



Department of Primary Industries

TRIM REF: OUT11/21240

NSW Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

(Attn: Mr Mark Brown)

Dear Mr Brown

**Subject: DPI-Fisheries Submission on Publically Exhibited Environmental Assessment of
Concept Plan for Cronulla Sharks Development at 461 Captain Cook Drive, Woollooware
(MP10_0229)**

Thank you for your letter dated 30 September 2011 requesting NSW Department of Primary Industries (Fisheries) (DPI-Fisheries) submission on the Environmental Assessment Report (EAR) of the proposed concept plan stated above, including advice on recommended conditions of approval.

This submission includes an assessment of this proposal in relation to potential impacts on aquatic habitats, the Towra Point Aquatic Reserve and aquaculture industry within Woollooware Bay. This submission considers the provisions under the *Fisheries Management Act 1994* and the Department's *Policy and Guidelines for Aquatic Habitat Management and Fish Conservation (1999)* and SEPP 62 Sustainable Aquaculture.

DPI-Fisheries wishes to make the following comments on the EAR for this proposal:

1) Towra Point Aquatic Reserve

There is no acknowledgement within the main EAR that the proposed development site directly adjoins a "sensitive coastal location" and significant coastal wetland. While reference is made to the mangrove wetlands north of the site and potential impacts to this habitat are assessed or identified, it is not stated that these mangroves are part of the Towra Point Aquatic Reserve. DPI-Fisheries is of the opinion that assessment of impacts to the Towra Point Aquatic Reserve could have been more upfront in this EAR, as specified in Item 14 of the Director General Requirements (DGRs) for this proposal.

Towra Point Aquatic Reserve has been identified and mapped within Appendix T of the EAR. However, the landward boundary of the reserve as mapped is inaccurate. This boundary extends to the Mean High Water Mark of Woollooware Bay and should include most mangroves abutting the Towra Point Nature Reserve and those abutting the developed lands around Woollooware Bay, including the development site. Conserving values of the adjacent wetland and Towra Point Aquatic Reserve should be a major consideration of the project.

Contrary to what is stated in Table 4 of the EAR, section 6.1 does not address the Towra Point Aquatic Reserve. S.197D of the *Fisheries Management Act 1994* addresses development affecting aquatic reserves, and there is no mention of this in the discussion of this Act under s.6.2.4 of the EAR. However, DPI-Fisheries notes that this section of the FM Act does not apply to Part 3A applications.

2) Riparian Buffer Zone Requirements

The EAR has not accurately stated DPI-Fisheries requirements for riparian buffer zones. It is stated on page 68 of the EAR that: 'The Concept Plan scheme incorporates a 30m transitional buffer to the mangrove wetlands to the north of the site, which is consistent with the merit assessment provisions under the Fisheries Management Act 1994'. This is incorrect. In fact, the Department's *Policy and Guidelines Aquatic Habitat Management and Fish Conservation 1999* recommends a minimum buffer zone width of 50m with their natural features and vegetation preserved which should be increased to 100m or more where adjacent to ecologically sensitive areas. This recommendation has not been stated in the EAR.

DPI-Fisheries has recommended that the riparian buffer zone width for this proposal complies with the NSW Office of Water riparian zone standards. DPI-Fisheries support for a buffer zone width of 40m, rather than a minimum of 50m, has considered the existing unvegetated nature of the riparian zone at this site and adjoining sensitive habitat. Contrary to the claim made in section 7.3.3 of the EAR, the DPI-Fisheries has been aware that there would be no or little potential to re-establish and expand the inter-tidal zone as part of this proposal, due to limitations from contamination issues. However, there is the potential to enhance the riparian functioning of this zone in terms of treating stormwater flows and increasing riparian biodiversity and ecological function adjacent to Towra Point Aquatic Reserve.

The EAR states that the riparian buffer zone, particularly on the western site, varies from 30-60m in width. However, considering the proposed foreshore park and hard surfaces associated with playgrounds, paving and BBQ facilities, the Department views 30m to be a more accurate description of the proposed buffer zone width in this area.

3) Harm of mangroves

It is stated in the main EAR that: 'The mangrove area within and adjacent to the channel will be retained and protected'. This contradicts the assessment within Appendix T which accurately states that: 'Construction of stormwater infrastructure and the two pedestrian bridges may require removal of some mangroves in the channel'.

DPI-Fisheries has the following concerns with this proposed concept plan:

1) Proposed buffer zone

DPI-Fisheries has noted that the proposed riparian buffer zone width along Woollooware Bay is 30m, rather than the 40m required in the Director-General Requirements for this proposal. As stated above, DPI-Fisheries supports a minimum 40m riparian buffer zone for this proposal. This width is a compromise from the Department's usual requirements of a minimum 50m riparian buffer width, considering the existing unvegetated nature of the riparian lands at this site. A 40m buffer aligns with the Local Environmental Plan requirements for buffers that currently apply to this site, and is supported by DPI-Fisheries as this width will provide greater benefits to the adjoining Aquatic Reserve from treatment of stormwater flows, increased riparian biodiversity and increased resilience to climate change and other stressors.

Regarding the justification for the proposed 30m riparian setback area (section 7.3.3 of EAR), DPI-Fisheries has the following comments:

- Potential site contamination and the required capping should not limit the establishment of a vegetated riparian buffer zone.
- This justification has not considered the treatment and reduced volume of stormwater from percolation through the riparian buffer zone. It has not acknowledged that there will be an overall increase in impervious areas as a result of this proposal. While water sensitive urban design measures are proposed, the proponent cannot yet guarantee the stormwater quantities will be reduced from this development without the detailed design stage of the stormwater concept plan. Stormwater treatment measures will be implemented, with the aim of improving stormwater quality from the existing situation. However, there is no consideration of whether this will result in better treatment of stormwater than that which would flow through a riparian buffer zone.
- This justification relies on historical precedents around Woollooware Bay that are based on old planning requirements that no longer apply to this site. The development of this site presents an opportunity to improve upon past riparian zone management practices adjacent to Towra Point Aquatic Reserve. A wider buffer zone offers improved stormwater treatment, greater potential for increased biodiversity, greater protection from coastal hazards and greater protection to adjoining mangrove habitat from unregulated access and related issues such as dumping of waste.

Considering the 30m buffer zone as proposed, DPI-Fisheries has noted that greater riparian functionality could be established within this zone. Apart from the proposed foreshore pathway/cycleway there are additional proposed paths and impervious areas within this zone (i.e. from the BBQ facilities, retail courtyard, and pathways) that should be reduced or removed from this zone. The cycleway on the western site should be placed further landward so that a wider riparian buffer planting could occur adjacent to the mangroves.

It should be noted that it may not be possible to plant saltmarsh species in the riparian buffer zone on the western site, due to site contamination issues. DPI-Fisheries is of the opinion that native riparian zone terrestrial vegetation can be planted in this zone with appropriate top soil establishment.

Any approval of the riparian landscaping concept plan needs to be considered with input from Ausgrid. The EAR makes no reference as to whether Ausgrid would approve of the proposed landscape uses and plantings under the high voltage powerlines within the riparian zone.

2) Stormwater

It is important that the detailed design of the stormwater concept plan (i.e. tank volumes and bioswale dimensions) is implemented with the overall aim of reducing and treating stormwater flows from this site. Further investigation of subsequent impacts of these flows on the Towra Point Aquatic Reserve will be required as part of any future detailed project applications at this site.

DPI-Fisheries recommends that this proposal be amended to include a 40m wide riparian buffer zone adjacent to Towra Point Aquatic Reserve and that this zone be managed to enhance riparian biodiversity and functioning as far as possible. Considering potential impacts to aquatic habitats, DPI-Fisheries recommends the following additions to the proposed Draft Statement of Commitments (section 8.0 in EAR):

- A commitment to base the detailed Stormwater Management Plan on the Stormwater Concept Plan proposed within this application.
- A commitment to further investigate potential impacts on mangrove habitat within Towra Point Aquatic Reserve from stormwater runoff, once detailed stormwater designs have been prepared.
- A commitment to preparing and installing signage and adequate measures to prevent trampling of native vegetation and the dumping of waste amongst mangrove habitat under the Ecology Section (as suggested in Appendix T of the EAR).

Further DPI-Fisheries recommends that:

- mangroves are not harmed in upgrading the existing mangrove boardwalk,
- foreshore boardwalks are set back from mangroves so the maintenance trimming for safety purposes will not be required over time, and
- detailed designs for the proposed seawall are included in the future detailed project application and that it is designed according to the principles in the 'Environmentally Friendly Seawall Guidelines' produced by the former Department of Environment and Climate Change (now Office of Environment and Heritage) and Sydney Metropolitan Catchment Management Authority (see: http://sydney.cma.nsw.gov.au/component/option,com_remository/Itemid,116/func,select/id,51/).

For any further information concerning the above, please contact Carla Ganassin on (02) 9527 8552 or via email on carla.ganassin@industry.nsw.gov.au.

Yours sincerely



Bill Talbot

Director

Aquaculture, Conservation & Marine Parks

18 November 2011