

RFI	
DPI Fisheries - MBOS	
<p>Identify all potential direct and indirect impacts associated with construction and operation of the project, including Posidonia australis, White's Seahorse and Black Rockcod. The MBOS should be revised to ensure compliance with NSW Biodiversity Offsets Policy for Major Projects Fact sheet: Aquatic biodiversity.</p>	<p>Response to the NSW Biodiversity Offset Policy for Major Projects Fact Sheet: Aquatic biodiversity Fact Sheet</p> <p>Transport's assessment of the proposal has been undertaken to meet the requirements stated in the Fact Sheet. The potential direct and indirect impacts together with the proposed mitigation measures are thoroughly assessed and documented in the following environmental assessment documents. The EIS, Response to Submissions (RtS) and Marine Biodiversity Offset Strategy (MBOS).</p> <p>Following is a summary of the where specific information required as per the "Steps" listed in the Fact Sheet can be found and how Transport has met these requirements.</p> <p><u>Fact Sheet Step 1: Impact assessment</u></p> <p>The displayed EIS includes a specialist Marine Biodiversity Assessment Report (MBAR). In response to specific issues raised by NSW Fisheries following the display of the EIS, an Addendum Marine Biodiversity Impact Assessment Report was prepared and included in the RtS to clarify the issues raised.</p> <p>These two reports which form part of the EIS assess the indirect and direct impacts to marine biodiversity and include all elements of the assessment requirements required in Step 1 of the Fact Sheet including: site description, mapping, consideration of impacts on aquatic resources users (this can also be found in the Socio-economic impact, Chapter 14 and Appendix N of the EIS), and description of all marine environments surrounding the project area.</p>

The MBOS summarises the potential impacts stated in the EIS (which includes the MBAR and Addendum Marine Biodiversity Impact Assessment Report) and outlines how Transport will manage the residual impacts under Commonwealth and State legislation.

Fact Sheet Step 2: Importance of site in the context of the broader catchment

This Step requires assessing the value of aquatic biodiversity to be affected on or adjoining the development site in the context of the broader catchment and considers ways in which the development may change this value.

The aquatic biodiversity values within the broader Botany Bay catchment are included in Chapter 10 and Appendix H of the EIS. This was used as a basis for assessing potential impacts from the proposal. The MBOS summarises these potential impacts and outlines how Transport will manage any residual impacts under Commonwealth and State legislation.

Specifically, the Fact Sheet requires Transport to consider the following:

- The aerial extent of the key fish habitat types to be affected in the catchment area as a percentage of the total area.

Response: This is included in Section 4 and 5 of the MBAR and summarised in Section 1.2 of the MBOS.

- How well connected the habitats are to other habitats, to facilitate natural regeneration.

Response: This is included in Section 4 and 5 of the MBAR and summarised in Section 1.2 of the MBOS.

- impacts on fish passage.

Response: The project is impacting on a relatively small area of Botany Bay and in both construction and operation will not be restricting fish passage within the Bay.

Fact Sheet Step 3: Determine the threatened species present on the development

The EIS has identified all threatened species, populations or communities of fish or marine vegetation listed under the Fisheries Management Act 1994 and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 within and adjacent to the development area. This was used to determine potential direct and indirect impacts from the proposal.

The EIS (and attached MBAR) identified these threatened species using the database searches listed in Step 3 and by undertaking aquatic surveys undertaken by specialist marine ecologists. The results of these database searches and surveys are included in the EIS and summarised in Section 1.2 of the MBOS.

Step 3 of the Fact Sheet also requires that Transport applies avoidance and mitigation measures to minimise aquatic biodiversity impacts.

The options assessment in Chapter 4 of the EIS included as a criteria the potential environmental impacts on sensitive ecological areas.

	<p>The Environmental Impact Statement (EIS) and Response to Submissions Report (RtS) outline all mitigation measures to minimise impact to marine habitats. Mitigation measures are summarised in Chapter 10 of the EIS and summarised in Section 5.3 of the MBOS.</p> <p><u>Step 4: Offset requirements for key fish habitats</u></p> <p>The MBOS summarises the potential impacts stated in the EIS (which includes the MBAR and Addendum Marine Biodiversity Impact Assessment Report) and outlines how Transport will manage the residual impacts under Commonwealth and State legislation.</p> <p>Step 4 of the Fact Sheet requires Transport to consider Chapter 3 of the Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013). Table 2-1 of the MBOS cross references these Chapter 3 requirements and where they have been addressed in the MBOS.</p> <p>Step 4 also requires Transport to meet the listed requirements when identifying aquatic habitat offset sites. Section 5 of the MBOS addresses these requirements.</p>
Demonstrate how the risk of failure of proposed <i>Posidonia australis</i> transplantation will be reduced or managed, noting that use of the monetary bond to achieve this would form only part of the approach.	<p>The MBOS details Transport's process for ensuring that the project meets its offset requirements including:</p> <ul style="list-style-type: none"> • Direct translocation of impacted <i>Posidonia australis</i> to new offset sites (Section 5)

	<ul style="list-style-type: none"> • “Operation Posidonia” post storm event recovery walks similar to that implemented at Port Stephens to collect Posidonia australis to infill and replace seagrass that has not survived (Section 5) • Monitoring and the completion of remedial actions to prevent mortality (Section 5) <p>It should be noted that the Fisheries Policy and Fact Sheet allow for on-ground offset action and monitory bonds/payments. It is expected that these policies would be implemented including, if required, payment to Fisheries to cover gaps in the offset requirements.</p> <p>A Working Group comprising representatives of Fisheries, independent marine scientists, educational institutions and Transport is to be established to oversee the implementation and performance of the MBOS and provide advice on any corrective measures that would be needed to meet our offset obligations.</p>
Identify potential impacts of ferry type and manoeuvring on seagrass beds including scouring effects.	<p>A conservative approach has been undertaken to assess the impacts from ferries around the wharves. The largest ferry size capable of using the wharves has been assumed in our assessment. This includes an assessment of impacts from any scouring impacts from these larger ferries. Refer to Chapter 5.2.9 and Appendix T of the EIS. These impacts have been included in the offset calculations.</p> <p>Transport in consultation with Fisheries, has developed a Seagrass Impact Monitoring Program (Appendix 3 of the MBOS) to undertake surveys pre-construction, construction, post construction to ensure that all impacts have been identified and Transport meets its legislated requirements.</p>

	Should additional impact from the operation occur and result in additional offsets, Transport would consult with DPI Fisheries, DPIE and DAWE on the best approach to ensure Transport has meet is legislated requirements.
Clarify why a maximum lifespan of 5 years is proposed for the MBOS.	<p>The MBOS does not have a maximum five year lifespan, rather it proposes that after five years a review of the implementation of the MBOS would be undertaken by the MBOS Working Group in consultation with DPI Fisheries, DPIE and DAWE.</p> <p>The MBOS has been updated to clarify the five and ten year reviews.</p>
Identify the 'before' benchmark for KPIs measuring the success of MBOS actions.	<p>The Seagrass Impact Monitoring (Appendix 3 of the MBOS) and Section 4.1 of the MBOS outlines the approach for determining this benchmark.</p> <p>As stated in the MBOS, Transport would undertake a pre-construction survey of seagrasses and provide a report to Fisheries NSW and DPIE to set the 'before' construction benchmark.</p> <p>The MBOS is based on a worst case scenario and the before benchmark would not change the overall implementation of the MBOS, but would be required post construction to determine if Transport has met it offset obligations.</p> <p>Consultation for the "before" benchmark would be undertaken with Fisheries and DAWE and submitted to DPIE for approval.</p> <p>Transport has update the MBOS to ensure clarification of the "before" benchmark process (ref Section 4)</p>

Demonstrate how the cumulative impact of construction and operation on marine biodiversity, required under the Fisheries Management Act 1994 and Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) will be reduced.	The EIS and RtS assesses the cumulative impacts of both construction and operation. The MBAR considers construction, operation and cumulative impacts. Refer: EIS: Chapter 25 MBAR: Appendix H of the EIS, Chapter 5.5
Provide a revised risk of loss with offset calculation under the EPBC Act and correct the offset cost discrepancy for Posidonia australis seagrass meadows TEC versus White's Seahorse.	Agree. The updated MBOS includes these updated calculations.
EESG – Terrestrial biodiversity	
In accordance with s. 6.14 (1) (b) of the Biodiversity Conservation Act 2016, a revised BDAR should be prepared and re-certified by the accredited assessor. This should comply with the requirements of BAM 2020 and include information previously requested by Environment, Energy and Science Group (EESG):	The BDAR has been updated to conform with BAM 2020.
Provision of BAM Calculator files, vegetation plot data sheets, and vegetation zone structure, function and composition scores.	The BDAR has been updated to conform with BAM 2020.
Rectify inconsistencies in the BDAR regarding the amount of vegetation to be cleared. Provide details of survey requirements for Australian Pied Oystercatcher and Sooty Oystercatcher, in accordance with the NSW BioNet Threatened Biodiversity Profile Data Collection (TBDC).	The BDAR has been updated to conform with BAM 2020.
Provide details of survey requirements for Australian Pied Oystercatcher and Sooty Oystercatcher in accordance with the NSW BioNet Threatened Biodiversity Profile Data.	The BDAR has been updated to conform with BAM 2020.
Supply the species polygon for Sooty Oystercatcher and location	The BDAR has been updated to conform with BAM 2020.

<p>maps for Australian Pied Oystercatcher and Sooty Oystercatcher that were recorded during the survey. Note that species polygons must conform with TBDC requirements.</p>	
<p>Heritage NSW</p>	
<p>An assessment of the impacts to Bare Island's heritage listing beyond its built elements and offshore dive sites is required. Consideration should be given to the significance of the island's shoreline, maritime habitat and wash caused by ferries in the assessment.</p>	<p>Maritime habitat Chapter 10 and Appendix H - MBAR assesses the impact of the project on recreational fishing and diving in the area including Bare Island.</p> <p>Ferry wash and shoreline Chapter 18 and Appendix T of the EIS assesses Coastal Processes from the project including an assessment of the shoreline effect from the operation of ferries in Botany Bay. The conclusion from the assessment was:</p> <ul style="list-style-type: none"> • The size and speed of the ferries will be too small/low to cause waves that lead to shoreline damage. Additionally, vessels will slow-down as they approach the wharves, with the two wharves being in the order of 100m from the shoreline at both sites. This 100m distance from the shorelines will provide sufficient distance from each shoreline to ensure that boat waves would diminish in height sufficiently to prevent shoreline damage. Note also that the inter-tidal shorelines at both sites are essentially rocky, but at Kurnell there are back-beach protection works; and • Note also that there are no sand dunes in the immediate area of the La Perouse jetty. Moreover, the La Perouse facilities will not change the local wave conditions, and hence not affect any dunes in nearby Frenchmans Bay. Note that any dune sands near the Kurnell jetty are protected by an existing geotextile sand-filled bag revetment to the east of the jetty and a rock revetment on its western side.



Transport
for NSW

	Due to Bare Islands distance from the wharves and the shoreline assessment that was completed as part of the EIS, it is unlikely that Bare Island will be impacted from wash of the ferries.
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Transport for NSW

7 Harvest Street, Macquarie Park NSW 2113 | PO Box K659, Haymarket NSW 1240

T 02 8202 2200 | F 02 8202 2209 | W transport.nsw.gov.au | ABN 18 804 239 602