

APPROVAL NOTICE

Consideration of the environmental impact pursuant to section 5.5 of the *Environmental Planning and Assessment Act 1979* of:

Tweed Sand Bypassing - Back-passing by Dredge

by the Department of Planning, Industry and Environment – Crown Land
under *State Environmental Planning Policy (SEPP) (Infrastructure) 2007*.

The Proposal

The Department of Planning, Industry and Environment (DPIE) – Crown Land is proposing to undertake maintenance dredging of the Tweed River navigation channel and transport the dredged sand via barge to two nearby sites for nourishment. The proposal is referred to as “back-passing” as the sand will be transported south toward the “up-stream” direction of net coastal long-shore sediment transport in the region. This ensures that sand remains within the active coastal zone and is not lost from the total sediment budget.

The proposed back-passing will be an option that the Tweed Sand Bypassing (TSB) project may consider as a stand-alone activity or as part of a wider dredging campaign.

The areas to be nourished include the Fingal Beach deposition area north of Fingal Head and the Dreamtime Beach deposition area south of Fingal Head. The cross-shore boundaries of the deposition areas are approximately between 3m – 13m depth contours.

The proposal is for a nominal annual placement of 50,000m³ across both deposition areas and this is inclusive of a 20,000m³ restriction at Dreamtime Beach. This annual volume is significantly less than the calculated maximum capacity of approximately 434,000m³ and 166,870m³ at Fingal Beach and Dreamtime Beach respectively. Therefore this proposal, which is limited to placement volumes of 50,000m³ per year, aims to minimise the potential for continuous impacts.

Details of a typical back-passing by dredge campaign, assuming the nominal proposed placement volumes, are as follows:

- dredge vessel likely have a hopper capacity of 1,800m³
- a placement rate of 3 trips per day, equating to 5,400m³ per day
- assume 57% stand-by days due to unfavourable weather conditions the actual operation time is therefore:
 - 10 days for 50,000m³ + 6 days stand-by = 16 days in total year
 - the 16 days will be split as 10 days total to Letitia and 6 days to Dreamtime per year inclusive of stand-by days

The dredge campaign commencement window is between June and September depending on weather, presence of threatened flora and fauna, dredge availability and operational requirements.

Due to the nature of the proposed works, there will not be any impacts on any public land, public roads or any public pedestrian footpaths/networks.

The proposed works include:

- Mobilisation and establishment of a dredge within the Tweed River entrance navigation channel;
- The sand will be dredged by and stored on the vessel, transported south and placed in one of two nominated deposition areas;

- Monitoring of dredging operations and potential impacts on aquatic vegetation, water quality and fauna (including benthic); and
- Demobilisation of the dredge on completion of the proposed works, removal of waste and any other materials, and works areas returned to pre-dredge conditions

Objectives

The objectives of the proposal are to:

- Maintain a safe navigable channel at the Tweed River entrance;
- Retain dredged sediments within the local sediment compartment to enable beneficial transfer for beach nourishment downdrift of proposed deposition areas, consistent with the Kingscliff - Dreamtime Beach Coastal Zone Management Plan (2017);
- Improve flexibility with regard to sediment placement to allow dredge campaigns to better respond to environmental, contractual and stakeholder considerations.

The objectives of the proposal will be achieved in an environmentally sensitive manner as per the management measures identified in Review of Environmental Factors (REF) and as detailed in this report.

Process

Section 4.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act) states that where an environmental planning instrument provides that specified development may be carried out without the need for development consent, a person may carry the development out, in accordance with the instrument, on land to which the provision applies.

The applicable environmental planning instrument for the proposed works is determined as the State Environmental Planning Policy (SEPP) (Infrastructure) 2007 - Clause 129, as the proposed 'back-passing' is for the placement of sand for coastal management and beach nourishment. Accordingly the proposed works may be carried out by or on behalf of a public authority without consent on any land.

Part 5 of the EP&A Act confers a duty on determining authority to examine and take into account to the fullest extent possible the likely and potential environmental impacts of an activity. Section 228 of the EP&A Regulation 2000 lists factors that must be taken into account concerning the impact of an activity on the environment. DPIE – Crown Land is the determining authority for the proposed works as defined under section 5.1 of the EP&A Act.

A Review of Environmental Factors (REF) Report was prepared by Ardill Payne & Partners (APP) on behalf of the DPIE – Crown Land, comprising the assessment of those matters affecting or likely to affect the environment by reason of the proposed activity, as required by Part 5 of the EP&A Act.

Under Division 1 of the SEPP (Infrastructure) 2007 a public authority must not carry out an activity (as specified by the planning instrument) unless the authority has given written notice of the intention to carry out the activity and taken into consideration any response (*received within 21 days of notice*) to the notice from all relevant public authorities and local council(s). Written notice was provided to the relevant authorities including local council and all responses have been considered in the REF (refer REF Appendix G: Stakeholder Consultation Summary).

Environmental Assessment

An environmental assessment of the proposed activity by way of a Review of Environmental Factors (REF) Report prepared by Ardill Payne & Partners (APP) on behalf of the DPIE – Crown Land, was completed in accordance with s5.5 of the EP&A Act taking into account factors as listed in Part 14 s228 of the EP&A Regulation (2000) and responses to notice as per Division 1 of the SEPP (Infrastructure) 2007.

The REF examines and takes into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the activity and concludes that the proposed activity *'is not considered to be such that will result in significant adverse impacts on the natural or man-made environment'*. On this basis it is determined that the proposal is not subject to additional Environmental Impact Statement requirements under the EP&A Act.

In response to notice issued under Division 1 of the SEPP (Infrastructure) 2007, primary concerns raised by public authorities relate to ecological impacts on aquatic ecosystems such as reef habitat within the Cook Island Aquatic Reserve, monitoring of ecological and water quality impacts, adaptive management measures, deposition management methodology, protection of marine mammals and breeding shorebirds/ seabirds, and impacts on public amenity and recreation. The REF was revised and updated taking into account comments from relevant authorities, and an updated version of REF was provided to authorities for further review prior to finalisation. Authority concerns are further addressed through the development and implementation of a Project Environmental Management Plan (PEMP) and monitoring program for the proposed work.

An Aquatic Ecology Assessment (AEA) of the proposal was undertaken by *Niche Environment and Heritage* to meet assessment requirements pursuant *Fisheries Management Act 1994 (FM Act)*, *Biodiversity Conservation Act 2016 (BC Act)* and *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. The assessment determined that the proposed work is unlikely to have a significant impact on State or Commonwealth listed threatened species or *other matters of national environmental significance (MNES)*. Accordingly, referral under the EPBC Act is not required; and similarly a species impact statement is not required under the FM Act or BC Act. Habitat impacts are likely to be confined to soft sediment communities which naturally have high and very variable patterns in sediment movement and deposition.

The AEA notes potential impacts to breeding/ nesting avifauna including foraging habitat, in relation to sand deposition, noise and increased risk of vessel strike, with records of a number of threatened and migratory species identified within the Cook Island Nature Reserve. The REF takes into account findings of the AEA, and has adopted all management recommendations from the AEA to avoid, minimise and mitigate potential impacts.

Three maritime heritage items were identified within the vicinity of the deposition areas shipwreck 'Fido', shipwreck 'Dellie' and Fingal Head Lighthouse; however it is unlikely that these items will be impacted.

An AHIMS search including extensive search (+1000m buffer) found 33 Aboriginal objects/ sites with 1 declared Aboriginal place recorded in or near the proposed deposition areas. Details contained in the Extensive Search identified that the 33 Aboriginal sites were land-based "open sites" that are removed from the deposition areas and as such are unlikely to be impacted by the proposed works. Representatives from Tweed Byron Local Aboriginal Land Council (TBLALC) conducted a joint inspection with DoI – Crown Land (now DPIE – Crown Land) on the 22nd January 2018. The inspection report (*Appendix J of REF*) notes that the proposed works *".. would not impact Aboriginal cultural heritage on land or offshore"* subject to compliance with their recommendations. These recommendations have been incorporated into the REF.

A temporary minor loss of amenity could be expected in the vicinity of the sand deposition site during operations, as it is minor temporary inconvenience for boat users at the dredging location in some instances.

There may be a temporary increase in water turbidity due to the works, to be managed to acceptable levels by the contractor in accordance with conditions of the REF and the project environmental management plan.

The proposal is considered to be consistent with the primary and secondary objectives of the Kingscliff – Dreamtime Coastal Zone Management Plan (K-DCZMP).

The REF identified the following approval and notification requirements for the proposed work under applicable environmental legislation:

- A variation is required to the existing environmental protection licence (EPL no. 10432) held by the *Tweed River Entrance Sand Bypassing Company Pty Ltd*, to include the proposed works;
- Referral of REF and supporting information to Department of Environment and Energy if required, for a determination of the requirement if any for a sea dumping permit.
- Notice of the proposed work is required in accordance with s199 of the FM Act.

Based on the outcomes of the assessment presented in the attached REF it is concluded that potential impacts associated with the proposed activity are likely to be temporary/ short term or minor in nature. The works are expected to have positive effects on public safety for users of Tweed River navigation channel and coastal protection by supplementing available sand volumes in the updrift of the Letitia compartment.

Conclusion

In accordance with section 4.1 of the EP&A Act the proposed works are permissible without consent under clause 129 of the SEPP (Infrastructure) 2007. Pursuant to Part 5 of the EP&A Act the environmental impacts of the proposal have been determined as not likely to be 'significant', and accordingly the proposal is not subject to Environmental Impact Statement requirements.

The proposal is unlikely to significantly affect threatened or protected species, populations or ecological communities or their habitats, within the meaning of the *BC Act* or the *FM Act* and therefore a Species Impact Statement is not required.

The Aquatic Ecology Assessment identifies no significant impacts on a matter of national environmental significance under the *Environmental Protection and Biodiversity Conservation Act 1999* and, accordingly, a referral is not required.

Aboriginal and Maritime Heritage is unlikely to be impacted and recommendations from the local Aboriginal group (TBLALC) have been adopted within the REF.

The REF has taken into account all responses from relevant authorities inclusive of management measures to mitigate environmental impacts.

Subject to approval requirements and management actions as noted in the REF, it is considered that the proposed works can be undertaken without modification as there is likely to be minimal impact on the environment through design, project management provisions and conditions of approval.

Recommendations

It is recommended that DPIE Crown Land proceed with the project as set out in this approval notice and that the Department as the determining authority:

- 1 Having taken into account to the fullest extent possible all matters affecting or likely to affect the environment, is of the opinion that the proposal is not likely to have a 'significant' impact on the environment including Aboriginal or maritime heritage or threatened species, populations or ecological communities or their habitats.
- 2 Approve the proposed works subject to approval requirements and management measures identified in the REF.

Prepared by:

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Position: **A/ Environmental Officer - TRESBP**

Date: 05/07/2019

Approved By:

Signature:



Name:

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Date:

11 / 07 / 2019

