

Advice to decision maker on coal mining project

Proposed action: Newland Coal Extension Project

Requesting agency	Department of Sustainability, Environment, Water, Population and Communities
Date of request	22 August 2012
Date request accepted	29 August 2012
Project title	Newland Coal Extension Project (EPBC 2011/5968)
Summary of request	<p>The Department of Sustainability, Environment, Water, Population and Communities (the department) is currently assessing the Newland Coal Extension Project (EPBC 2011/5968) in accordance with the provisions of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act).</p> <p>The department advises the Interim Independent Expert Scientific Committee on Coal Seam Gas and Coal Mining (the interim committee) of an opportunity to comment on the draft environmental impact statement and seeks advice on:</p> <ol style="list-style-type: none"> 1) Whether the Water Balance Model, Site Water Management Plan and Flood Modelling Report, sufficiently mitigate for adequate protection of riparian areas that may impact on the listed threatened species of concern under the EPBC Act.

Advice

- 1) The interim committee has concerns over the limited information provided in relation to cumulative impacts, particularly given the scale of the pending development. Further information to identify the cumulative impacts to both surface water and groundwater, is warranted, to enable an assessment of all potential impacts to both water resources and matters of national environmental significance, including an appropriate risk assessment.
- 2) In terms of the specific advice requested, the interim committee notes that the:
 - a) proponent has provided a site water balance; which predicts a peak water demand in 2030 of approximately 2.4 million litres a day. This water demand will primarily be met by water captured on site, or in the event of a prolonged drought, by SunWater water allocations. The interim committee advises that following improvements could be made to assist with the interpretation of the model:
 - i) a summary table which clearly lists all water inputs and outputs; and
 - ii) discharge quantity and quality triggers, to validate that the proposed dams are adequate as part of the water management strategy.
 - b) proponent has not provided a regional water balance, as part of their water balance model. Provision of a regional water balance would further assist the full assessment of impacts from the development.

- c) Water Management Plan discusses the water balance and water release scenarios for the six proposed discharge points. The plan does not appear to include discharge triggers or information relating to the quality or quantity of discharge/received water. Further documentation may benefit by consideration of a broader range of flow scenarios. In addition, any contaminants that are released are likely to accumulate under low flow scenarios and adverse impacts are likely if discharges occur after a waterway has recently flowed; for example, impacts relating to the first flushing event.
 - d) Water Management Plan also proposes three monitoring points for the receiving waterways. The number and location of these monitoring points are not considered adequate, as individual discharge points are not monitored. Further documentation may benefit through consideration of monitoring all discharge points at multiple locations.
 - e) Flood Modelling Report discusses impacts associated with diversions and flooding. The proposal includes four creek diversions, which will be designed to mimic the pre-development channel and hydraulic characteristics. The proponent has proposed rock armouring as a mitigation measure to increase the scour threshold and reduce the risk of erosion. In addition, a monitoring program will be established with initial monitoring taken at six monthly intervals. This is considered adequate if monitoring is undertaken at multiple locations downstream and in close proximity to every diversion proposed.
 - f) Flood modelling has been undertaken on the 2 yr, 10 yr, 50 yr, 100 yr, and 1000 yr Average Recurrence Interval (ARI) and probable maximum flood (PMF) development scenarios. The majority of results indicate a minor impact on flood levels and velocities, where pits and infrastructure are located outside of the 1000 yr ARI. This is considered adequate to reduce potential impacts to matters of national environmental significance.
- 3) In addition, the interim committee notes that subsidence has the potential to structurally affect the Cerito Creek Dam structure. The dam wall is within the immediate vicinity of the longwall panels, which may be impacted by cracks in the shallower longwall areas. This will depend on a range of factors including panel width, depth of cover, extraction thickness, overburden lithology and type of the surficial deposits. An assessment of the scale and extent of this potential impact does not appear to have been provided.

**Date of
advice**

5 October 2012
