South Thomson Development Barge Landing



Acknowledgement

Rottnest Island Authority kaadatj Wadjak Noongar moort. Baalap Wadjemup kaaradjiny, RIA acknowledge Whadjuk Noongar families. They Wadjemup caring,

baalabang malayin nakolak-ngat wer wirn kalyakoorl noyinang koort boodja-k wer kep-ak. their culture and spirits always connected Island-to and water-to.

Ngalak kaadatj nedingar, birdiya wer boordakan Noongar moort. Ngalak karnadjil kaadatj We acknowledge ancestors, Elders and future Noongar families. We truly acknowledge men

maaman wer noba wirn ali kalka nginow noyiyang Wadjemap ngardak boodja-k. and boys' spirits who still remain connected Wadjemup under ground-in.

Baalabang moort maambart-boort, ngooni-boort, kongk-boort wer Birdiya-boort. Their family's father-without, brother-without, uncle-without and Elder-without.



About Rottnest Island Authority

Rottnest Island is a Class A Reserve managed by the Rottnest Island Authority under the provisions of the Rottnest Island Authority Act 1987 (the Act) which establishes the Authority as a statutory body reporting to the Minister for Tourism.

Under the Act the Authority has the control and management of the island for the following purposes:

- To provide and operate recreational and holiday facilities on the island
- To protect the flora and fauna of the island
- To maintain and protect the natural environment and the man-made resources of the Island to the extent that the Authority's resources allow, repair its natural environment

The Rottnest Island Authority became part of the Department of Biodiversity, Conservation and Attractions from 1 July 2018.

The department brings together the functions and staff of the former Department of Parks and Wildlife with those of the Botanic Gardens and Parks Authority, Rottnest Island Authority and the Zoological Parks Authority.



Current Situation

Rottnest Island Authority (RIA) own and operate a range of marine infrastructure on Wadjemup / Rottnest Island which serve multiple purposes. The major fixed marine infrastructure includes:

- Main Jetty, which incorporates the current barge landing (Point 1 and 2)
- Fuel Jetty (Point 3)
- Army Groyne, which is currently a non-operational asset (Point 4)



RIA Major Fixed Marine Infrastructure





Project Background

Proposal: develop the Army Groyne to create a new barge operational area

Outcomes:

- Relocation of critical barging operations from the Main Jetty
- New ferry berth
- New back up fuelling facilities
- Undercover storage facilities



Project Background

The Rottnest Island Management Plan (RIMP) 2023 – 2028 identifies the need to redevelop the Army Groyne to alleviate increasing demand for commercial marine and barge services at the Main Jetty.

Activity at the Main Jetty has resulted in competing pressures between ferry traffic, pedestrians, cargo and heavy equipment deliveries to the island.



Project Design





Outcomes

A dedicated barge operational area will:

- Reduce overlapping activities taking place at the Main Jetty
- Reduce risk associated with a single entry-point to the island
- Reduce risk of interaction between trucks and visitors
- Increase amenity at the entry point to the island
- Allow for expansion to meet the growing from both a visitor and commercial perspective



Visitors boarding and disembarking the ferry at the Main Jetty. *Photo – RPS Consulting*

Ferry visitors arriving via the Main Jetty. Photo – RPS Consulting



Barge Landing area and vehicle activity. *Photo – RPS Consulting* Vehicles and bulk materials on pallets at Barge Landing area. *Photo – RPS Consulting*



Timeframes





Environmental Approvals

The following key state and federal environmental approvals are required to support the project.

Type of approval	Legislation	Regulatory authority	Description
Section 38 referral	<i>Environmental Prot</i> <i>ection Act 1986</i> (EP Act)	Environmental Protecti on Authority (EPA)	A mechanism where a proposal that is likely to have a significant effect on the environment requires a proponent to refer the proposal to the EPA for a decision on whether or not it requires assessment under the EP Act.
EPBC referral	Environmental Prot ection and Biodiversity Co nservation Act 1999 (EPBC Act)	Department of Climate Change, Energy, the Environment and Water (DCCEEW)	The EPBC Act protects Matters of National Environmental Significance (MNES). If an action is likely to have a significant impact on any MNES, an EPBC referral to DCCEEW is required.



WA EPA

Section 38 Referral Process





EPBC Referral Process

If potential impacts are identified, then an EPBC referral to DCCEEW is required.

The EPBC Act requires a decision on assessment to be made within 20 business days from the date the referral is received by the Minister. If the Minister believes the information provided is insufficient to make an informed, controlled action or assessment approach decision, further information may be requested.

If the Minister decides that the proposal is a controlled action, it is assessed further, and the Minister decides on whether to approve. This process may take between three to 12 months.



Technical Investigations

Technical investigations have been undertaken across onshore and offshore project footprints to support the environmental approvals:

- Benthic community habitat mapping
- Marine fauna assessment (desktop)
- Coastal processes (wave climate, penetration, sediment and wrack assessment)
- Terrestrial flora and fauna surveys
- Heritage activity notice and surveys
- Dredge plume modelling





Summary of Potential Impacts Identified in the Technical Investigations



Benthic Communities and Habitats

Permanent impacts:

- Removal of 2.39 hectares of seagrass
- Permanent or temporary impacts to marine fauna present in habitats affected by project activities
- Minor changes to coastal processes (sediment, wrack)

Temporary construction impacts:

- Increased turbidity
- Increased sedimentation/suspended solids
- Decrease in light availability
- Increase in noise





Marine Fauna

Permanent impacts:

- Removal of marine fauna habitats from construction of the wharf and dredging activities
- Increased light emissions
- Increased risk of introduced marine species
- Increased risk of pollution incidents
- Increased vessel collision risk

Temporary construction impacts:

• Elevated underwater noise (proposed construction methodology means impacts are unlikely to be significant)





Terrestrial Flora and Vegetation

This project will result in the loss of up to 0.25 hectares of native vegetation in Good to Degraded condition.

The vegetation is representative of the Threated Ecological Community (TEC) *Callitris preissii* (or *Melaleuca lanceolata*) forests and woodlands of the Swan Coastal Plane. This vegetation is listed as Critically Endangered at State Level.

No conservation significant species were recorded within the project footprint.





Terrestrial Fauna

This project will result in the loss of up to 0.25 hectares of terrestrial fauna habitat.

One conservation significant fauna species was recorded within the survey area. The quokka (*Setonix brachyurus*) (listed as Vulnerable under the EPBC Act and BC Act) was recorded at three locations within the project footprint.

The Dugite (listed as P4) and bobtail (listed as VU) have also been recorded in this survey area.





Coastal Processes

The assessment identified:

- Sea wave conditions are expected to be consistent with conditions at the present location.
- The project will not have a significant impact on the timing or volume of wrack accumulation across the beaches of Thomson Bay.
- It is unlikely that the proposed barge development would have a significant impact on the sediment dynamics along South Thomson Bay.





Coastal Processes

A consultant undertook a Dredge Plume modelling assessment of the impact caused by the dredging program. The calculated zones of impact were determined based on the complete winter dredging program. The impacts are:

- Zone of high impact (ZOHI) irreversible impact to benthic communities and habitats (Brown zone)
- Zone of medium impact (ZOMI) impact to benthic communities and habitats is recoverable within 5 years (Yellow zone)
- Zone of influence (ZOI) temporary change to environmental quality during construction with no impact to marine fauna or flora (Green zone)





Marine Environmental Quality

Impacts to marine environmental quality from construction and operation of the project include:

- Temporary decease in light availability for benthic communities and habitats
- Reduced water quality (e.g. temporary increase in Total Suspended Solids)
- Increased risk of pollution incidents from vessels leading to degradation of marine environmental quality
- Alterations to existing current / circulation patterns

Baseline monitoring has been undertaken at the locations indicated to assess potential impacts during and post construction of the project.





Social Surrounds

- Although not listed under the statutory heritage listings, the Army Groyne is deemed historically significant and is classified as a 'Heritage Building'.
- No registered shipwrecks are known to occur within the project area.
- RIA have undertaken an unexploded ordinances (UXO) investigation and there was no UXO found.
- The removal and relocation of vessel moorings.
- There are no registered Aboriginal Cultural Heritage sites within the project footprint.





Mitigation and Management

The RIA are planning to undertake the project with appropriate avoidance, mitigation and management measures to reduce environmental impacts where possible.

The following management plans will be prepared to support the project:

- Construction Environmental Management Plan
- Dredging and Spoil Disposal Management Plan
- Marine Environmental Quality Monitoring and Management Plan



How to Provide Feedback

Rottnest Island Authority welcomes feedback on the project.

Please use this link riaconsultation@dbca.wa.gov.au to provide feedback.

Feedback is open from Friday 1 March to Friday 29 March 2024.



Thank You

