreation, reserve managers Goulburn City Council Crown Reserves Reserve Trust
383.2	Crown	GMC		Wollondilly River
402	The State of New South Wales	GMC	Lot 157 DP 821713	R97366 for Future Public Requirements gazetted 3 August 1984 currently leased to Goulburn Race Club Lease No. 203508
404	The State of New South Wales	GMC	Lot 160 DP 821713	Reserve No 1012688 for Environmental Protection gazetted 3 November 2006, managers Goulburn Woodlands Reserve Trust
	Crown	GMC	Lot 7041 DP 1026087	R86639 for Public Recreation gazetted 1 March 1968, managers Goulburn Rugby Park Reserve Trust
499.1	Crown	GMC		Wollondilly River



Office of Water



Dinuka McKenzie
NSW Department of Planning
GPO Box 39
Sydney NSW 2001

Contact: Janne Grose
Phone: 02 4729 8262
Fax: 02 4729 8141
Email: Janne.Grose@water.nsw.gov.au

26 July 2010

Our ref: ER20865
File: 9052928
Your ref: MP09_0193

Attention: Anna Timbrell

Dear Ms McKenzie

MP09_0193 – Highlands Source Project –Environmental Assessment – Goulburn Mulwaree and Wingecarribee Local Government Areas

Thank you for your letter of 26 May 2010 seeking comment from the NSW Office of Water (NOW) on the Environmental Assessment (EA). I apologise for the delay in responding.

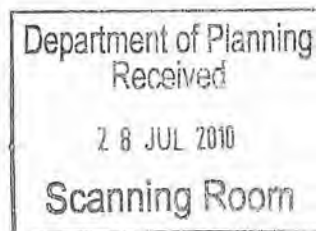
NOW's key issues with the EA are outlined in Attachment A but it should be noted that NOW is concerned by the inconsistencies in the EA in relation to the watercourse crossings.

Contact Details

Should you have any queries in relation to this matter please contact Janne Grose on telephone (02) 4729 8262.

Yours sincerely

Mark Mignanelli
Manager, Major Projects and Assessment



NSW Office of Water Comments

Highlands Source Project - Environmental Assessment

Reference is made to the following:

- The NSW Office of Water's (NOW's) submission on the draft Environmental Assessment (EA) of 1 April 2010
- The site inspection held on 23 June 2010 and attended by NOW which inspected seven of the proposed 138 watercourse crossings.

Access Track Creek crossings

In its submission of 1 April 2010, NOW raised concerns that the draft EA did not provide details on the proposed additional access track crossings and considered the draft to be inadequate due to the potential impact of the access crossings on watercourse stability.

NOW recommended the access track crossings need to either consist of a bridge crossing or a bed level crossing (located at bed level) and not consist of culverts or be raised above the bed level due to fish passage issues. NOW notes that Section 6.7.3 of the EA outlines that temporary access tracks would need to be created and that some larger waterways may require some bed level crossings or bridges to be installed and the waterway crossings would be identified during the detailed design. The section also complies with NOW's advice that any additional waterway crossing would be appropriately stabilised and rehabilitated and would not consist of culverts or be raised above bed level.

Pipeline Creek Crossings

The EA classifies the 138 waterway crossings along the pipeline route as 12 major creeks/rivers, 8 moderate creeks, 25 minor creeks and 93 as drainage lines. NOW reiterates these are all "rivers" as defined under the Water Management (WM) Act and there is no distinction under the WM Act between major and minor creeks etc. Minor drainage lines are as important as major watercourses and scale is not a factor in the considerations. The erosion and sedimentation issues of minor watercourses can be the same as for major watercourses.

NOW in its submission on the draft EA raised concerns that chain-of-ponds systems, channelised fill systems and valley fill systems were proposed to be crossed by trenching because these are fragile types of watercourses. All three types would be sensitive to concentrated flow if the pipeline was to break due to watercourse instability issues and the watercourses could be destroyed by concentrated water flowing out of a broken pipe.

NOW is concerned that there is inconsistency with the information provided in the EA and also at the site inspection in terms of the proposed pipeline crossing method. For example,

- Section 10.5.1 of the EA states that directional drilling (or a similar technique) would be used to avoid potential impacts on aquatic environments and associated riparian areas at sensitive waterways but this statement conflicts with Table 6.4 which proposes to trench across sensitive channelised fill systems and valley fill systems.

- the crossing method proposed in Table 6.4 conflicts with Table 15.4 at a number of watercourse crossings including:
 - W84 (Table 6.4 proposes to use the HDD method and Table 15.4 refers to trenching. At the site inspection, it was proposed to use HDD at this crossing from a distance of approximately 50-60 m away from the banks of the creek (also see further comments below)
 - W105 (Table 6.4 proposes to use the HDD method but Table 15.4 refers to anchoring the pipeline to the channel bed via concrete blocks or using HDD). At the site inspection neither HDD and trenching were considered to be physically possible and it was proposed to encase the pipe in concrete and then lay the pipe on the bottom of the pool (NOW does not have an issue with using this method but it does conflict with Table 6.4)
 - W119 (Table 6.4 proposes to use the HDD method and Table 15.4 indicates a trenching crossing is feasible). At the site inspection, two options (HDD or the laying of a concrete encased pipe on the bed of the pool) were discussed but the preference was to HDD.
 - W131 (Table 6.4 proposes to use the HDD method and Table 15.4 proposes to anchor the pipeline to the channel bed via concrete blocks , At the site inspection it was proposed to lay the concrete encased pipe on the bed of the river at this location with trenching up to either bank (NOW does not have an issue with this method at this location but it conflicts with Table 6.4).
- Section 15.1.3 of the EA states that all other waterways would be crossed by open cut trenching unless there are sensitive waterways or associated environments but this is not consistent with Table 6.4 which proposes to cross sensitive channelised fill systems and valley fill waterways using trenching.

NOW's previous submission outlined that chain-of-ponds are quite rare and fragile. NOW notes Table 6.4 (page 98) proposes to cross W84 by HDD rather than trenching. NOW supports the use of HDD at W84, as this chain-of-ponds is in very good condition. NOW does not support trenching of W84 . At the site inspection on 23 June 2010, HDD was also discussed as the proposed crossing method but this and Table 6.4 conflicts with Table 15.4 which still refers to crossing by trenching at W84.

Section 15.1.3 states that the crossing method for each waterway was based on the recommendations for crossings provided by NOW but the EA does not incorporate NOW's comments/recommendations provided in the draft EA submission, ie:

NOW raised concerns with crossing sensitive chain of ponds, valley fill systems and channelised fill systems by trenching.

NOW recommended crossings of waterways /riparian land should be under bored where :

- (i) there is permanent flow in the waterway or
- (ii) there is existing native riparian vegetation or
- (iii) the creek is in good natural condition or
- (iv) there is potential fish passage Class 1 or 2.

NOW also recommended underboring where the bed of the watercourse has a mobile bed and not rock

NOW's draft EA submission indicated trenching may be an option if:

- (i) the waterway is a dry intermittent creek
- (ii) the native riparian vegetation has previously been cleared and

- (iii) there are no watercourse instability issues.

In addition to the above NOW recommended trenching may be an option (iv) where the potential fish passage Class is 3 or greater and (v) if the bed of the stream is rock.

NOW notes Table 6.4 proposes to trench all valley fill systems even though:

- 4 of these watercourses are in good natural condition (W42, W43, W44 and W63)
- 15 have native riparian vegetation present
- 2 of these systems (W42 and W67) exhibit existing bank instability and 3 of these systems (W8, W42 and W80) exhibit headward erosion downstream of the crossing (see page 298 of the EA).

Table 6.4 also proposes to trench all channelised fill systems even though 5 of these systems (W1, W19, W79, W108, W111) exhibit existing bank instability and W20 exhibits headward erosion downstream of the crossing. Please note, based on the site inspection, HDD is possible at the W108 site as there is space on either floodplain to undertake boring. Trenching of the W108 site would also be possible as long as the rehabilitation of the site was undertaken properly. This would include reinstatement of the trench with removed material and regrassing underneath a biodegradable geofabric material. There was some bedrock present but it was difficult to determine if this was continuous through the cross section. There was also a crossing already present approximately 100 m downstream that could be utilised by contractors.

Clarification is required as Table 6.4 classifies W121 as a moderate watercourse but Table 15.3 classifies it as a major watercourse.

NOW can not support the commencement of pipeline construction until the conflicts in the EA have been resolved. If the conflicts in the EA are not resolved NOW will need to inspect the proposed crossing points for the channelised fill systems, valley fill systems and chain of ponds before it could support pipeline construction commencing.

Further aquatic ecology surveys and geotechnical investigations

While it is noted further aquatic ecology surveys and geotechnical investigations are to be undertaken during the detailed design phase to determine the final method of crossing (for example see Sections 15.1.3, 15.3.1, 15.5.1 and Table 15.4 in the EA), clarification is required as to when these additional investigations are intended to be undertaken? Section 6.11.1 of the EA indicates that construction is to commence in July 2010 and be completed by May 2011? NOW queries the project timing start date and also queries how much more investigation will actually be undertaken if the project construction is due to commence this month? NOW requests it be provided with the results of these further investigations.

Depth of trench at crossings

NOW notes that where trenching is to occur, the stability of the waterway will be used to determine the depth of the trench (Section 6.5.2 of the EA, page 90) but NOW reiterates (as recommended by NOW for the EA adequacy review) that scour calculations for bankful flow need to be undertaken to determine the appropriate depth.

NOW previously raised concerns that the draft EA provides conflicting advice on the depth of the trench at the watercourse crossings. It is noted the EA still includes this conflicting advice. For example, Section 15.5.1 (page 305) refers to 1 to 2 metres from the top of the pipeline to the bed of the channel but Section 25.2.1 states that '*through watercourses it is expected that the trench would be excavated up to 2.5 m below ground level. This would allow for sufficient material to be placed over the pipeline to prevent scouring of the pipeline during high velocity water flows in the watercourse*' (page 443). This statement needs to be proven. A bedrock bed may not need a

depth of 2.5 m and NOW reiterates that it could be shallower if scour calculations are undertaken. For sand bed streams the rule of thumb is sand scour is equal to the water depth during bankfull flow.

Concrete blocks

Table 6.4 indicates the proposed construction crossing method for watercourses W105 and W131 is horizontal directional drilling (HDD) but Tables 15.4 and 15.5 indicate the pipeline could also be anchored to the channel bed via concrete blocks at these water crossings. Based on the site inspection NOW considers the proposed method of using concrete blocks to be appropriate because these crossing points would be located in deep pools.

At crossing W105 the right hand bank of the river is very steep and would need substantial rehabilitation to ensure the long term stability of the exposed areas.

Erosion and Sediment Control

Section 15.5.1 of the EA includes as an erosion and sediment control measure that the waterway would preferably be crossed on a straight portion of the waterway and notes that where this is not possible bank stability works should be implemented. NOW previously recommended further detail be provided on what is proposed by 'bank stability works' and the waterways that potentially require this mitigation measure and recommended the works should be soft engineering where practical. NOW notes that details of the specific bank stability works will be detailed in the CEMP after detailed design has been completed but this would typically comprise soft engineering techniques to rectify bank cuts and improve stability.

NOW reiterates that if the crossing is to be trenched and there is flowing water at the time an additional erosion and sediment control measure needs to be included for a sediment curtain to prevent turbid water from going downstream.

Waterway Mitigation Measures

The recommended mitigation measures incorporated in Table 15.5 are not adequate as the table is too general. Each watercourse needs to be looked at separately and details need to be provided on what part of the stream is proposed to be crossed and what geomorphic units are present at the exact crossing type (ie is the crossing point at a pool or a riffle? Is the crossing point to be located at the upstream, middle or downstream end? Are the banks unstable at the crossing point ? etc). Even though the watercourses may be the same type it makes a big difference as to where it is proposed to cross each watercourse and it is not appropriate to generalise.

Rehabilitation

NOW supports the inclusion of the following additional measures in the Rehabilitation Plan (Section 27.4.4 of the EA, page 472):

- stream bank rehabilitation types will be selected by a geomorphologist and the works designed by a river engineer
- the riparian zone will be restored to its pre construction condition and will take into consideration the original vegetation and the second phase would seek to establish a permanent cover of the species that originally occurred
- any riparian land disturbed by the proposal is to be rehabilitated in a two step process. The primary stage will rapidly stabilise disturbed riparian areas and the second phase will establish a permanent cover of vegetation that reflects the species that originally occurred and if the existing riparian vegetation is native, then the local native species must be rehabilitated and re-established.

In addition to stream bank rehabilitation types, bed and floodplain rehabilitation needs to be added

as there are no banks in a valley fill system.

Rehabilitation Monitoring

Section 27.5.2 of the EA (page 473) notes the monitoring program would be undertaken to assess the outcomes of the works undertaken including areas of potential erosion and ground instability associated with the construction impact. The monitoring program should include monitoring and maintenance of any bank stabilisation and stream bank, bed and floodplain rehabilitation that will need to be undertaken as part of this proposal. The rehabilitation will need to be monitored until all crossing sites are identified as stable by an independent suitably qualified certifier.

In relation to the rehabilitation of native riparian vegetation, NOW supports the proposed maintenance period for the rehabilitation of native riparian vegetation as outlined in Section 27.5.2 of the EA, page 473) (ie for a period of 5 years after final planting). The rehabilitation of other non native vegetation in riparian areas should be maintained until it is established and the area has been certified as stable.

Wetlands

NOW previously raised concerns in the draft EA review that one wetland on Kenmore Creek occurs directly on the pipeline route. It is noted in Section 10.2.5 of the EA that the construction corridor would likely intersect the wetland but it is now proposed to deviate the pipeline during the detailed design phase to avoid impacts on the wetlands. NOW agrees that the pipeline route should be deviated at this location to avoid the wetland.

NOW previously recommended the pipeline route avoid any hanging swamps. Section 10.2.5 of the EA indicates there are no upland swamps or hanging swamps within the survey corridor (page 206). NOW is concerned by this statement as chain-of-pond systems and intact valley fill systems are upland swamps in the southern highlands. Some of the 58 valley fill systems that are proposed to be crossed by the pipeline may potentially be upland swamps.

NOW recommends that reference is made to the Wingecarribee Biodiversity Strategy prepared by Ecological Australia in 2003 and the Wingecarribee wetland strategy. It should be noted however that while there are some references to swamps in the biodiversity strategy the report had a vegetation focus and not a geomorphic focus so it may not have identified any, or all swamps and valley fills which were intact but had poor native vegetation present.

Reference should also be made to two recent reports which relate to the wetlands of the Wingecarribee Shire that may be affected by the proposal:

[http://www.wetlandcare.com.au/Content/articlefiles/657-Background Paper PR Final Draft.pdf#search="Paddys River Wetlands"](http://www.wetlandcare.com.au/Content/articlefiles/657-Background Paper PR Final Draft.pdf#search=)

[http://www.wetlandcare.com.au/Content/articlefiles/657-Paddy River POM Final Draft.pdf#search="Paddys River"](http://www.wetlandcare.com.au/Content/articlefiles/657-Paddy River POM Final Draft.pdf#search=)

There should be no disturbance of the upland swamp surface areas (as they have a very sensitive surface) and the crossing method should be HDD and this needs to commence from outside the swamp area. There should be no trenching of the swamp area.

Water Supply

Section 6.6.6 of the EA notes water for construction is to be sourced mainly from non potable sources near the construction activity and a licence under the Water Act is required to extract water from waterways for use during construction (Volume 1 Report, page 132). NOW reiterates the Hawkesbury Nepean catchment is currently embargoed from the issuing of new commercial

surface water licences, however to allow for the pipeline to be constructed the applicant can apply for a permit under the Water Act 1912. The applicant needs to apply for a permit from NOW prior to the construction phase commencing and the applicant should contact Mr Wayne Connors, Water Licensing at the Parramatta office on phone 9895 7194 in the first instance.

Statement of Commitments

Groundwater

Commitment 12 - NOW supports the inclusion of Commitment 12 in the EA (ie to consult NOW if groundwater is intercepted and dewatering is necessary to determine if an approval is required under Part 5 of the Water Act 1912). In addition, NOW recommends:

- Commitment 12 is expanded to include provision of data from all geotechnical studies conducted, together with quantification of the likely magnitudes of groundwater to be extracted
- the results of the geotechnical studies are provided to NOW as they are completed for further assessment of the need for any licensing.

Whilst the likely groundwater impacts are not considered to be significant this needs to be demonstrated by the progressive reporting of results of all intrusive investigations conducted for the project.

Geomorphology

Commitment 14 - NOW previously recommended the Statement of Commitments include specific reference to the need to undertake the aquatic and engineering surveys to determine the appropriate method to cross waterways. NOW supports the inclusion of Commitment 14 in the EA (page 475) but clarification is required as to when these further investigations are to be undertaken because, as noted above, the EA indicates that construction would commence in July 2010. The investigations must be undertaken before construction commences and it is requested the results are provided to NOW.

Commitment 15 - NOW previously recommended a commitment be included that each watercourse crossing be assessed to determine whether the soils are sodic or non-sodic. NOW supports the inclusion of Commitment 15 that soil properties (such as sodicity) at watercourse crossings would be assessed to determine appropriate crossing methodologies and rehabilitation measures but clarification is required as to when these further investigations are to be undertaken? NOW would like to review the proposed methodologies and measures before they commence. The investigations should be undertaken before construction commences.

Commitment 18 - NOW previously recommended the commitment include that rehabilitation continue until all pipeline waterway crossing and access track crossing sites are identified as stable by an independent suitably qualified certifier NOW therefore supports the inclusion of Commitment 18 in the EA (page 476).

Commitment 23 - NOW previously recommended a commitment be included that the pipeline crossings should be inspected particularly after major rainfall events to ensure the rehabilitation and stabilisation works have been effective. NOW therefore supports the inclusion of Commitment 23 in the EA. Any new additional access track crossing sites should also be inspected particularly after major rainfall events to ensure the crossings are stabilised.

End Attachment A
20 July 2010