For further information please contact Jane Cross, Planning and Assessment.

The Office of Water supports the inclusion of mitigation measures in relation to the groundwaters and protected wetlands. The proposed development plan is prepared to identify and mitigate impacts. The Office of Water recommends a comprehensive assessment of potential groundwaters. The Environmental Assessment does not provide a comprehensive assessment of potential groundwaters.

The project has the potential to impact on groundwaters, groundwaters dependent ecosystems, and wetlands. The Environmental Assessment does not provide a comprehensive assessment of potential groundwaters.

The key issues comprise:

- Application is approved as approved in Attachment A.
- The Environmental Assessment should include the Office of Water (NSW) Office of Water, including recommended conditions.
- Consent by Fines/NSW is detailed in Attachment A.
- Consent by Fines/NSW is detailed in Attachment A.

Mr. Andrew Beetle, Planning NSW, 9 November 2012, in the attention of Fines/NSW, and the Division of Planning.

Respect for the Office of Water, both divisions within the Department of Primary Industries (DPI) in respect to the above matter. This letter addresses the Division of Planning and Infrastructure Projects, Division of Planning.

25 Jan 2013

OUT13/1863
Executive Director Business Services

Yours sincerely,

For further information please contact Kevin Peletty, Planning Manager, Southern Region.

For further information please contact Mark Edwards, Group Leader (Norwa office) on 4428 9101, or Mark.Edwards@lands.nsw.gov.au.

Committee by Forest NSW

20 November 2012

For further information please contact Wendy Goodburn, Resource Management Officer (Coomourum office) on 4828 6635, or at: Wenda@goodburn.industry.nsw.gov.au.

as detailed in Attachment C.

Committee by Agriculture NSW

It is noted that the Director General Requirements for this project included specific

Committee by Agriculture NSW
****

End Attachment A

Habitats, and Publications.

(2004). These documents are available on our website www.dpi.nsw.gov.au under Agenda
MY Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (2004) and
all new or upgraded improved and permanent road crossings to be undertaken in accordance
Fisheries NSW recommends that any project approval require that the design and construction of
devlopment

revegetation strategy. Both these commitments should be made conditional of any approval of the
considered during the detailed design of the Town Creek diversion including design of the
Fisheries NSW also concurs with the commitment that if be
Influences (Fisheries NSW), Fishways NSW also concurs with the commitment that it be
EA), and in consultation with the Office of Environment and Heritage and Department of Primary
Fisheries NSW concurs with the commitment to develop a biodiversity offset package within 12
Fisheries NSW concurs with the proposal to develop a biodiversity offset package within 12
management and soil and water, and fully implemented by the proponent and its contractors.
and placed in the subsequent management Plan for Construction, Operation, Vegetation,
EA). The SCB and/or mitigation actions listed in the
Environmental Assessment (EA) all the proposed safeguards and mitigation actions listed in the
groundwater, soils, and hydrology and soils classified in sections 7.3, 7.4, 7.5 and 7.6 of the
Fisheries NSW concurs with the proposal to develop a biodiversity offset package within 12
Fisheries NSW concurs with the proposal to develop a biodiversity offset package within 12
implementation, in particular those related to biodiversity, aquatic ecology, surface water.
implemented by the proponent. These safeguards are in the Shoalhaven River and have the potential to be
Development area. These waterways claims the Shoalhaven River and have the potential to be
Town Creek and Town Creek Estuary habitats are located or adjacent to the proposed
Fisheries NSW notes that parts of Broughton Creek, Broughton, Will Creek, Bungawillion Creek.
Fisheries NSW Policy and Guidelines for Aquatic Habitat Management

and fish conservation (1999).  

Response to exhibition of Environmental Assessment
Princess Highway Upgrade (Foxground-Erry Burra Bypass) (M910–M940)

Attachment A
environmental

time of use, resulting in sedimentation and water quality impacts in the downstream receiving

It is recommended consideration be given to the potential risks of the crossings failing during their

sedimentation impacts during construction and decommissioning of the crossings.

- Impeding the bankroll flow, and

vegetation

potential impacts on stream geomorphology, bed and bank stability, and remnant vegetation.

potentially impacted by the sedimentation impacts have been minimised (see page 270). It is unclear if a geomorphological assessment was

water quality were minimised (see page 270). The EA notes the preferred sites for

sections that include temporary crossings of Brounagun Creek and temporary crossings of

Temporary crossings

Further details is provided on this.

preference was placed on environmental factors for vegetation to grow in a contiguous fashion. It is suggested

Appendix F notes the bridges would be of sufficient height to allow bird to flight undetected

amended to be consistent with section 7.3.

of the median strip (where practical) (see page 276) is

recommendation is made regarding the potential height from which vegetation will allow passage to

bridge or vegetation grown (page 60) but it is not clear if the bridge design will allow moorings to

Section 7.3 of the EA indicates the temporary crossings would be constructed near bridge

Brounagun Mill Creek and Bundoora Creek and temporarily

check is supported.

The proposed use of a bridge to cross Brounagun Mill Creek, Bundoora Creek and Cowclump

inches.

bridges to cross Brounagun Creek particularly as theIan panorama considers provides biodiversity

and bridges are proposed at each of these crossings. The Office of Water supports the use of

The Environmental Assessment (EA) notes the upgrade will cross Brounagun Creek three times

Watercourse Crossings

1. of the Emanuel Assessment.

bays of watercourses, in-stream habitat and riparian vegetation, etc (see section 3.5.2. Volume

should include the number of watercourse crossings and the potential to disturb the bed and

opinions have less impact on watercourses and riparian condition. Considerations in this regard

The evaluation of the route options would have been best if addressed whether any of the

1. Route Options

Princess Highway Upgrade (Forrestfield-Berry) (M10-240)

Attachment B

Response to exhibition of Environmental Assessment

Commitment by NSW Office of Water
A 2:1 gradient is likely to require rock fill. If the recommended rock is not used as a design feature, two to four years of maintenance may be required.

The channel should be designed to permanently exclude stock.

Section 4.2.1 indicates the gradient of the channel would be between 2% and 1° (Table 7.5).

Crossing and access points for landowners and adjoining management.

- a management proposal, for example, the next few years
- propose zone regulation the incorporation of educational/management
- incorporate a low-flow channel
- incorporate channel

Table 7.5 Indications of the channel immediately downstream of the proposed bridge structures and in the existing channel (of the proposed route, the river channel).

This indicates a measure to reduce the risk of erosion.

D. Division of Town Creek

The EA indicates the Division of Town Creek. The EA suggests that the water flow would be reduced along the proposed town creek alignment.

The water management Act 2000 identifies BLRs for access to water. Wherever landowners with suitable and qualified center.

Section 4.2.1 specifies the position of the crossings, which are designed as

Table 7.5 includes a mitigation measure to reduce the crossings immediately downstream of the proposed bridge structures and within the existing channel to minimize the driving of additional vehicles.
Table 7.50 notes a vegetation management plan (VMP) needs to be prepared which details the rehabilitation of watercourses and ancillary catchy sites.

6. Water quality aspects

Waterways, particularly as perennial and seasonal streams draining to wetlands, should be protected by appropriate measures. The table below shows the location and extent of such areas.

7. Ancillary catchy sites

These sites are identified in Appendix C and include wetlands, swamps, and other areas that are suitable for water storage. Table 7.10 lists the criteria for selecting these sites.

8. Riparian corridors

Riparian corridors are proposed to assist in maintaining the natural vegetation and provide habitat for wildlife. Table 4.7 of the EA notes the criteria for selecting these areas.

DRAFT Statement of Commitment (F) notes the stockpiles will be located at least 50 metres from sensitive locations (e.g., streams). Clarification is needed as to whether the proposed works are consistent with the bed and banks of waterways and post-construction work.

Where possible, monitoring of waterways and the project works should be carried out to assess the impact on the environment. The Office of Water Affairs is required to prepare an environmental statement that includes the stockpiles prior to diversion of flow from Tenom Creek (see Table 5.8, page 299). If it is not possible, the Office of Water Affairs should prepare an alternative environmental statement.

Section 7.13 of the EA indicates the construction pads may involve the temporary placement of equipment and machinery on natural features, including banks of streams. The Office of Water Affairs is required to prepare an environmental statement that includes the proposed works and any potential impacts on the environment.

Trees, shrubs, and groundcover species.

Vegetation and if they are any trees are noted in Appendix C. The Office of Water Affairs is required to prepare an environmental statement that includes the location of vegetation and if they are any trees are noted in Appendix C.
in surrounding areas.

- Devegetation for road cuttings and bridge footings, leading to draw-down
- Substation purposes, leading to consolidation of groundwater systems
- Compaction of alluvial sediments, ensuring embankments having undergone pre-loading for a period

As a result of the short-term construction and long-term operation of the project, the following

approval is required: all the outcomes of consideration and reasonable assessment of the Office of Water.

The EA outlines several aspects of the project that could potentially impact on groundwater in the

redefined for road construction and road maintenance

A road's authority (within the meaning of the Roads Act 1993)—in relation to water

the authority's licence, as follows:

exemptions of Schedule 5 of the Water Management (General) Regulations 2011, which includes

exemptions for the use of groundwater from that source under Part 1 (access license

sources 2011). However, Roads and Maritime Services (RMS) is exempt from the need for an

meeting within the Water Stewardship Plan for the Greater Metropolitan Region (Groundwater

Source) within the Sydney Basin: South Groundwater Source

11. Groundwater

\section{Groundwater

stable by an independent suitably qualified center.

Watercourse stability monitoring should continue with the relevant watercourses identified as

monitored at construction and post-construction.

Wadebridge Creek (downstream of where the diversion channel enters the creek) is

the stability of the diversion channel is monitored post-construction, and

where works are approved within the bed and banks of waterways is recommended.

Monitoring

Further clarification is required in relation to whether surface water and groundwater sources are

from watercourses or groundwater sources is not currently proposed (page 105). Section 4.2.3

watercourses and groundwater sources from draw-down. When the area is the extraction of water

Section 4.2.5 of the EA notes the water sources would include surface water sourced from

9. Water Supply community,

natural vegetation communities.

natural surface water, springs and groundwater sources (and rehabilitated to mimic the relevant local

The Office of Water agrees with using locally indigenous species to rehabilitate and re-vegetate

Implement (EPA Regs 75-96, page 72) is recommended the riparian corridors are

elaborate area (see Table 7-6, page 72).
End Attachment B

Groundwater quality impacts from the discharge of actual or potential acid mine drainage to the groundwater

13. Recommended Condition of Approval

The following condition shall be met:

13.1. Geomorphology and bed and bank stability:

This includes local impact analyses less than 50 meters from watercourses.

13.2. Restoration of Stream Flows and Channel Stability

The Office shall require that the proposed project be designed in accordance with the Acid Mine Drainage (AMD) Guidelines and best management practices to minimize impacts to groundwater quality and aquatic ecology.

12. Draft Statement of Commitments

The following commitments are supported:

12.1. Monitoring Impacts

The Office of Surface Mining is required to monitor and report on the impact of the project to address any potential impacts to the environment.

The following recommendations shall be made:

12.2. Stream Restoration

The Office of Surface Mining is required to develop and implement a groundwater monitoring plan to address any potential impacts to the environment.

12.3. Groundwater Quality

The Office of Surface Mining is required to develop and implement a groundwater monitoring plan to address any potential impacts to the environment.
Section C

For much of its length, it is agreed that the orange option is the preferred option for the route. This route will minimise land take and impacts on agricultural land by utilising an existing road.

The orange option is through greenfield and will impact on high value agricultural land. This would result in greater impact on agricultural productivity and viability of the directly impacted properties, the service area and the community.

It is agreed that the orange option is not favoured because of the severe impact on a number of large agricultural properties as opposed to the northern options.

This option is through greenfield and will impact on high value agricultural land. The green option is the preferred option from an agricultural perspective due to the minimisation of the impact on the landscape.

The land use impacts that this option creates a new highway alignment remote to the existing alignment and cross private properties that can cause subdivision. Subdivision is not preferable as it can lead to ad-hoc small properties that can create uncertainty. It is also noted that some properties will be severed by the proposed highway.

For the orange route, there will be an impact on agricultural land and properties. Each of the broader options and access improvement options in Sections B and C have been assessed from an agricultural perspective and the route recommended that will have the least access for emergency services such as Rural Fire Service to access to the properties.

If properties to be severed from the main road still maintain access to the farm via underpasses, land use conflicts with surrounding land uses.

1. General comment in relation to agriculture in the area.

2. Comment on broad route options.

Section C

The green route is through greenfield and will impact on high value agricultural land.

Transport options have led to impacts on relatively undisputed rural land and communities.

The land use impacts of the green option being the preferred option.

NSW Department of Agriculture and the Office of Environment and Heritage, 13 November 2017

Attachment C

Response to exhibition of Environmental Assessment

Princess Highway Upgrade (Forground-Berry Bypass) (MP10-0240)
From an agricultural impact perspective, the options here involve the same land, with different access configurations. No comment.

Southern interchange for Berry

Property, like through severance, and the alignment and also reduces the impact on the productive agricultural land of the rural North Street enables both a 40-metre buffer to be established between the North Street residents and the alignment of the highway along North Street. The option to locate the alignment about 40 metres from North Street along North Street.

Rural Fire Service.

To the other as well as access for emergency vehicles such as for bushfire management by the other perspectives, there will need to be good access for stock from one side of the bridge.

While the revised option 3 will impact on agricultural land, it appears to be the most practical.

Northem Berry access

Comment on access options for Berry.