NSW GOVERNMENT | **Office of Water**

31 March 2011

Mr Andrew Beattie
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Attention: Mark Turner

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Our ref : ER20593
Your ref: MP07_0037

Dear Mr Beattie

MP07_0037 – North Nowra Link Road - Environmental Assessment - Shoalhaven Local Government Area

I refer to your letter of 14 February 2011 seeking comment from the NSW Office of Water (NOW) on the Environmental Assessment (EA) for the above major project proposal.

The NOW's key issues with the EA are outlined in Attachment A.

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

ATTACHMENT A

NSW Office of Water Comments

North Nowra Link Road
Environmental Assessment

The Environmental Assessment (EA) for the North Nowra Link Road has identified the Central Option as the preferred option for the North Nowra Link Road and notes "*the Northern Option fails to meet all project objectives with limited benefit in terms of traffic effectiveness and a net negative benefit/cost ratio*".

Reference is made to the former Department of Natural Resources (DNR) submission of 2 April 2007 for request for Director General Requirements. In this submission, DNR outlined:

- the Bomaderry Creek Bushland is an area of very high conservation value due to its high species diversity, rare and threatened flora and fauna and its high degree of use for public recreation within an expanding urban landscape.

- options which propose to bisect the Bomaderry Creek Bushland are likely to have the greatest deleterious impacts on these attributes. Most particularly, the fragmentation of the bushland will affect the integrity, viability and use of the Bomaderry Creek bushland.

- the Central Option through the Bomaderry Creek bushland is inconsistent with contemporary NSW Government Natural Resource Management policy directions (noting the State Plan (Priority E4)), NRC targets, the Department of Planning's (DoP) biodiversity outcomes as outlined in DoP's South Coast Regional Strategy and the Southern Rivers Catchment Management Authority's Catchment Action Plan targets.

- preference be given to develop options which fringe the northern flank of the bushland ie the Northern option. This option provides a practical alternate link road route that is substantially far more in alignment with the State's natural resource direction

The above advice was reiterated in the former Department of Water and Energy's (DWE) submission of 15 April 2009 to DoP for request for Director General Requirements.

A key issue with this proposal is the potential for the link road to bisect and fragment Bomaderry Creek Regional Park (BCRP) if the Central option is approved, whereas the Northern option is located to the north of the BCRP and Southern option follows the southern boundary of the BCRP and therefore these options do not bisect and fragment the park. The EA identifies that the BCRP is an area of very high conservation value (see Section 6.1, page 43) and the Northern Option has less impact to the BCRP and minimal impact on the Bomaderry Creek Gorge (see Section 11.5, page 106).

The EA outlines that "*the Northern Option provides the best biodiversity outcome when compared to the Central and Southern Options*" (see Section 13.4.4, page 134) but notes

the "*environmental impacts associated with all three routes are considered to be low provided that the specified mitigation measures are implemented*".

The EA also identifies there is the potential to adversely impact upon the Sandstone Sedgeland vegetation community along Route Options 1 and 2 (i.e. the Central and Southern options respectively) by altering the flow regimes to these areas (see Section 17.3, page 152). It is noted that Option 3 (northern Option) has not been identified as having a potential impact on this community. As surface runoff recharges the groundwater in these areas, the NOW concurs with the EA that for the Central and Southern Options:

- the flow paths must be retained to ensure the flow regime to these areas remains the same as prior to the construction of the road;

- geotechnical investigations required for the road design investigation will need to investigate the current groundwater levels and flows and identify the importance of the groundwater flow regime to the sandstone sedgeland vegetation community.

Any adopted road option should ensure that any works undertaken are consistent with the spirit and principles of the NSW Groundwater Dependent Ecosystem Policy and will need to demonstrate that the proposed development would maintain natural patterns of groundwater flow and not disrupt groundwater levels that are critical to Groundwater Dependent Ecosystems.

The EA indicates that construction of the bridge and its approaches will potentially have an impact on the riparian zone for all the route options (See Section 17.4). The EA compares the height of the bridge for all three options as this will determine the type of vegetation that will eventually grow within the light and rainfall shadow of the bridge. The EA notes "*the Northern Option would result in potentially the most significant impacts to riparian vegetation due to the relative shallowness of the banks for Bomaderry Creek in this location, as well as flooding with a number of piers required within the 1:100 ARI flood level*" (see Section 17.6, page 154).

While the northern option will result in a bridge structure with minimal clearance off the banks due to the flatter topology of the gorge, there is, as noted in the EA, only a very small amount of riparian vegetation north of the bridge crossing at this location (see Section 17.4).The EA identifies that the Central option will provide sufficient clearance for the movement of fauna under the bridge and through the Bomaderry Creek Gorge riparian vegetation. It should be noted however at some locations along the gorge fauna movement is restricted by the gorge itself where the water completely fills the base of the gorge.

It is noted that the Southern option provides a significant height differential between the riparian vegetation and the underside of the bridge and as such there will be minimal ongoing impact to riparian vegetation. As noted above, a key issue with this proposal is the potential fragmentation and bisecting of the regional park by the link road if the Central option is approved rather than the impact of the road crossing on riparian vegetation. Accordingly the NOWs preference is an outcome that minimises fragmentation of the BCRP.

End Attachment A
31 March 2011