



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

| | |
|-------------------------------|---------------------------------------|
| Purpose Permit number: | CPS 10278/1 |
| Permit Holder: | Fremantle Ports |
| Duration of Permit: | From 10 January 2024 to 31 March 2029 |

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of maintenance dredging of Fremantle Ports Inner Harbour.

2. Land on which clearing is to be done

Lot 4565 on Deposited Plan 220793, City of Fremantle
Lot 4552 on Deposited Plan 220690, City of Fremantle

3. Clearing authorised

The permit holder must not clear more than 1.668 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

PART II – MANAGEMENT CONDITIONS

4. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

- avoid the clearing of *native vegetation*;
- minimise the amount of *native vegetation* to be cleared; and
- reduce the impact of clearing on any environmental value.

PART III - RECORD KEEPING AND REPORTING

5. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

| No. | Relevant matter | Specifications |
|------------|---|---|
| 1. | In relation to the authorised clearing activities generally | <ul style="list-style-type: none"> (a) the species composition, structure, and density of the cleared area; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was cleared; (d) the size of the area cleared (in hectares); and (e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 4. |

6. Reporting

The permit holder must provide to the *CEO* the records required under condition 5 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table 2 have the meanings defined.

Table 2: Definitions

| Term | Definition |
|-------------|--|
| CEO | Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> . |
| clearing | has the meaning given under section 3(1) of the EP Act. |
| condition | a condition to which this clearing permit is subject under section 51H of the EP Act. |
| department | means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3. |
| EP Act | <i>Environmental Protection Act 1986</i> (WA) |

| Term | Definition |
|-------------------|---|
| native vegetation | has the meaning given under section 3(1) and section 51A of the EP Act. |

END OF CONDITIONS



Meenu Vitarana
MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

18 December 2023

Schedule 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

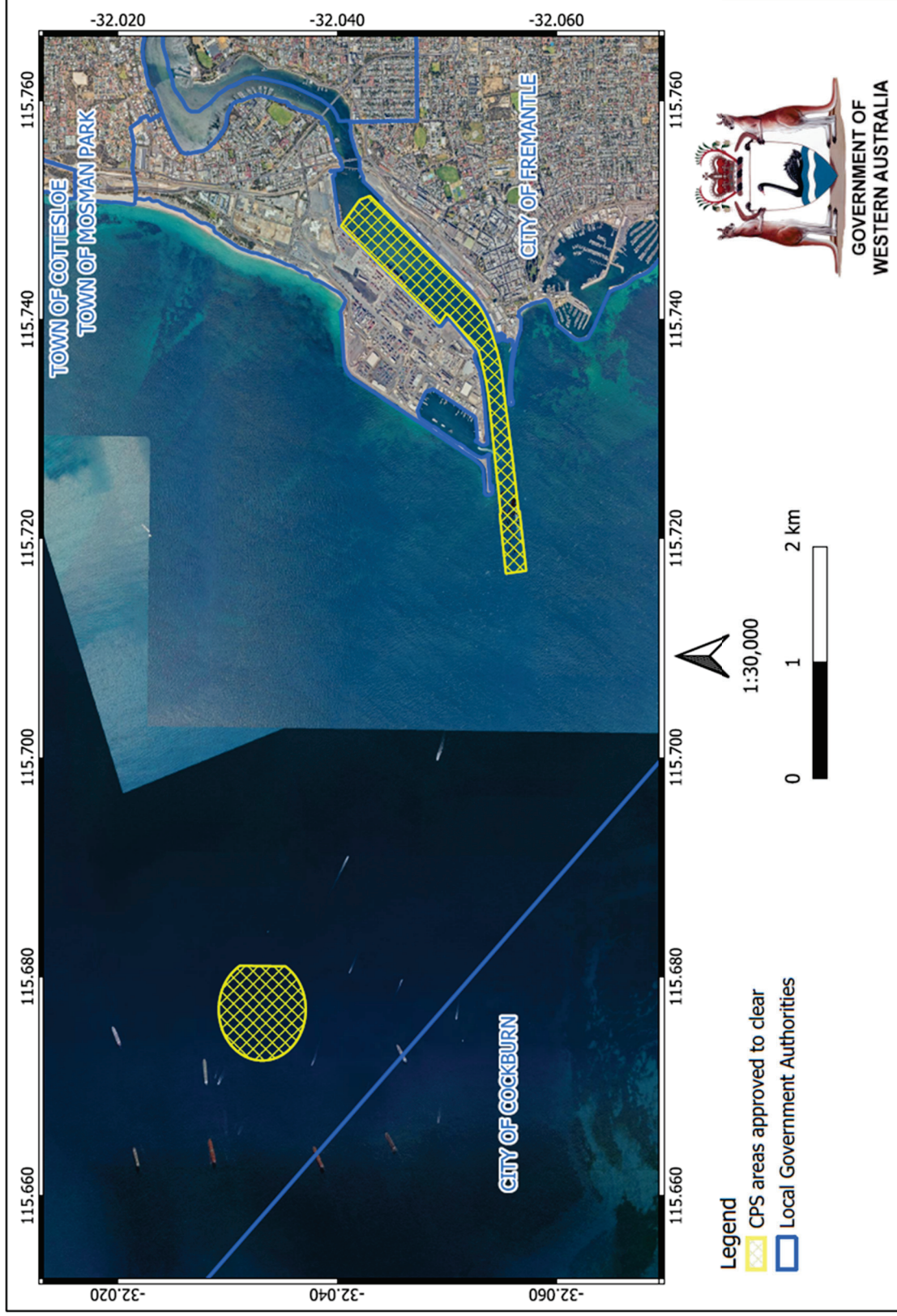


Figure 1: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

| | |
|-------------------------------|--|
| Permit number: | CPS 10278/1 |
| Permit type: | Purpose permit |
| Applicant name: | Fremantle Ports |
| Application received: | 20 July 2023 |
| Application area: | 1.668 hectares of native vegetation within a 157.14 hectare clearing footprint |
| Purpose of clearing: | Maintenance dredging of Fremantle Ports Inner Harbour |
| Method of clearing: | Hydraulic dredging |
| Property: | Lot 4565 on Deposited Plan 220793 Lot 4552 on Deposited Plan 220690 |
| Location (LGA area/s): | City of Fremantle |
| Localities (suburb/s): | Fremantle |

1.2. Description of clearing activities

The vegetation proposed to be cleared is marine vegetation, distributed across two separate areas (see Figure 1, Section 1.5).

The application is to clear marine vegetation through dredging a passage for commercial vessels into and out of the Fremantle Port. Then the dredged sediment will be disposed at Gage Roads shipping lane and anchorage area within Port waters, approximately five kilometres from the coast. The dredge and disposal of sediments will be undertaken using a trailing suction hopper dredger (Fremantle Ports, 2023a).

The marine vegetation proposed to clear/disturb within the application includes:

- Dredging area: the footprint of the dredging area is 98.4 hectares, including 1.160 hectares of marine vegetation (0.467 hectares of seagrass and 0.693 hectares of macroalgae).
- Disposal area: the footprint of the disposal area is 58.8 hectares, including 0.508 hectares of seagrass (Fremantle Ports, 2023a).

The purpose of the dredging is to maintain the Port of Fremantle Inner Harbor design depth (Fremantle Ports, 2023a). Maintenance dredging is required to remove sediments that have accumulated in the Inner Harbour from the Swan River estuary since dredging was undertaken in 2010. The dredging will allow safe access for ships into the Inner Harbour, and ensure the berths remain deep enough for larger container vessels (Fremantle Ports, 2023b).

A total dredge volume of 80,000 cubic metres is proposed to be removed over five years, with 60,000 cubic metres of sediments planned to be removed in 2024, and then approximately 5,000 cubic metres of sediments annually from 2025-2029 (Fremantle Ports, 2023b).

Dredged sediment is proposed to be disposed of at the Gage Roads offshore disposal site utilised in the 2010 dredging project (Fremantle Ports, 2023b). The dredged sediment disposal is also to nourish Port Beach, which is facing with an imminent coastal erosion risk (BMT, 2021). Sand nourishment via dredging has been identified by the City of Fremantle as the preferred management response for providing protection from the coast erosion risk in the short-term (BMT, 2021).

1.3. Decision on application

| | |
|-----------------------|--|
| Decision: | Granted |
| Decision date: | 18 December 2023 |
| Decision area: | 1.668 hectares of native vegetation within 157.14 hectares of clearing footprint, as depicted in Section 1.5, below. |

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix B), relevant datasets (see Appendix E.1), the benthic habitat survey and supporting documents provided by the applicant (see Appendix D), the clearing principles set out in Schedule 5 of the EP Act (see Appendix C), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration the purpose of the clearing is to improve the safe access for commercial vessels into and out of the Fremantle Port.

The assessment identified that the proposed clearing would result in the direct loss of approximately 0.975 hectares of seagrass and 0.693 hectares of macroalgae. However, noting the extensive extent of marine vegetation in the vicinity of the application area, this loss is not considered as significant habitat for marine fauna.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is not likely to lead to an unacceptable risk to the environment.

The Delegated Officer decided to grant a clearing permit subject to conditions to avoid, minimise to reduce the impacts and extent of clearing.

1.5. Site map

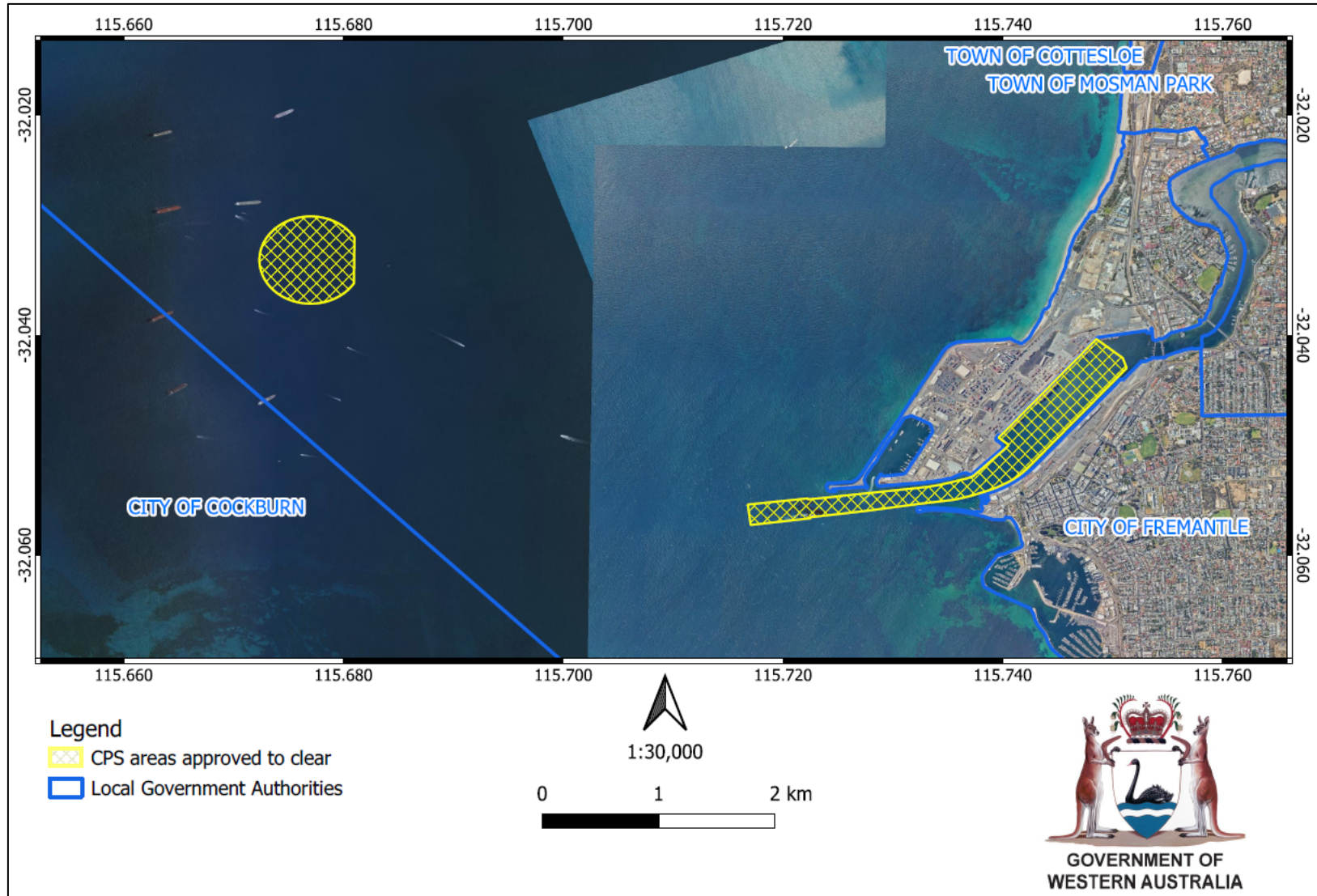


Figure 1 Map of the application area

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- Technical guidance – *Environmental Impact Assessment of Marine Dredging Proposals* (EPA, September 2021)
- Technical guidance – *Protection of Benthic Communities and Habitats* (EPA, December 2016)
- Technical guidance – *Protecting the Quality of Western Australia's Marine Environment* (EPA, December 2016)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant has advised that to reduce impacts to the environment, including marine native vegetation through implementation of the maintenance dredging, the proponent has engaged marine consultants to undertake environmental investigations and assessments including sediment sampling, plume modelling, seagrass mapping, and to develop an environmental management plan including monitoring (Fremantle Port, 2023b).

The environmental review document and environmental management plan (BMT, 2022a and 2022b) identify mitigation measures as presented in Table 1 to minimize the impact from the clearing activities.

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

Table 1. Avoidance, minimization, management and monitoring measures to mitigate the impacts of the proposed clearing (summarised from BMT, 2022a and 2022b)

| Potential environmental impacts | Avoidance measures | Minimization measures | Management and monitoring measures |
|--|--|--|--|
| Measures to ensure maintenance of benthic community habitat (BCH) | | | |
| Direct loss | Dredging and disposal area is located within an area of lower concentration of seagrass and macroalgae | Selection of the disposal area to minimise direct removal of BCH | <ul style="list-style-type: none"> The dredge will have an accurate positioning system installed and the position of the dredge will be monitored during dredging operations. Disposal position logs including details of the timing and position will be maintained. |
| Indirect loss | Not applicable (N/A) | Project timing in autumn period when seagrasses are dormant | |
| Measures to ensure maintenance of marine environmental quality | | | |
| Increased water column turbidity | N/A | The short duration of the dredging (less than 10 days). | Maintain water clarity to meet the environmental criteria at boundary of zone of moderate influence (ZoMI) and zone of influence (ZoI). <ul style="list-style-type: none"> Surface or bottom total suspended solids TSS (mg/L) at any individual impact site is 10 mg/L above the reference site data on the dredging activity sampling occasion. Median Secchi depth from impact sites must not be reduced by 20% water clarity of environmental quality guideline for the maintenance of aesthetic quality during the sampling occasion. |

| | | | |
|---|---|--|--|
| Hydrocarbon spills and waste generation | There will be no storage of fuel and petroleum products | <ul style="list-style-type: none"> Contractor for marine dredging activities will have their own refuelling and spill management procedures to adhere to and an oil spill contingency plan for responding to any marine oil pollution events. Any refuelling on site will occur in a designated area that does not drain into adjacent stormwater systems or waterways | <ul style="list-style-type: none"> A clean and tidy work area will be maintained with safe storage of all potentially hazardous substances. Fuels and oils will be stored in contained areas and any fuelling will occur within a bunded area. There will be a spill kit available on site with all necessary materials for mitigating an accidental hydrocarbon spill. The Contractor will prepare a Construction Environmental Management Plan (CEMP) that includes oil spill contingency procedures. Work areas will be clear of waste/rubbish following demobilisation from site. The dredge and any associated support vessels will be required to obtain a low-risk rating from the Department of Primary Industries and Regional Development (DPIRD) risk assessment tool prior to mobilising to site from an interstate or international location. |
|---|---|--|--|

Other measures

Prevent introduced marine species (IMS)

- The dredge and any associated support vessels will be cleaned and/or visually inspected for IMS prior to mobilising to the Project site from any location.
- The dredge and any associated support vessels will be required to obtain a low-risk rating from the DPIRD risk assessment tool prior to mobilising to site from an interstate or international location.

Prevent marine mammal collision

- Vessel masters responsible for operating the dredge will be suitably trained to understand marine mammal behaviours, actions and reporting requirements in the event of marine mammal injury or mortality and provisions under Environmental Protection and Biodiversity Conservation Regulations – Part 8 Division 8.1: Interacting with cetaceans.
- A suitably trained marine fauna observer (MFO) is required to be on location during dredging and disposal activities to make continuous observations of marine mammals within the monitoring zone (area within a 300 m radius from the dredge).
- The dredge contractor will complete a pre-start (20 minutes) visual survey to ensure no marine fauna are present at the time of dredge start-up or at the time of the disposal.
- If marine fauna is sighted inside the monitoring zone, the behaviour and direction of their movement will be monitored and recorded by the MFO, and actions will be taken to cease dredging should the marine fauna continue towards the dredge plant.
- During night-time and low visibility operations specific procedures for commencement of dredging will be implemented.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix B) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix C) identified that the impacts of the proposed clearing present a risk to present a risk to biological values (fauna) and water resources. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (fauna) - Clearing Principle (b)

Assessment

According to available databases, in addition to many seabirds and shorebirds, eight conservation significant marine fauna species recorded within the local area may occur within the application area, including: blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), loggerhead turtle (*Caretta caretta*), green turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricata*), Southern right whale (*Eubalaena australis*), humpback whale (*Megaptera novaeangliae*) and spinner dolphin (*Stenella longirostris*) (See Appendix B2). Since the proposed clearing will occur on the seabed, the impacts on avifauna species are indirect and minimal, noting the short period of the clearing.

The seabed within the inner harbour and entrance channel has been regularly swept to maintain the depth since the capital dredging in 2010 (BMT, 2022a), therefore the proposed dredging area is unlikely to contain significant benthic community habitat (BCH) for marine fauna.

The proposed clearing activities may result in the direct loss of approximately 0.975 hectares of seagrass and 0.693 hectares of macroalgae (Fremantle Ports, 2023a). Further, the dredging and disposal activities may indirectly impact on benthic community habitat (BCH) caused by shading effects, loss due to burial and stressor effects on marine fauna due to enhanced sediment concentrations in the water column (BMT, 2022a). To minimize the indirect impacts of the proposed clearing on BCH, the applicant has proposed to undertake the clearing activities during autumn (April) in the first year as seagrasses begin a dormancy stage due to reduction of availability of natural sunlight during autumn/winter in the local region (BMT, 2022a and 2022b). For the additional activities in following years, dredging restriction time is not required considering very low risks of the small sediment volume to be dredged and disposed of (5,000 cubic metres/year) (BMT, 2022b).

Noting the proposed clearing will occur only on the seabed, no impacts to conservation significant seabirds and shorebirds are likely, noting they may utilise the area for feeding purposes only and can fly away during the dredging operations.

Noting the extensive extent of marine vegetation in the vicinity of the application area, the relatively small area of seagrass and macroalgae directly impacted by the proposed disposal, the short period of proposed works (less than 10 days for the first year and shorter in following years), the avoidance and mitigation measures committed by the applicant (see Section 3.1), the impacts of the proposed disposal on marine fauna habitat are unlikely to be significant.

The proposed clearing may have impacts on marine fauna if individuals are present within the application area during the time of clearing. These impacts will be minimized by undertaking mitigation measures to prevent marine mammal collision proposed by the applicant, including the engagement of a suitably trained marine fauna observer and ceasing of operations when marine fauna are spotted (see Section 3.1).

Given the above assessment, the proposed clearing is not likely to impact upon significant habitat for fauna indigenous to Western Australia.

Conclusion

Based on the above assessment, the Delegated Officer has determined that the proposed clearing is considered acceptable in relation to this environmental value, given that avoidance, mitigation, management and monitoring measures proposed under the relevant environmental plan are undertaken appropriately.

Conditions: No fauna management conditions required.

3.2.2. Water resources - Clearing Principle (j)

Assessment

The inner harbour and entrance channel of the Fremantle Port (dredging area) is connected with and located approximately 870 metres downstream of the Swan - Canning estuary, which is listed in the Directory of Important Wetlands. The dredging activities may disturb the channel bed, leading to the increase of turbidity levels and impacts on the estuary water quality. In addition, the disposal onto the ocean bed poses a risk of pollutants distribution if there are pollutants in the dredged material.

To maintain the water clarity, the applicant has proposed management and monitoring measures to ensure the total suspended solid levels and median Secchi depth meet the relevant environmental criteria (see Section 3.1 for details). Considering the location, relatively small volume, short dredging duration and the proposed dredging environmental management plan, the impact from the proposed maintenance dredging is likely to be limited to a temporary reduction in water quality (DWER, 2023).

Regarding the dredged material, sediment sampling and analysis has confirmed that sediments to be dredged from the inner harbour and entrance channel are suitable for ocean disposal (BMT, 2023a).

Given the above, the proposed clearing is not likely to significantly affect water quality and any impacts are likely to be temporary.

Conclusion

Based on the above assessment, the Delegated Officer has determined that the proposed clearing is considered acceptable in relation to this environmental value.

Conditions: None required.

3.3. Relevant planning instruments and other matters

The City of Fremantle (the City) did not express any objections to the proposed clearing (City of Fremantle, 2023). The City requested advice on "the result of any health impact assessment that has been carried out for the proposed dredging of the Fremantle Port", so the City can advise the public (City of Fremantle, 2023). The applicant liaised directly with the City on 27 November 2023 and provided the required information (Fremantle Ports, 2023c).

The applicant is applying for a permit from the Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection (Sea Dumping) Act 1981* for disposal at sea of maintenance dredge material derived from the Fremantle Port Inner Harbour for the 5-year period from April 2024 to March 2029. The Fremantle Ports noted that the permit is likely to be granted prior to the commencement of dredging operations (expected on or after 1 April 2024) (Fremantle Port, 2023c). The permit duration has been extended until March 2029 to allow for the required maintenance.

The proposed dredging area is mapped within an Aboriginal site of significance named Swan River, ID 3536. Fremantle Ports have been issued heritage approvals for dredging of the Inner Harbour under Section 18 of the *Aboriginal Heritage Act 1972* under the capital dredging project undertaken in 2010 (Fremantle Port, 2023a). Given the passage of time since consent was granted, Fremantle Ports has engaged with Traditional Owners for the Swan River site to obtain contemporary views in respect of the project. The Whadjuk Aboriginal Corporation provided written advice in support of the project and committed to collaborate and work with Fremantle Ports on the items needed to progress the monitoring program for the dredging (Fremantle Port, 2023c).

It is the permit holder's responsibility to comply with the *Aboriginal Cultural Heritage Act 2021* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

End

Appendix A. Additional information provided by applicant

| Summary of comments | Consideration of comment |
|---|--|
| Supporting documents: Environmental Review Document, Environmental Management Plan | Information from these reports have been considered during the assessment and described under the Section 3.1, 3.2 of this report when appropriate |
| Information related to DCCEEW approval and Section 18 of the <i>Aboriginal Heritage Act 1972</i> approval | The provided information has been described under Section 3.3 of this Report |
| Addressing the request of the City of Fremantle | The information has been described under Section 3.3 of this report |

Appendix B. Site characteristics

B.1. Site characteristics

| Characteristic | Details |
|------------------------|---|
| Local context | The area proposed to be cleared is riverbed/seabed containing two sections within the Fremantle Port's waters. One section is the estuary (estuary section) between Swan River and the ocean where the dredging is proposed to be undertaken to facilitate a safe passage for commercial vessels into and out of the Port's Inner Harbor (Fremantle Ports, 2023a). This section consists of an area of marine vegetation including seagrass and macroalgae at its edge bordering with the ocean (See figure D.1 in Appendix D). Another section is in the ocean (ocean section), located approximately five kilometres from the estuary. This is the targeted disposal area where the sediment collected from dredging the estuary section will be disposed. This section is located on a seabed area where marine vegetation is relatively sparse (See Figure D.2 in Appendix D) |
| Ecological linkage | The estuary section of the application area is mapped within the Gnangara Ecological Linkages and Perth Regional Ecological Linkage. |
| Conservation areas | The application area is not within a conservation area. The closest conservation area is a part of the Swan River vested under the Swan River Trust, which is located approximately 400 metres upstream of the estuary section of the application area. |
| Vegetation description | Benthic habitat mapping technical note and application form (BMT, 2023; Fremantle Ports, 2023a) indicate the vegetation within the proposed clearing area consists of: <ul style="list-style-type: none"> - For estuary section (Dredging ar-a) - footprint area of 58.779 hectares, including: <ul style="list-style-type: none"> • Seagrass: 0.467 hectares. • Macroalgae: 0.693 hectares. • Sand: 57.619 hectares. - For ocean section (Disposal ar-a) - footprint area of 98.361 hectares, including <ul style="list-style-type: none"> • Seagrass: 0.508 hectares. • Sand: 97.853 hectares. Representative photos and benthic habitat maps are available in Appendix D. |
| Vegetation condition | The application form (Fremantle Ports, 2023a) indicates that the seagrasses within the application area include: <ul style="list-style-type: none"> • Seagrass dense (0.729 hectares) • Seagrass sparse (0.246 hectares) No information on conditions of macroalgae is available. |
| Climate | Climate: Mean maximum temperature is 24.0 degrees Celsius. Mean minimum temperature is 14.0 degrees Celsius. |

| Characteristic | Details |
|------------------------|--|
| | Rainfall: Mean annual rainfall is 736.4 millimetres. (BOM, 2023) |
| Soil description | There is no soil mapping data currently available. |
| Land degradation risk | Given the nature of the application area, land degradation is not likely to be relevant. |
| Waterbodies | The application area lies within the Indian Ocean. The desktop assessment indicated that the closest watercourse is the Swan - Canning Estuary, located approximately 870 metres from a section of the area proposed to be cleared. The Swan - Canning River is listed in the Directory of Important Wetlands in Australia - Western Australia. |
| Flora | Three threatened flora species and 31 priority flora species are mapped within the local area. None of the recorded flora species are known marine species. |
| Ecological communities | According to available databases, three threatened ecological communities (TEC) (with 208 occurrences) and two priority ecological communities (PEC) (with five occurrences) have been recorded within the local area. Most of these TEC/PECs are terrestrial vegetation communities, except for the Subtropical and Temperate Coastal Saltmarsh (EPBC-listed TEC and State-listed PEC). The nearest TEC is <i>Callitris preissii</i> (or <i>Melaleuca lanceolata</i>) forests and woodlands of the Swan Coastal Plain, located 3.3 kilometres from the application area. The closest Subtropical and Temperate Coastal Saltmarsh is located approximately six kilometres from the proposed clearing area. |
| Fauna | The desktop assessment identified that a total of 87 threatened or priority fauna species have been recorded within the local area, including 34 threatened fauna species, 15 priority fauna species, and 38 specially protected fauna species. Among them are three marine mammals, one marine reptile and 53 coastal and/or marine birds. |

B.2. Fauna analysis table

| Species name | Conservation status | Suitable habitat features? [Y/N] | Suitable vegetation type? [Y/N] | Distance of closest record to application area (km) | Number of known records within the local area | Are surveys adequate to identify? [Y, N, N/A] |
|---|---------------------|----------------------------------|---------------------------------|---|---|---|
| <i>Balaenoptera musculus</i> (Blue whale) | EN | Y | Y | 5.55 | 10 | N/A |
| <i>Balaenoptera physalus</i> (Fin whale) | EN | Y | Y | 6.46 | 1 | N/A |
| <i>Caretta caretta</i> (loggerhead turtle) | EN | Y | Y | 0.41 | 18 | N/A |
| <i>Chelonia mydas</i> (Green turtle) | VU | Y | Y | 9.07 | 1 | N/A |
| <i>Eretmochelys imbricata</i> (Hawksbill turtle) | VU | Y | Y | 8.35 | 1 | N/A |
| <i>Eubalaena australis</i> (Southern right whale) | VU | Y | Y | 0.62 | 5 | N/A |
| <i>Megaptera novaeangliae</i> (Humpback whale) | CD | Y | Y | 0.47 | 60 | N/A |
| <i>Stenella longirostris</i> (Spinner dolphin) | P4 | Y | N | 5.55 | 3 | N/A |

CD: conservation dependent, EN: endangered, VU: vulnerable

Appendix C. Assessment against the clearing principles

| Assessment against the clearing principles | Variance level | Is further consideration required? |
|---|------------------------------|--|
| Environmental value: biological values | | |
| <p><u>Principle (a):</u> <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared does not contain locally or regionally significant flora, fauna or habitats.</p> | Not likely to be at variance | No |
| <p><u>Principle (b):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared does not contain significant habitat for conservation significant fauna.</p> | Not likely to be at variance | Yes <i>Refer to Section 3.2.1, above.</i> |
| <p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u></p> <p>The proposed clearing area is unlikely to contain habitat for flora species listed under the BC Act.</p> | Not likely to be at variance | No |
| <p><u>Principle (d):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.”</i></p> <p><u>Assessment:</u></p> <p>The proposed clearing area does not contain species indicative of a threatened ecological community.</p> | Not likely to be at variance | No |
| Environmental value: significant remnant vegetation and conservation areas | | |
| <p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>There is no available data on the extent of marine vegetation in the local area. However, noting the abundance of marine vegetation mapped in the surrounding areas of the application area (Figure D.1 and D.2 in Appendix D), the proposed clearing area is not considered to be a significant remnant.</p> | Not likely to be at variance | No |
| <p><u>Principle (h):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.”</i></p> <p><u>Assessment:</u></p> <p>Given the nature and extent of the proposed clearing and distance to the nearest conservation area, the proposed clearing is not likely to have significant impacts on the environmental values of nearby conservation areas.</p> | Not likely to be at variance | No |
| Environmental value: land and water resources | | |

| Assessment against the clearing principles | Variance level | Is further consideration required? |
|---|------------------------------|--|
| <p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>Given the application area lies on the seabed, the native vegetation proposed to be cleared is marine vegetation and is not considered to be growing in association with a wetland or watercourse. While the application area is connected with the Swan – Canning estuary, impacts to the estuary are likely to be minimal and temporary.</p> | Not likely to be at variance | No |
| <p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u></p> <p>The vegetation proposed to clear is marine vegetation on seabed, therefore the proposed clearing is not likely to have an appreciable impact on land degradation.</p> | Not likely to be at variance | No |
| <p><u>Principle (i):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.”</i></p> <p><u>Assessment:</u></p> <p>Given the Swan - Canning Estuary listed in the Directory of Important Wetlands is located just approximately 870 metres upstream of the application area, the proposed clearing may impact surface water quality.</p> | May be at variance | Yes <i>Refer to Section 3.2.2, above.</i> |
| <p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u></p> <p>Given the clearing occurs on seabed, the proposed clearing is unlikely to contribute to increased incidence or intensity of flooding and waterlogging.</p> | Not likely to be at variance | No |

Appendix D. Survey information excerpts / photographs of the vegetation

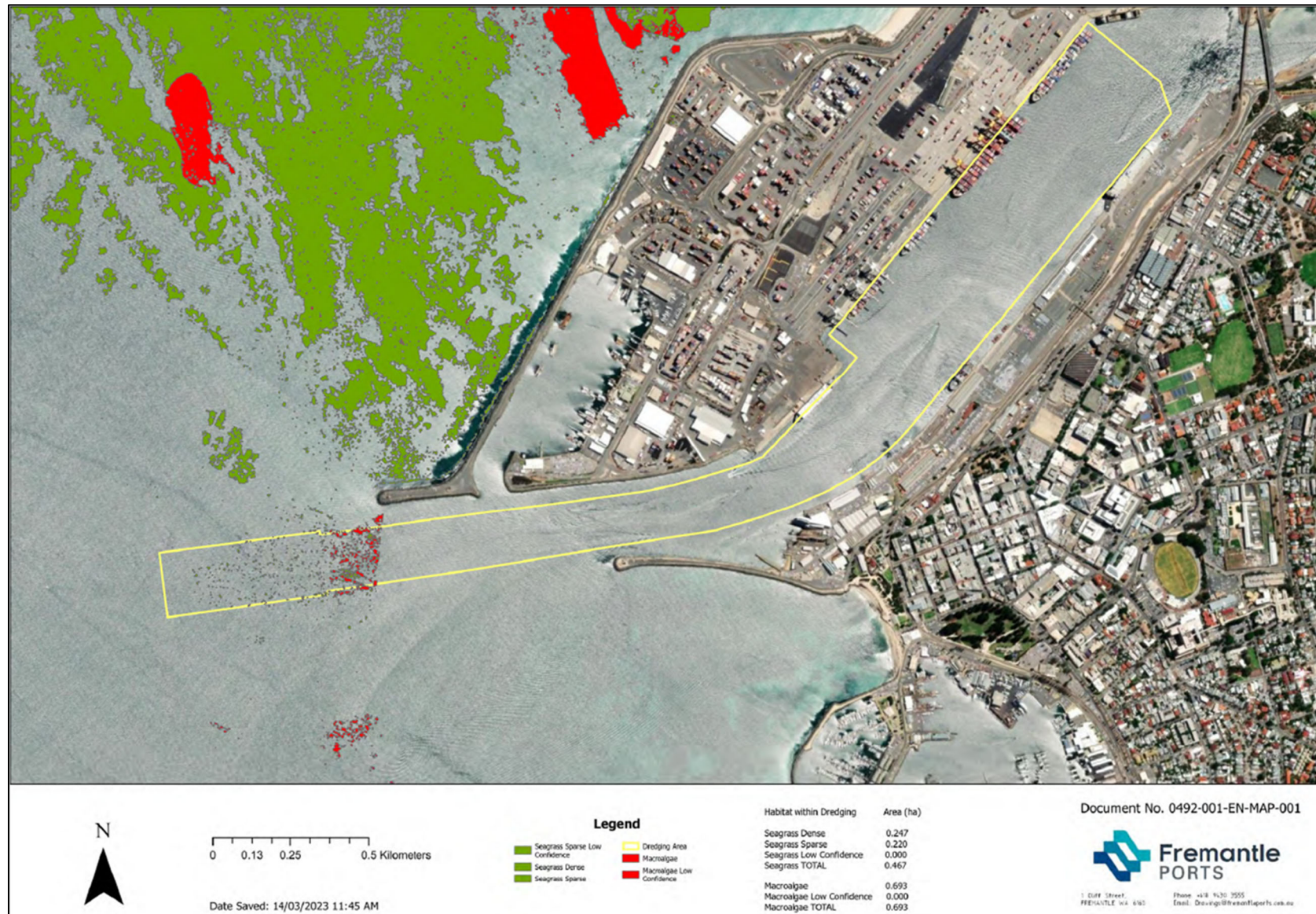


Figure D.1. Benthic communities and habitat mapping for estuary section of the application area (Fremantle Ports, 2023a)

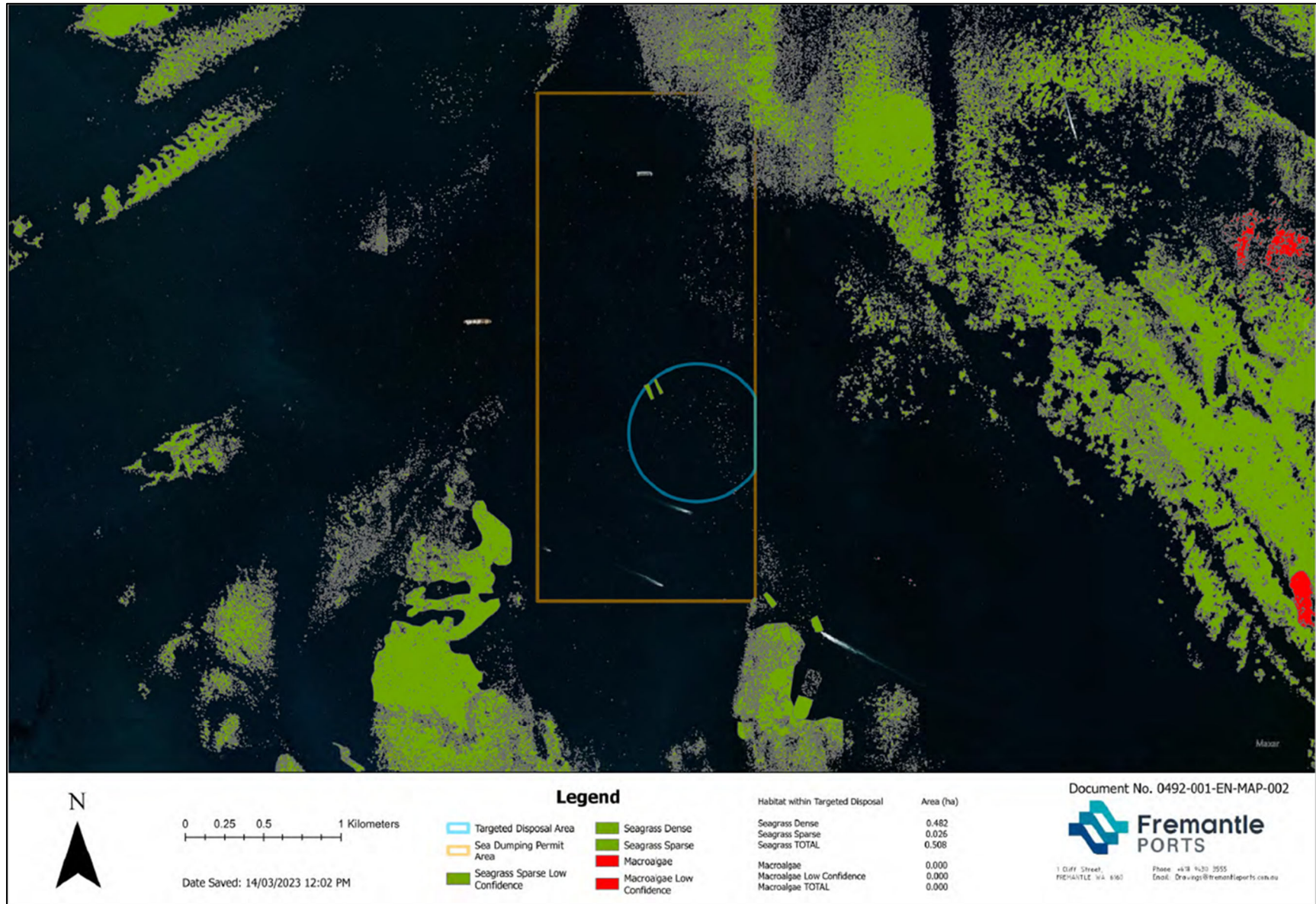


Figure D.2. Benthic communities and habitat mapping for ocean section of the application area (Fremantle Ports, 2023b)

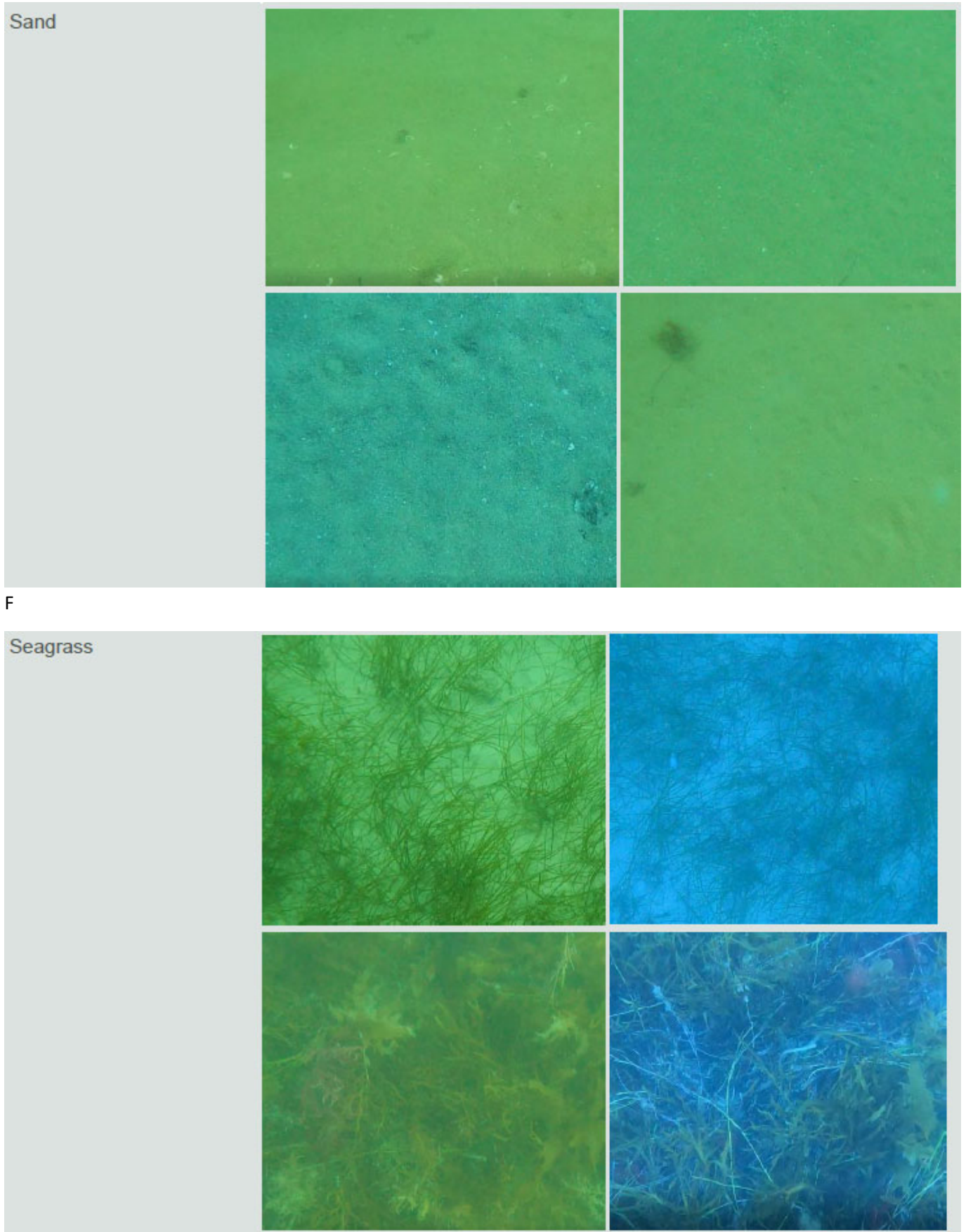


Figure D.3. Representative photos of benthic habitat within the application area (BMT, 2023)

Appendix E. Sources of information

E.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- Aboriginal Heritage Places (DPLH-001)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- IBRA Vegetation Statistics
- Imagery
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities

E.2. References

- BMT Commercial Australia Pty Ltd (BMT) (2023) *IMSAdatapackage - Benthic habitat mapping technical note 2023– Supporting the Native vegetation clearing permit application CPS 10278/1*. Received 08 September 2023 (DWER Ref: DWERDT835034).
- BMT Commercial Australia Pty Ltd (BMT) (2022a) *Inner Harbour Maintenance Dredging - Environmental Review Document – Supporting the Native vegetation clearing permit application CPS 10278/1*. Received 19 October 2023 (DWER Ref: DWERDT855820).
- BMT Commercial Australia Pty Ltd (BMT) (2022b) *Inner Harbour Maintenance Dredging - Environmental Management Plan – Supporting the Native vegetation clearing permit application CPS 10278/1*. Received 19 October 2023 (DWER Ref: DWERDT855820).
- BMT Commercial Australia Pty Ltd (BMT) (2021) *IMS data package Port Beach Sand Nourishment via Dredging 2021 – Supporting the Native vegetation clearing permit application CPS 10278/1*. Received on 08 September 2023 (DWER Ref: DWERDT835028).
- Bureau of Meteorology (BOM) (2023). *Climate statistics for Australian locations – Swanbourne*. Available from: http://www.bom.gov.au/climate/averages/tables/cw_009215.shtml (Accessed in September 2023)
- City of Fremantle (2023). *Advice for clearing permit application CPS 10278/1*, received 1 November 2023 (DWER Ref: DWERDT859959).
- Department of Water and Environmental Regulation (DWER) (2023). *Marine Ecosystems Branch advice – Clearing permit application CPS 10278/1*. Received 23 October 2023 (DWER Ref: DWERDT855351).
- Department of Environment Regulation (DER) (2013). *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf
- Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF.
- Environmental Protection Authority (EPA) (2021). *Technical Guidance – Environmental Impact Assessment of Marine Dredging Proposals*. Available from: https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Technical_guidance_EIA_of_Marine_Dredging_Proposals.pdf

Environmental Protection Authority (EPA) (2016). *Technical Guidance – Protection of Benthic Communities and Habitats*. Available from:
https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/TechnicalGuidance_ProtectionOfBenthicCommunitiesAndHabitats-131216.pdf

Environmental Protection Authority (EPA) (2016). *Technical Guidance – Protecting the Quality of Western Australia's Marine Environment*. Available from:
https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/TechnicalGuidance_ProtectingTheQualityOfWAMarineEnvironment-131216_0.pdf

Fremantle Ports (2023a) *Clearing permit application CPS 10278/1 and supporting document*, received 20 July 2023 (DWER Ref: DWERDT810021).

Fremantle Ports (2023b) *Additional information supporting the clearing permit application CPS 10278/1*, received 19 October 2023 (DWER Ref: DWERDT855820).

Fremantle Ports (2023c) *Response to the Request for further information for the clearing permit application CPS 10278/1*, received 30 November 2023 (DWER Ref: DWERDT874917).