



## Department of Primary Industries

OUT17/29995

Mr Robert Byrne  
Industry Assessments  
NSW Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

robert.byrne@planning.nsw.gov.au

Dear Mr Byrne

### **West Culburra (SSD 3846) Supplementary Response to Submissions**

I refer to your email of 20 July 2017 to the Department of Primary Industries (DPI) in respect to the above matter. Comment has been sought from relevant branches of DPI. Views were also sought from NSW Department of Industry - Lands that are now a division of the broader Department and no longer within NSW DPI.

Any further referrals to DPI can be sent by email to [landuse.enquiries@dpi.nsw.gov.au](mailto:landuse.enquiries@dpi.nsw.gov.au).

Please accept my apologies for the delay in providing this advice. DPI has reviewed the supplementary response to submissions and provides the following comments and recommendations for consideration in assessment of the proposal.

#### **Comments**

The proposed development site lies adjacent to the Crookhaven River estuary. The estuary supports extensive areas of marine vegetation (including seagrass, mangroves and saltmarsh) and Priority Oyster Aquaculture Areas (oyster farms) and both commercial and recreational fishing grounds.

DPI Fisheries policy (see Attachment A) is that all developments should aim to achieve “no net loss” of Key Fish Habitats and no significant impact upon commercial and recreational fishing. DPI also supports the aims and requirements of SEPP 62 (Sustainable Aquaculture) which include ensuring that developments do not have adverse impacts on oyster aquaculture in the vicinity of the development.

DPI remains unconvinced that the development as proposed can be carried out without substantial risk of significant adverse impact upon the fisheries values of the Crookhaven River estuary. Detailed comments regarding specific outstanding issues are provided at **Attachment A**.

#### **Recommendations**

##### **Prior to project approval**

- Deletion of proposed view corridors and the leisure/tourism hub at Cactus Point (and associated clearing of vegetation).

- A requirement to establish and maintain a 100 m riparian buffer for the full length of the development adjacent to the Crookhaven estuary.
- Independent review of the detailed design of the water quality treatment train and its suitability to achieve a neutral outcome.
- Independent review of the proposed Erosion and Sediment Control Plan(s).

**Following project approval**

- Robust long term monitoring of water quality outcomes with comparison against baseline (pre-development) data.
- Water quality monitoring to be event based and to focus on outcomes at the boundary of the estuary (not within the estuary where dilution has occurred).
- Implementation of the Erosion and Sediment Control Plan(s) to be subject to periodic independent audits.

Yours sincerely



Mitchell Isaacs  
**Director, Planning Policy & Assessment Advice**  
14 August 2017

*DPI appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here:*

<https://goo.gl/o8TXWz>

**West Culburra (SSD 3846)**

**DPI detailed comments on the supplementary response to submissions**

**Integrity of the 100m riparian buffer zone and proposed harm to marine vegetation**

DPI acknowledges that the proposal includes a 100m riparian buffer between the Crookhaven River and most of the residential development, and that the number and type of ancillary developments within this buffer has been scaled back such that it will now be better able to perform its intended function. However, the proponents have reconfirmed their intent to clear parts of the buffer down to the shoreline (including mangrove vegetation) to create “vistas”. These will compromise the effectiveness of the buffer.

While section 89J of the *Environmental Planning and Assessment Act 1979* provides an exemption from the requirement to obtain approval under section 201, 205 or 219 of the *Fisheries Management Act 1994*, DPI considers the conservation of key fish habitat a relevant matter for consideration in determination of the proposal.

DPI Fisheries policy notes that approval will generally not be given for the removal or trimming of marine vegetation (e.g. mangroves) for aesthetic purposes (e.g. to create water views) for private developments ([Policy and guidelines for fish habitat conservation and management 2013](#), section 3.2.3.2, pp.20-21). DPI Fisheries also applies a ‘no net loss’ habitat policy. For **unavoidable** impacts on key fish habitat an offset is required which includes habitat compensation on a minimum 2:1 basis (section 3.3.3.2, pp.29-30). DPI does not consider that creation of “vistas” is sufficient justification for clearing of riparian vegetation (including mangroves) which performs a valuable ecological role.

**Stormwater quality**

DPI has concerns regarding the modelling undertaken to assess the impact of the development on water quality as outlined below.

**Development stages modelled**

The modified MUSIC modelling only assesses the pre-development and post-development scenarios. There continues to be no assessment of the “during development” scenario when most of the vegetation clearing and soil exposure will take place. The development is proposed to be conducted in 4 stages and each stage could conceivably take 4 to 6 years to complete. Therefore it is not unreasonable to expect a 20 to 25 year development phase (civil + dwelling construction). The risk of experiencing several large rainfall events per year which overwhelm the sediment and erosion controls and transport sediments and nutrients beyond the development site and into the Crookhaven River estuary is very high.

**Model inputs**

DPI previously questioned the appropriateness of using the 1964 to 1970 climate data as the basis for MUSIC modelling. The water quality impact analysis in the Aquatic Ecology Impact Assessment Report by Ecological Australia (Appendix 8) refers to detailed analysis based on 1967 data which is portrayed as an “average year” (see Section 4.5, p19). 1967 was in fact a drought year in south eastern Australia. Data from the Bureau of Meteorology’s website underlines the fact that 1967 was not an “average year” (see table).

Station	Nowra Treatment Works	Culburra Treatment Works	Greenwell Point Bowling Club
<b>1967 rainfall</b>	815 mm	936 mm	791 mm
<b>Mean rainfall</b>	1037 mm	1209 mm	1127 mm
<b>Median rainfall</b>	978 mm	1127 mm	1104 mm

DPI considers the water quality analyses should examine worst case scenarios, that is, scenarios of above average rainfall/runoff.

### Model results

Table 1 of the Martens Report (Appendix 7) provides model outputs (pollutant loads) for both pre-development and post-development conditions. The predicted pre-development loads include 13,900kg/year of total suspended solids (TSS) and 899 kg/year of gross pollutants. Given the site is predominantly natural bushland with a small portion of grazing land, no public access and appears to be stable with little if any surface disturbance and erosion, DPI is not convinced that these numbers are realistic.

The modelled pre-development loads contribute to the prediction of substantial improvements in water quality as a result of the development with predicted substantial reductions in TSS, TP (total phosphorous), TN (total nitrogen) and gross pollutants between the pre-development and post-development scenarios (see Table 2). DPI considers these predicted improvements are implausible given the pre-existing site conditions and the nature and extent of the proposed development.

### Development on Crown land

The Department of Industry - Lands & Forestry advise that the proposal has no authorisation to utilise Crown Lot 7309 DP1163571 and/or Crown land below Mean High Water Mark as part of the development. This includes any proposal for clearing or any other structure or activity at any stage of the development. As a result any proposed development and/or activity on the Crown land cannot be taken to be achievable by the applicant.

Any establishment of the proposed public recreation facilities on Lot 7309 would require the Lot to be reserved for Public Recreation prior to any development, and for management of the Lot to devolve to Shoalhaven City Council.

Lands & Forestry has not received enquiries or an application to this effect from either the applicant or Shoalhaven City Council. Consequently at this stage Lands & Forestry cannot consent to the siting of any facilities on the Crown land, either at this stage or under future stages of the development.

Any development of the Crown land at any stage of the development, above or below the Mean High Water mark must have the prior approval of Lands & Forestry. No approval has been sought for these works, and approval is not guaranteed should an application be received.

Lands & Forestry does not support the clearing of foreshore vegetation on Crown land, above or below the mean high water mark for "vistas" as is proposed by the applicant.

### Tourism/Leisure hub at Cactus Point

The proposed foreshore tourism development ("leisure hub") at Cactus Point remains a component of the proposal. Despite concept planning for this aspect being deferred until later stages (Stage 4) in the approval process, it is clear that the proponent intends to seek some form

of waterside, tourism/recreation focussed development (motels, restaurants, cafes, tourist oriented shops) which is likely to require clearing of riparian vegetation including mangroves and armouring of the foreshore.

DPI reiterates that the waterway adjacent to Cactus Point is a shallow intertidal mud flat which is inherently unsuited to the vast majority of waterway based recreational uses. The viability of a tourism/leisure hub at this site given the existing accessibility of numerous sandy beaches in the general Culburra area is very much open to question. DPI believes that there is little justification for clearing riparian vegetation or foreshore armouring at the site as it will continue to remain an unsuitable location for water focussed leisure activities other than possibly canoeing/kayaking at high tide.

**END ATTACHMENT A**