

OUT19/16513

Mick Fallon
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Dear Mr Fallon

# Inland Rail - Narrabri to North Star (SSI-7474) EIS Exhibition

I refer to your email of 9 December 2019 to the Department of Planning, Industry and Environment (DPIE) – Water about the above matter. The following recommendations for you to consider are from DPIE Water and NRAR. Please note Crown Lands, the Department of Primary Industries (DPI) – Fisheries and DPI - Agriculture all now provide a separate response directly to you.

#### **Pre-Approval**

It is recommended that the proponent provide:

#### Water Supply

Confirmation of the water supply works to ensure an adequate water supply is available and
the impacts of the proposed extraction are adequately assessed. The identification and
assessment of water supply works will enable exclusion of approval requirements under the
Water Management Act 2000 where applicable and confirm the availability of a secure supply.
Furthermore, an impact assessment (including viable mitigating measures) is required if there
is the potential for a loss of water supply and a new surface flow path (due to redirecting
surface flows).

More detail regarding these recommendations are provided in **Appendix A**.

#### **Hydrological Assessment**

- An assessment of impacts to downstream water supplies and storages, as well as dependent species, communities and ecosystems, arising from altered flood flow patterns created by the addition of up to 50 new culverts.
- An assessment of the geomorphic impacts of new downstream cross-drainage flow paths, particularly where these flows re-enter the main river network.

More detail regarding these recommendations are provided in **Appendix A**.

#### Floodplain Management

An assessment of the consistency of the project (and associated impacts) with the
requirements of the Floodplain Management Plan for the Gwydir Valley Floodplain 2016.
 It is noted that part of the project near Moree is within the area covered by this plan, and the
flood study does not reference this.



## Post Approval

Should the project be approved, the following are provided as recommended <u>Conditions of</u> Consent:

- The proponent should clarify the contradiction in proposed thresholds for providing scour
  protection in culverts. Further, all culverts should be designed with reference to soil properties
  and River Styles properties in the immediate location. This should be developed in
  consultation with DPIE Water during detailed design stages.
- The proponent should develop the Construction Environmental Management Plan (CEMP) and Operations Environmental Management Plan (OEMP) in consultation with DPIE - Water and NRAR prior to commencing works.
- The CEMP and OEMP should incorporate a Watercourse Protection Plan, which includes monitoring during and for a period after construction (at least until major floodplain flows are experienced), to ensure effectiveness of scour protection.
- Works within waterfront land need to be consistent with the *Guidelines for Controlled Activities on Waterfront Land (NRAR 2019)*.

Any further referrals to DPIE – NRAR & Water can be sent by email to: landuse.enquiries@dpi.nsw.gov.au.

Any further referrals to (a) Crown Lands; (b) DPI – Fisheries; and (c) DPI – Agriculture can be sent by email to: (a) <a href="mailto:lands.ministerials@industry.nsw.gov.au">lands.ministerials@industry.nsw.gov.au</a>; (b) <a href="mailto:ahp.central@dpi.nsw.gov.au">ahp.central@dpi.nsw.gov.au</a>; and (c) <a href="mailto:landuse.ag@dpi.nsw.gov.au">landuse.ag@dpi.nsw.gov.au</a> respectively.

Yours sincerely

Simon Francis Senior Project Officer

**DPIE Water – Strategic Relations** 

17 February 2020

## Inland Rail - Narrabri to North Star (SSI-7474) EIS Exhibition

## **Water Supply**

The EIS has estimated construction water of 150ML over a two year period will be required to meet demands for dust control, site compaction and site reinstatement. The information provided within the Submissions Preferred Infrastructure Report (SPIR) is inadequate to identify the extraction site, licensing requirements and security of supply. The impacts of the proposed water extraction are yet to be assessed.

The SPIR proposes to confirm the ability to access water supplies and any licensing requirements after project approval through individual Construction Water Supply Plans for each section of the Inland Rail program. This could represent a commercial risk to the project. Therefore, it is recommended this be confirmed to enable exclusion of approval requirements under the *Water Management Act 2000* where applicable.

#### **Hydrological Assessment**

The proponent has committed to further analysis regarding detailed design. However, some inconsistencies are evident. In Section 3.1.2 of Appendix E - Flood Study Report, it states that in the absence of soil property information, scour protection will be provided for culverts where discharge velocity exceeds 2.5 m/s, whereas in Section 4.4.2.1, the report states 1.6 m/s as the threshold for scour protection. DPIE – Water supports the lower value as appropriate, but the proponent should clarify its position on this contradiction. Further, all culverts should be designed with reference to soil properties and River Styles properties in the immediate location.

Additionally, the proponent has indicated up to 50 new culverts will be incorporated into the design. This represents a significant alteration to overland and floodplain flows during floods in comparison to existing conditions. While considerable attention has been paid to the impacts on local infrastructure and surrounding properties, no assessment of impacts to downstream water supplies or storages, nor dependent species, communities or ecosystems arising from altered flow patterns has been undertaken. Nor have the geomorphic impacts of new downstream cross-drainage flow paths due to new culverts (particularly where these flows re-enter the main river network) been reviewed. These assessments are required before approval is granted.

**END ATTACHMENT A**