

Native Vegetation Clearance

Eyre Peninsula Desalination Project Marine Infrastructure

Data Report

Clearance under the *Native Vegetation Regulations 2017*

9 December 2025

Prepared by Marcus Cooling and Renate Faast



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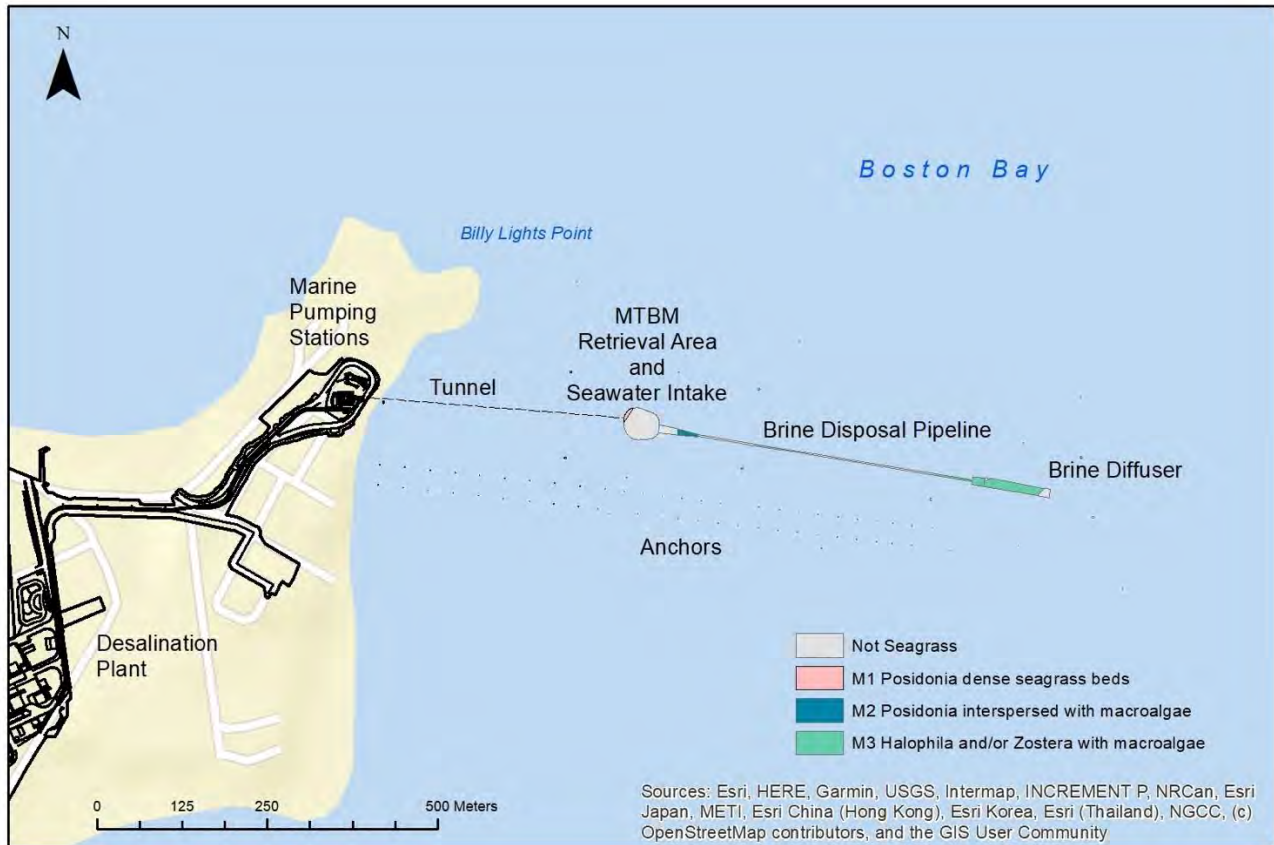
1. Application information

Application Details

Applicant:	SA Water		
Key contact:	250 Victoria Square Adelaide SA 5000		
Landowner:	State Government of South Australia		
Site Address:	Marine environment of Boston Bay, Port Lincoln		
Local Government Area:	City of Port Lincoln	Hundred:	NA
Title ID:	NA	Parcel ID	NA

Summary of proposed clearance

Purpose of clearance	Clearance required for the construction of marine infrastructure for the Eyre Peninsula Desalination Plant.
Native Vegetation Regulation	Regulation 12(34) 5(1)(d) Infrastructure that the Minister has declared to be in the public interest
Description of the vegetation under application	0.1883 ha of marine benthic habitat dominated by <i>Posidonia</i> , <i>Halophila</i> and <i>Zostera</i> sea grasses
Total proposed clearance - area (ha) and number of trees	0.0141 ha Posidonia Vegetation Association M1 0.0188 ha Posidonia/macroalgae Vegetation Association M2 0.1554 ha Halophila/Zostera/macroalgae Vegetation Association M3 (Also 0.322 ha other benthic habitat including bivalve beds and macroalgae)
Level of clearance	Level 4 (as part of the overall Eyre Peninsula Desalination Plant project)
Overlay (Planning and Design Code)	Native Vegetation Overlay
Map of proposed clearance area	



Mitigation hierarchy	<p>The project avoids impacts to the coastal, intertidal and nearshore zones by adopting subsurface tunneled pipelines. The dense <i>Posidonia</i> beds, which occur out to approximately 360 m from the mean high tide are avoided due to the tunnelling solution incorporated into the design.</p> <p>Six of the eight proposed anchor locations for the dredge barge have been selected to avoid interaction with seagrass.</p> <p>Impacts to seagrass vegetation have been minimised by reducing the footprint of the works, using sensitive dredging techniques, disposing of dredge spoil on land and laying the brine pipeline on the sea floor (instead of excavating a channel).</p>
SEB Offset proposal	Payment of \$20,826.26 into the Fund

2. Purpose of clearance

2.1 Description

Clearance is required for the construction of marine infrastructure as part of the Eyre Peninsula Desalination Project.

Impacts of the construction of marine infrastructure are additional to vegetation clearance associated with the desalination plant, pipeline, pump stations and power supply as documented in the original Data Report and Variations 1 to 5 (see Section 2.5 below).

2.2 Background

SA Water plans to construct a desalination plant at Billy Lights Point to augment the water supply to Eyre Peninsula.

SA Water currently supplies Eyre Peninsula water customers through a combination of groundwater extraction and River Murray water piped to the region. The Uley South Groundwater Basin, located 30 km west of Port Lincoln, is the last remaining major productive groundwater source on Eyre Peninsula and supplies approximately 75% of the region's drinking water. For many years water in the Uley South Basin has gradually depleted towards historic low levels, placing the region's main source of water under severe pressure. Sustained over-extraction and reduced groundwater recharge has put the basin at risk of permanent degradation from seawater intrusion. SA Water currently holds a water allocation licence to extract groundwater from the Uley South Groundwater Basin. The licence is administered by the SA Department for Environment and Water (DEW). The allocated volume is expected to be reduced by DEW due to the basin's degraded condition, which will impact SA Water water supply volumes. To improve the basin's long-term health and meet water volume demand, a desalination plant is planned as a climate-independent water source.

A 5.3 gigalitre per annum desalination plant, the Eyre Peninsula Desalination Plant (the project) is planned at Port Lincoln. Once complete, the project is expected to provide drinking water and water supplies for approximately 35,000 customers including the towns of Port Lincoln, Cummins, Wudinna, Streaky Bay, Cowell, Tumby Bay and Ceduna and to industry.

2.3 General location map

The desalination plant will be constructed at the former BHP sand depot at Billy Lights Point (Figure 1). A new pipeline will transfer drinking water from the plant to existing storage tanks at Northside Hill 4 km south-west of Port Lincoln. Marine transfer pipelines from the desalination plant into Proper Bay will provide seawater to the desalination plant and dispose of brine. A pump station will be constructed on the marine intake pipeline within the Port Lincoln Wastewater Treatment Plant. A new electricity connection will be required to supply the plant and will connect to the grid in Port Lincoln.

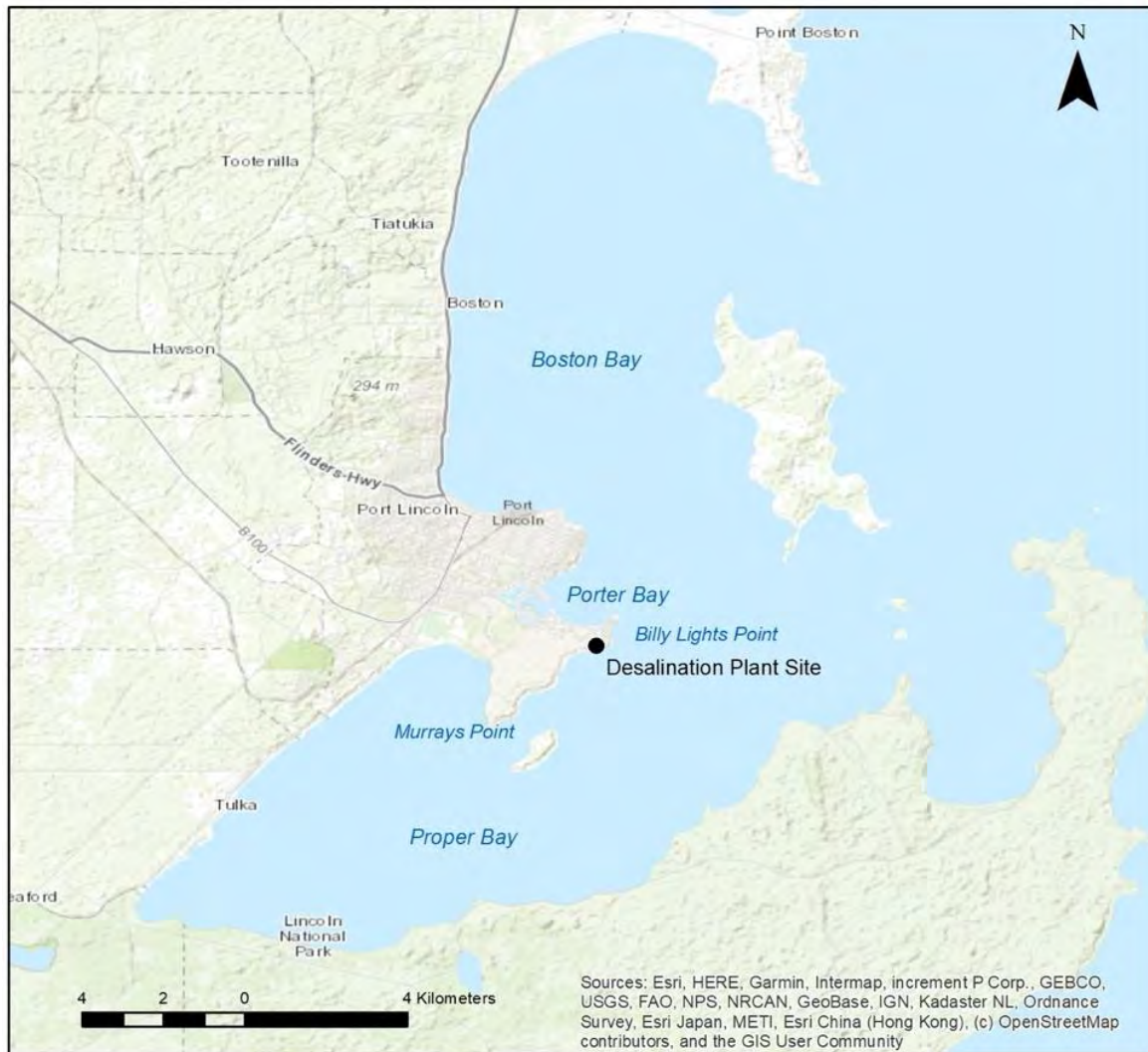


Figure 1. Site Location.

2.4 Details of the proposal

Pipelines for seawater intake and brine disposal will be constructed in the marine environment, extending 1.04 km east into Boston Bay from the wastewater treatment plant site at Billy Lights Point (Figure 2).

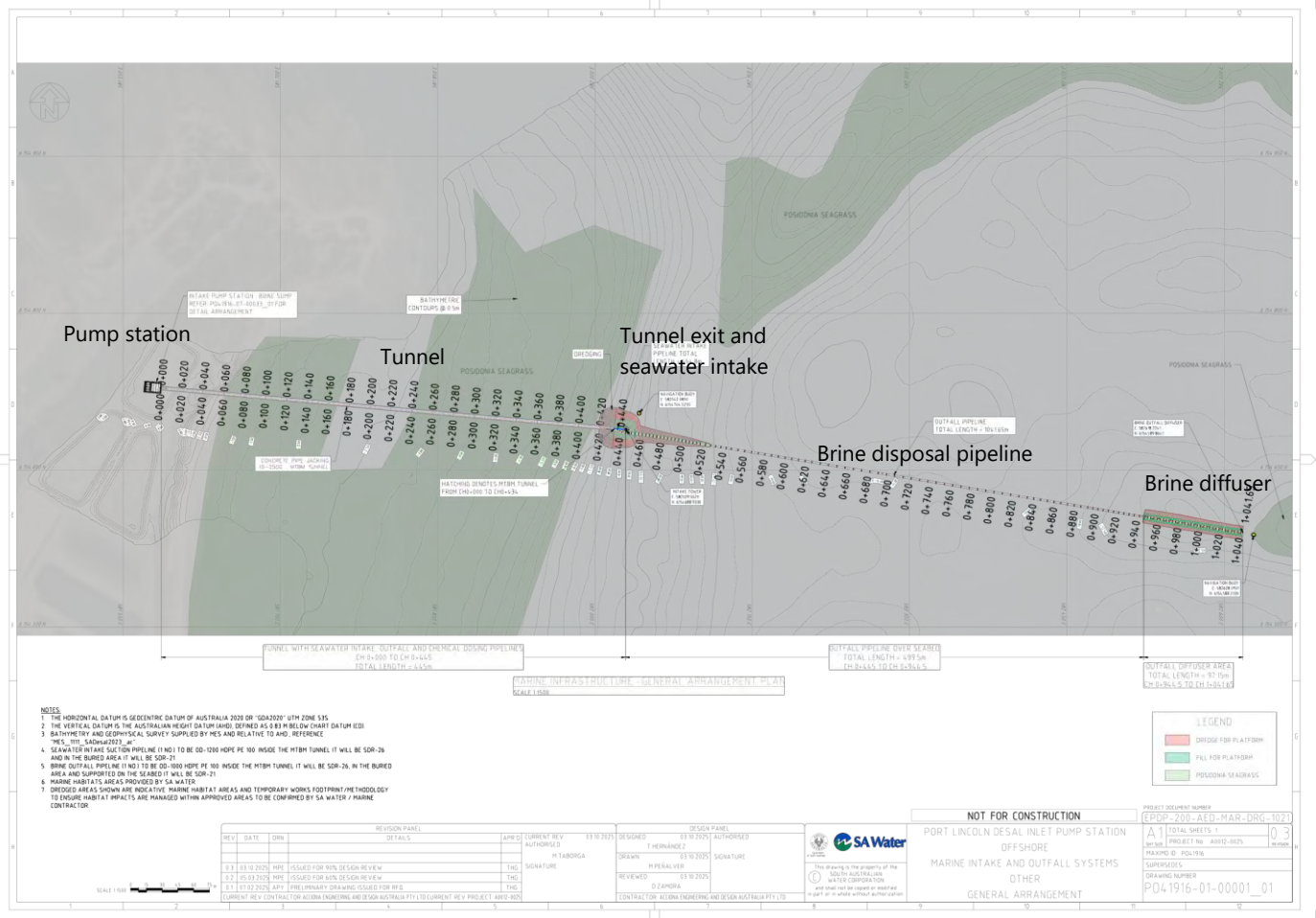


Figure 2. Marine pipeline routes showing pump station, tunnel, bore retrieval area and brine diffuser.

The pipelines will be constructed in a tunnel that will be excavated from the pumping station and will emerge from the seabed approximately 360 m from the mean high tide line (Figure 2). No shoreline habitat will be impacted by these works.

Dredging is required at the tunnel exit to recover the Micro-tunnel Boring Machine (MTBM), to allow construction of the seawater intake infrastructure including foundations. This area has footprint of 0.2004 ha. The seawater intake pipeline will terminate within this disturbed area and will not have any further impact on vegetation.

The brine disposal pipeline extends from the dredged area at the tunnel exit through an excavated channel which has a 0.0489 ha footprint. The pipeline will be extended a further 400 m where it will be laid on the seabed with a footprint of 0.0805 ha.

The brine disposal pipeline will terminate at the brine diffuser. The diffuser is 98 m long and has ports at 6 m intervals. Dredging is required for the brine diffuser foundations. The estimated footprint of the diffuser has been extended by 20 m as a contingency because hydrodynamic modelling is still underway and additional ports may be required. The total clearance area for the diffuser is 0.1479 ha.

Table 1. Seafloor footprint of the marine works components

Works Component	Footprint
MTBM recovery and seawater intake	0.2004 ha
Brine trench	0.0489 ha
Brine pipeline	0.0805 ha
Brine diffuser	0.1479 ha
Pipeline dredge anchors (8 anchors)	0.0056 ha
Small anchors at pipelines (66 anchors)	0.0052 ha
Pipeline launch area	0.0211 ha
Spud anchors at spit (2 anchors)	0.0014 ha
Five tonne anchors at spit (4 anchors)	0.0013 ha
Small anchors at spit (5 anchors)	0.0004 ha

Clearance is required for anchor points at the construction site. The dredge barge will be deployed at the MTBM retrieval zone and at the brine diffuser. The dredge barge will be secured at each location by 4 x five tonne anchors. A conservative 3 m diameter potential impact footprint is estimated for the anchors, which includes the effects of chain movement.

Small anchors with a 1 m diameter are required around the pipeline works. A total of 66 anchors are required:

- to anchor the floating dredge spoil pipeline
- for exclusion zone marker buoys
- for water quality monitoring buoys

The outfall pipeline will be assembled on land adjacent to the desalination plant and will be floated to the construction site where it will be sunk into place. The pipeline will be launched from the existing causeway adjacent to the former BHP sand export site. A launch ramp into the sea will be required over the shore end of the causeway. Rock bags will cover approximately 0.0150 ha of rocky intertidal zone which supports macroalgal vegetation. A crane barge will be used to install concrete collars on the pipeline during launching. The crane barge will be secured by 2 spud anchors (3 m diameter) and four x 5 tonne anchors (2 m diameter). Five small boat anchors (1 m diameter) will be used to secure five exclusion buoys at the launch site for the pipeline strings.

2.5 Approvals required or obtained

Development approval was granted on 25 November 2024 under DA 24017594.

The original scope of vegetation clearance was assessed in a data report prepared by Ecological Associates which was submitted by SA Water to the Department of Environment and Water and was approved on 19th December 2024 under approval number 2024/3201/931.

The original data report foreshadowed future clearance requirements for marine infrastructure (the subject of this data report), which had not yet been defined.

Terrestrial aspects of the data report were amended in four variations:

- Ecological Associates (2025). Eyre Peninsula Desalination Plant - Variation to Vegetation Data Report. Ecological Associates Report AH066-12-B, 3 July 2025, prepared for SA Water, Adelaide.
- Ecological Associates (2025). Eyre Peninsula Desalination Plant - Second Variation to Vegetation Data Report. Ecological Associates Report AH066-13-A, 12 August 2025, prepared for SA Water, Adelaide.
- Ecological Associates (2025). Eyre Peninsula Desalination Plant - Third Variation to Vegetation Data Report. Ecological Associates Report AH066-14-A, 26 September 2025, prepared for SA Water, Adelaide.

- Ecological Associates (2025). Eyre Peninsula Desalination Plant - Fourth Variation to Vegetation Data Report. Ecological Associates Report AH066-15-A, 13 November 2025, prepared for SA Water, Adelaide.

A fifth variation is in preparation (ref AH066-17) to allow for clearance to support marine pipeline assembly on the track adjacent to the desalination plant.

The project was referred by SA Water to the Commonwealth Minister for the Environment on 22 July 2024 who determined on 24 September 2024 that the project is not a controlled action under the Environment Protection and Biodiversity Conservation Act 1999.

2.6 Native Vegetation Regulation

Vegetation clearance in this project is proposed under Regulation 12(34) - Infrastructure 5(1)(d) Clearance incidental to the construction or expansion of a building or infrastructure (and associated services) where the Minister has declared that the clearance is in the public interest.

2.7 Development Application information (if applicable)

The Development Application number for the project is 24017594.

3. Method

3.1 Database Searches for Flora and Fauna

Existing records of threatened marine flora and fauna were reviewed for a 5 km search radius centered on the site using:

- NatureMaps and Atlas of Living Australia (1st December 2025).
- EPBC Protected Matters Search Tool (1st December 2025)
- South Australian Department for Environment and Water Biological Database of South Australia search (21st May 2024: Record set number DEWNRBDBSA240521-1).

Records with a locational reliability greater than 1 km or occurring prior to 1995 were excluded. For EPBC Protected Matters, species were only included if they are known to occur or their habitat is known to occur in the search area. Terrestrial and freshwater aquatic species were excluded from the searches.

National conservation ratings are in accordance with the most recent *EPBC Act* Listing Status available in the Species Profile and Threats Database. State Conservation Ratings are in accordance with the National Parks and Wildlife Act 1972.

3.2 Flora assessment

J Diversity Pty Ltd was engaged by SA Water to provide marine habitat mapping¹. Mapping has been used to design the project to minimise and quantify marine habitat impacts.

The survey and analysis methods are given in J Diversity (2025). An overview of the methods is provided here.

High-definition video footage was captured and analysed post-field, with spatial coordinates and a habitat classification assigned to each second of the video.

Towed camera surveys were conducted in several phases:

- vicinity of the intake and outfall pipelines July 2021
- vicinity of the BHP Jetty July 2021
- alternative intake and outfall pipeline designs 11 September 2023
- vicinity potential saline plume November 2023 and May 2024
- buffer around the 2024 study boundary February 2025 and
- gaps within the survey area of the intake and outfall alignments February 2025

Habitat classifications were based on combinations of substrate type, composition of habitat forming species, density (percentage cover of the identified species) and epiphyte cover. Density classifications of sparse, medium and dense were delimited with thresholds of 33% and 66%. The habitat forming species included macroalgae, seagrasses and macroinvertebrates.

A total of 48 habitat classes were identified including:

- bare sand
- reef and bivalve beds as substrate,
- *Posidonia* (of varying densities and with or without epiphytes)
- *Halophila*
- *Zostera*
- macroalgae (of varying densities)
- turf mats
- bivalves (mainly razor clams)

The detailed habitat classification was simplified into the main biota groups and density classes to support habitat mapping. Polygons were drawn manually based on spatial grouping of dominant habitat classes.

¹ J Diversity (2025). EP Desalination Project - Habitat Mapping Report. Prepared for SA Water: Rev 1, 19 May 2025.

Marine Assessments were completed for each plant association as prescribed by the Native Vegetation Council (NVC) Bushland Assessment Manual (template dated September 2025). Where detailed species lists and habitat characteristics (e.g. native species diversity, regeneration) are not available for a vegetation association, the Marine Assessment Scoresheets have been populated using the highest scores for these Vegetation Condition classes. Macroalgal communities are not recognised within the Marine Assessment Methodology and are therefore not included in this report.

3.3 Fauna assessment

Marine and Coastal Research Consortium (MCRC) was engaged by SA Water to survey fish in the vicinity of marine works for the desalination plant.

The survey and analysis methods are given in MCRC (2025)². An overview of the methods is provided here.

Fish were surveyed using Baited Remote Underwater Video Stations (BRUVS). Surveys were conducted on five occasions (October 2021, May 2022, March 2024, November 2024 and May 2025). Surveys involved eight replicate BRUV stations at the brine outfall and two controls, approximately 1.5 km north and south of the brine outfall. Replicates were located at least 400 m apart to minimise repeat counting of individuals. BRUVS comprises a camera mounted 1.2 m from a mesh bag of approximately 0.5 kg of minced sardines. Recordings were made over 60 minutes. BRUVS were located as close as possible to previous sampling sites to allow comparisons between sites across periods.

BRUVS were analysed using SeaGIS EventMeasure software. Taxa were identified to the finest taxonomic level possible. Abundance was assessed as the maximum number of individuals for each taxon in a single frame for a deployment period.

² Roberts, C.N. and Charlie Huveneers, C. (2025) Baseline assessment of fish diversity and abundance at the proposed Boston Bay desalination site. Marine & Coastal Research Consortium, Flinders University. Report (August 2025).

4. Assessment Outcomes

4.1 Vegetation Assessment

General description of the vegetation, the site and matters of significance

Descriptions of vegetation communities are taken from J Diversity (2023)³ and J Diversity (2025)⁴.

The habitat features identified during analysis of the towed camera footage included: bare sand, reef and bivalve beds as substrate; the large bodied seagrass *Posidonia* ("strapweed"), mainly *P. australis*, of varying densities and sometimes with dense epiphytes, colonising seagrasses including *Halophila* ("paddleweed") and *Zostera* ("eelgrass"), macroalgae of varying densities and turf mats; and mixed habitats with two or more of the above components³.

Three plant communities will be impacted by the proposed works:


- M1: Habitat Class - *Posidonia* dense seagrass beds
- M2: Habitat Class - *Posidonia* interspersed with macroalgae
- M3: Habitat Class – *Halophila* and/or *Zostera* seagrass interspersed with macroalgae.


An additional 0.5255 ha of other benthic habitat including rocky intertidal shoreline, bivalve beds and macroalgae, will be impacted by the works. These habitats are not protected under the Native Vegetation Act.



³ J Diversity (2023). Boston Bay Marine Habitat Video Analysis. Report prepared for SA Water: Rev 3, 2 March 2023.

⁴ J Diversity (2025). EP Desalination Project - Habitat Mapping Report. Prepared for SA Water: Rev 1, 19 May 2025.

Details of the vegetation associates proposed to be impacted

Vegetation Association	M1: Habitat Class - <i>Posidonia</i> dense seagrass beds				
					
General description	<p>Dense beds of the large-bodied seagrass <i>Posidonia</i> ("strapweed") are present in the shallow inshore areas, generally below a depth of 12 m, at the western end of the alignment. <i>Posidonia</i> covers over 66% of the seabed, and comprises mainly <i>P. australis</i> (Southern Tapeweed) in shallow water (<5 m) with <i>P. sinuosa</i> (Narrow-leaf Tapeweed) becoming dominant in deeper water. <i>Zostera</i> sp. (Grass-wrack), is present at the most inshore sites east of the Wastewater Treatment Plant.</p> <p>The European fan worm <i>Sabella spallanzanii</i>, is present with a sparse cover over most of the survey area. The European fan worm has been identified as one of the pest species of most concern within South Australia and has been declared 'noxious' under the <i>Fisheries Management Act 2007</i>.</p>				
Threatened species or community	<p>No threatened ecological communities or flora species were recorded.</p> <p>Vegetation Association M1 may provide foraging habitat for the following threatened species:</p> <ul style="list-style-type: none"> - Australian Sea Lion (EPBC Endangered) - Leatherback Turtle (EPBC Endangered) - Southern Giant-Petrel (EPBC Endangered) - Southern Right Whale (EPBC Endangered) - Black-browed Albatross (EPBC Vulnerable) - Great White Shark (EPBC Vulnerable) - Eastern Osprey (SA Endangered) - White-bellied Sea Eagle (SA Endangered) - Humpback Whale (SA Vulnerable) 				
Landscape context score	1.1	Vegetation Condition Score	77.5	Conservation significance score	1.10
Unit biodiversity Score	93.78	Area (ha)	0.014	Total biodiversity Score	0.94

Vegetation Association	M2: Habitat Class - <i>Posidonia</i> interspersed with macroalgae				
					
General description	<p>This vegetation association occurs near the tunnel exit and seawater intake site. Beyond depths of approximately 10 m, <i>Posidonia</i> becomes interspersed with macroalgae, predominantly red macroalgae.</p> <p>The European fan worm <i>Sabella spallanzanii</i>, is present with a sparse cover over most of the survey area.</p>				
Threatened species or community	<p>No threatened ecological communities or flora species were recorded.</p> <p>Vegetation Association M1 may provide foraging habitat for the following threatened species:</p> <ul style="list-style-type: none"> - Australian Sea Lion (EPBC Endangered) - Leatherback Turtle (EPBC Endangered) - Southern Giant-Petrel (EPBC Endangered) - Southern Right Whale (EPBC Endangered) - Black-browed Albatross (EPBC Vulnerable) - Great White Shark (EPBC Vulnerable) - Eastern Osprey (SA Endangered) - White-bellied Sea Eagle (SA Endangered) - Humpback Whale (SA Vulnerable) 				
Landscape context score	1.1	Vegetation Condition Score	62.49	Conservation significance score	1.10
Unit biodiversity Score	75.61	Area (ha)	0.019	Total biodiversity Score	1.51

Vegetation Association	M3: Habitat Class – <i>Halophila</i> and/or <i>Zostera</i> seagrass interspersed with macroalgae
	 <p><i>Halophila</i> / macroalgae</p>
	 <p><i>Zostera</i> / macroalgae</p>
General description	<p>The deeper waters to the east of the intake site support patches of seagrass dominated by <i>Halophila</i> ("paddleweed") or <i>Zostera</i> ("eelgrass") interspersed with macroalgae. These seagrasses occur in depths greater than 12 m.</p> <p>Vegetation Association M3 encompasses three habitat classes identified by J Diversity (2025):</p> <ul style="list-style-type: none"> - <i>Halophila</i> / macroalgae - <i>Zostera</i> / macroalgae - Seagrass mixed <p>The European fan worm <i>Sabella spallanzanii</i>, is present with a sparse cover over most of the survey area.</p>

Threatened species or community	<p>No threatened ecological communities or flora species were recorded.</p> <p>Vegetation Association M1 may provide foraging habitat for the following threatened species:</p> <ul style="list-style-type: none"> - Australian Sea Lion (EPBC Endangered) - Leatherback Turtle (EPBC Endangered) - Southern Giant-Petrel (EPBC Endangered) - Southern Right Whale (EPBC Endangered) - Black-browed Albatross (EPBC Vulnerable) - Great White Shark (EPBC Vulnerable) - Eastern Osprey (SA Endangered) - White-bellied Sea Eagle (SA Endangered) - Humpback Whale (SA Vulnerable) 				
Landscape context score	1.1	Vegetation Condition Score	62.91	Conservation significance score	1.10
Unit biodiversity Score	76.12	Area (ha)	0.155	Total biodiversity Score	12.18

Site map showing areas of proposed impact

Figure 3. Project Clearance

Works Component	Footprint	Vegetation Clearance
MTBM recovery and seawater intake	0.2004 ha	0.0086 ha <i>Posidonia</i> M1
Brine pipeline trench	0.0489 ha	0.0185 ha <i>Posidonia</i> /macroalgae M2
Brine pipeline	0.0818 ha	0.0236 ha <i>Halophila</i> / <i>Zostera</i> M3
Brine diffuser	0.1306 ha	0.1306 ha <i>Halophila</i> / <i>Zostera</i> M3
Pipeline dredge anchors	0.0056 ha	0.0014 ha <i>Posidonia</i> M1 0.0007 ha <i>Halophila</i> / <i>Zostera</i> M3
Small anchors at pipelines (66 anchors)	0.0052 ha	0.0012 ha <i>Posidonia</i> M1 0.0003 ha <i>Posidonia</i> /macroalgae M2 0.0005 ha <i>Halophila</i> /macroalgae M3
Pipeline launch area	0.0211 ha	No vegetation
Spud anchors at spit	0.0014 ha	0.0014 ha <i>Posidonia</i> M1
Small anchors at spit (5 anchors)	0.0004 ha	0.0002 ha <i>Posidonia</i> M1
Five tonne anchors at spit (4 anchors)	0.0013 ha	0.0013 ha <i>Posidonia</i> M1

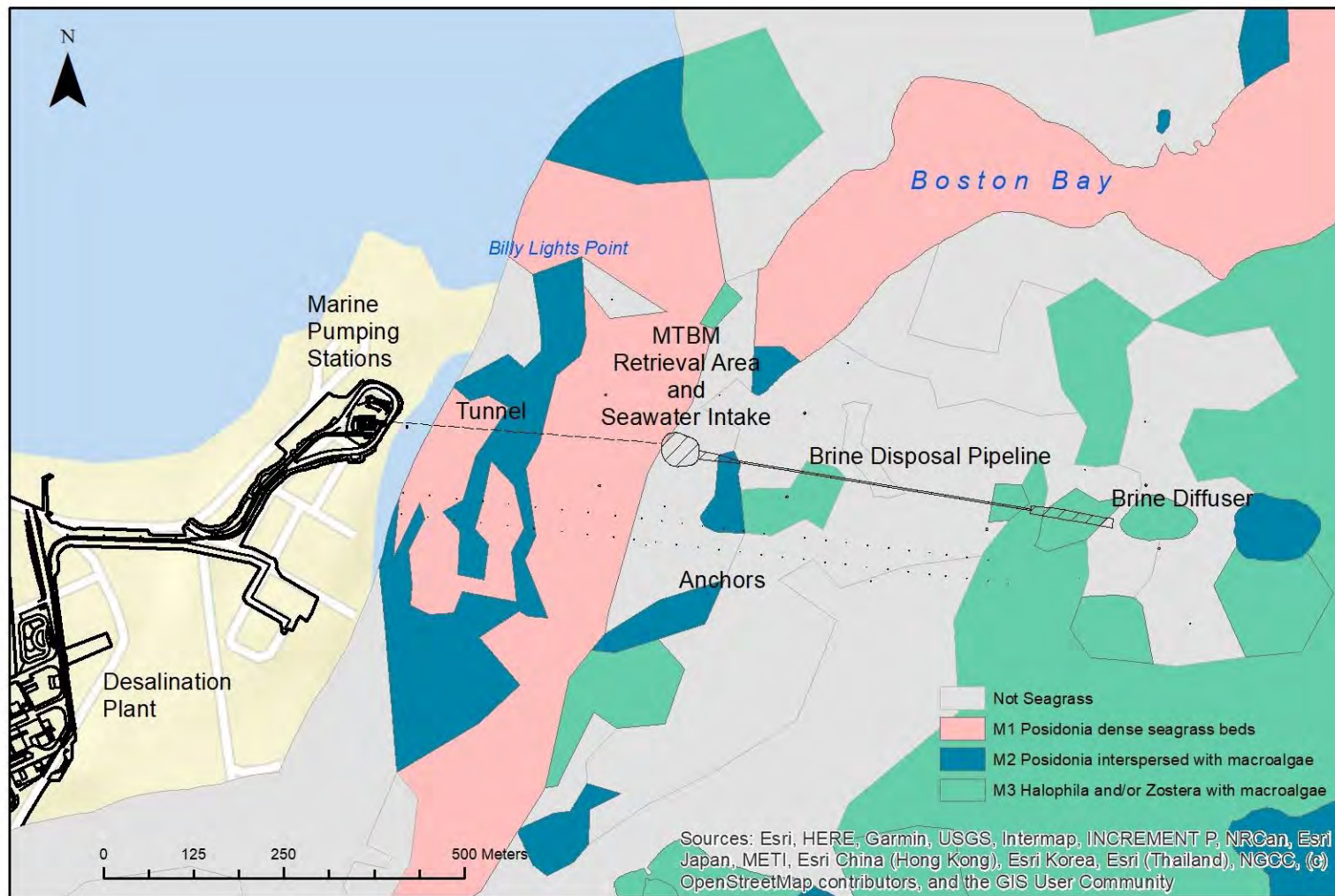


Figure 4. Vegetation Associations present in the vicinity of the works, showing proposed pipeline alignment and anchors.

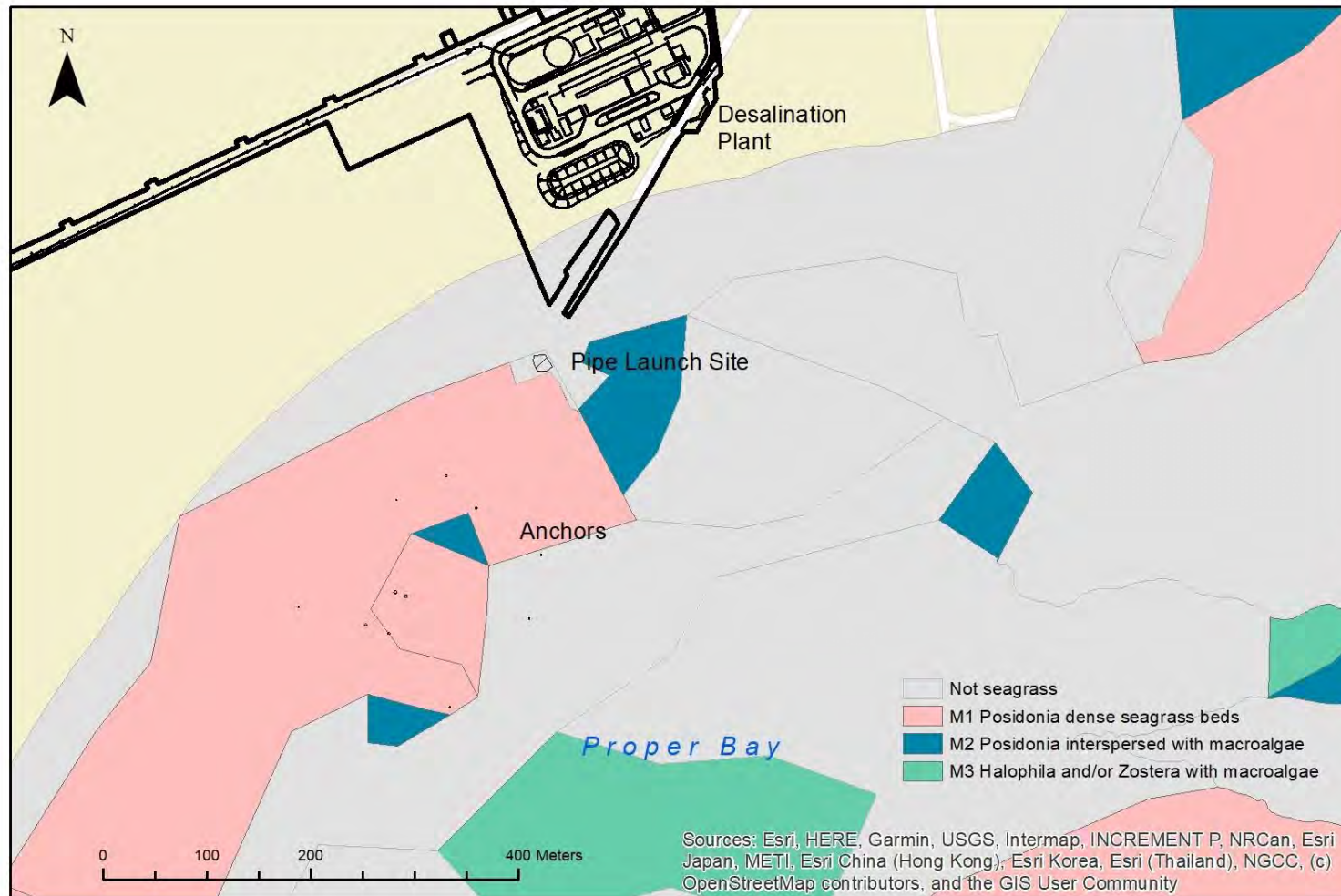


Figure 5. Vegetation Associations present in the vicinity of the works, showing proposed pipe launch site and anchors.

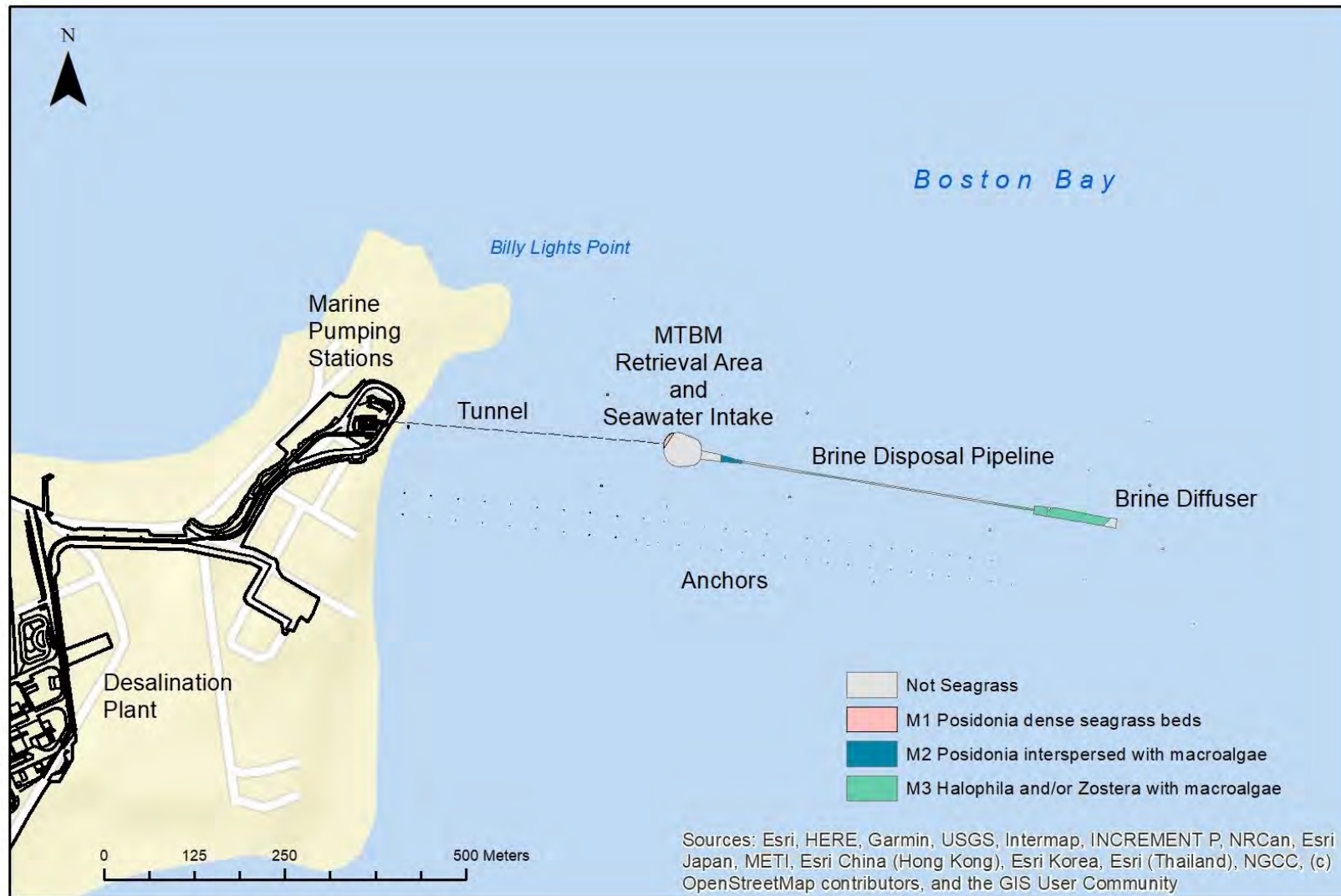


Figure 6. Clearance footprint associated with pipeline alignment and anchors.

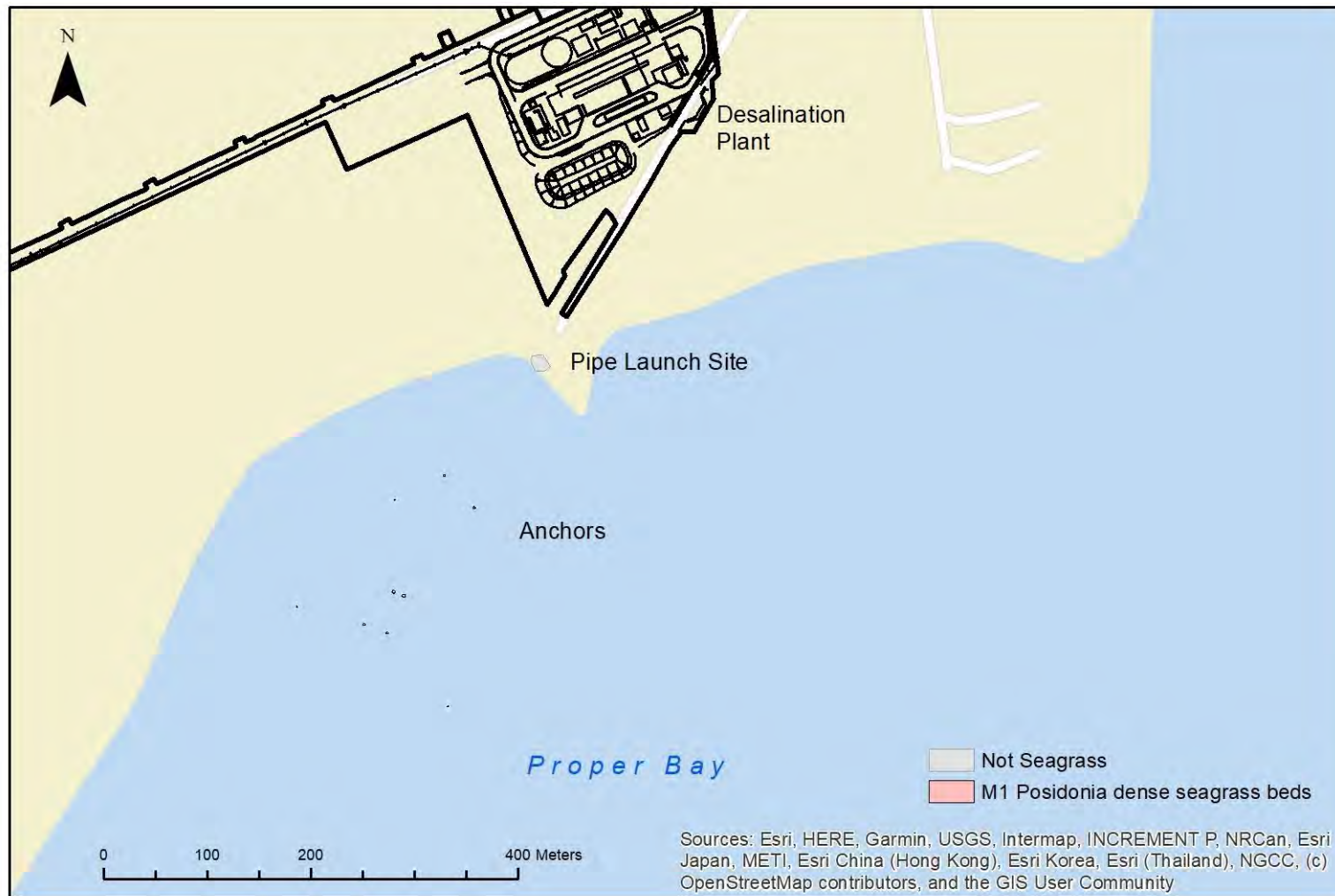


Figure 7. Clearance footprint association with launch site and anchors.

4.2 Threatened Species assessment

A complete analysis of marine fauna survey results is provided in MCRC (2025)⁵. A summary of results is presented here.

A total of 48 fauna species were observed at the outfall site and two control sites (

⁵ Roberts, C.N. and Charlie Huveneers, C. (2025) Baseline assessment of fish diversity and abundance at the proposed Boston Bay desalination site. Marine & Coastal Research Consortium, Flinders University. Report (August 2025).

Table 2). The highest diversity and abundance was in the May 2025 survey when 264 individuals from 18 taxa were observed at the outfall site, plus 148 individuals from 13 taxa at the southern control site and 91 individuals from 11 taxa at the northern control site. The fauna assemblage at the outfall site was distinguished by higher abundances of wavy grubfish (*Parapercis haackei*) than at the controls and rough rock crab (*Nectocarcinus integrifrons*) which was higher at the southern control site than the outfall site.

Teleost fish (mostly leatherjackets and trevally) contributed most to fauna diversity, followed by crustaceans then cephalopods, elasmobranchs and delphinids.

The abundance of crustaceans was highest in May 2025, mostly due to large numbers of rough rock crab. Other crustaceans observed were blue swimmer crab and giant spider crab.

None of the species observed in the survey are listed as rare or threatened under the South Australian National Parks and Wildlife Act (1972). None of the species are listed as rare, threatened or migratory under the Commonwealth Environment Protection and Biodiversity Act (1999).

Table 2. Species observed in the marine fauna survey (all five sampling periods)

Taxon	Outfall	Control North	Control South
Cephalopod			
<i>Sepioteuthis australis</i>	Y	Y	Y
<i>Hapalochlaena</i> sp.	Y		
<i>Octopus bunurong</i>		Y	Y
<i>Octopus</i> sp.	Y	Y	Y
Sepiidae			
<i>Sepia apama</i>			
Cetacean			
<i>Tursiops</i> sp.	Y		
Crustacean			
<i>Diodon nichthemerus</i>	Y	Y	
<i>Leptomithrax gaimardii</i>	Y	Y	Y
<i>Naxia aurita</i>	Y		
<i>Melicerus latisulcatus</i>	Y		
<i>Nectocarcinus integrifrons</i>	Y	Y	Y
<i>Ovalipes australiensis</i>	Y	Y	Y
<i>Portunus armatus</i>	Y	Y	Y
Elasmobranch			
<i>Bathytoshia brevicaudata</i>	Y	Y	Y
<i>Heterodontus portusjacksoni</i>	Y	Y	Y
<i>Trygonorrhina dumerilii</i>		Y	
Teleost			
<i>Siphamia cephalotes</i>		Y	Y
<i>Vincentia conspersa</i>	Y		
<i>Arripis georgianus</i>	Y	Y	Y
<i>Arripis truttaceus</i>	Y	Y	Y
<i>Atherinosoma microstoma</i>		Y	
<i>Trachurus declivis</i>		Y	
<i>Trachurus novaezelandiae</i>	Y	Y	Y
<i>Pseudocaranx</i> sp.	Y	Y	Y
<i>Parequula melbournensis</i>	Y	Y	Y
<i>Nesogobius</i> sp.	Y	Y	
<i>Neodax balteatus</i>	Y	Y	Y
<i>Siphonognathus attenuatus</i>	Y		
<i>Siphonognathus beddomei</i>	Y		
<i>Acanthaluteres spilomelanurus</i>	Y	Y	Y
<i>Acanthaluteres vittiger</i>			Y
<i>Brachaluteres jacksonianus</i>	Y	Y	
<i>Meuschenia venusta</i>			Y
<i>Nelusetta ayraud</i>	Y	Y	Y
<i>Thamnaconus degeni</i>	Y	Y	Y
<i>Upeneichthys vlamingii</i>	Y	Y	
<i>Parapercis haackei</i>	Y	Y	Y
<i>Parapercis ramsayi</i>	Y	Y	Y
<i>Platycephalus bassensis</i>	Y	Y	Y
<i>Platycephalus grandispinis</i>	Y		
<i>Platycephalus speculator</i>	Y	Y	Y
<i>Ammotretis elongatus</i>			
<i>Rhombosolea</i> sp.	Y	Y	
<i>Sillaginodes punctatus</i>	Y	Y	
<i>Sillago bassensis</i>	Y		
<i>Sphyræna novaehollandiae</i>	Y	Y	
<i>Omegophora armilla</i>		Y	Y
<i>Lepidotrigla papilio</i>	Y	Y	

Species observed on site, or recorded within 5km of the application area since 1995, or the vegetation is considered to provide suitable habitat.

SPECIES	EPBC Act	NPWS Act	Source	Date of last record	Species known habitat preferences	Likelihood for use for habitat - comments
BIRDS						
<i>Actitis hypoleucos</i> (Common Sandpiper)		R	1,3,4	2023	Migratory species, breeding in Northern Hemisphere, and flying to the Southern Hemisphere in the southern spring and summer. Utilises a wide range of coastal wetlands, with varying levels of salinity, and is mostly found around muddy margins or rocky shores and rarely on mudflats.	Known. Observed near Billy Lights Point during 2023 fauna surveys. Highly likely to use coastal shoreline at launch ramp near causeway. Numerous records around Port Lincoln and Billy Light Peninsula.
<i>Calidris acuminata</i> (Sharp-tailed Sandpiper)	VU		3,5	2024	A small-medium migratory shorebird breeding in northern Siberia and moving to non-breeding areas south of the Equator. Widespread in both inland and coastal locations, occurring in freshwater and saline habitats. They feed along the water's edge of mudflats, wetlands and sewage ponds.	Known. Highly likely to use coastal shoreline at launch ramp near causeway. Numerous records across the coastal and wetland areas of the assessment area.
<i>Calidris canutus</i> (Red Knot)	VU	E	1,2,3	2020	Small to medium shorebird which breeds in the northern hemisphere and migrates south to spend the boreal winter in Australasia. It inhabits intertidal mudflats, sandflats and sandy beaches of sheltered coasts and sometimes on sandy ocean beaches or shallow pools on exposed rock platforms. Occasionally seen on saline wetlands near the coast and on sewage ponds and saltworks.	Highly likely to use coastal shoreline at launch ramp near causeway. Previously recorded at Billy Lights long beach and at the Pt Lincoln Marina drain.
<i>Calidris ferruginea</i> (Curlew Sandpiper)	CR	E	2,5	2023	A migratory shorebird which breeds across Arctic Siberia. Non-breeding birds are found in many Australian coastal sites and may also be seen inland in suitable wetland habitats. Feeding habitat includes exposed sandy or soft mud substrates on intertidal flats and beaches. Roosting habitat consists primarily of large intertidal sandflats, spits, and banks.	Likely to use coastal shoreline at launch ramp near causeway. There is one record for the species at the Greyhound Rd wetlands.
<i>Calidris melanotos</i> (Pectoral Sandpiper)		R	2	2021	Small wader which breeds in the northern hemisphere and migrates to south-eastern Australia, arriving mainly in coastal areas and then dispersing inland. Found in coastal lagoons, estuaries, swamps, lakes, creeks, floodplains, and artificial wetlands. It forages for invertebrates on grasslands and mudflats.	Possible. There is one recent record for the species, at Billy Lights Point.
<i>Cladorhynchus leucocephalus</i> (Banded Stilt)		V	1,3,4	2023	A nomadic wading bird, found mainly in shallow saline and hypersaline waters of the inland and coast including ephemeral salt lakes, salt works, lagoons, salt- or claypans and intertidal flats. Sometimes found in brackish or fresh water, including farm dams and sewage ponds	Known. Highly likely to use coastal shoreline at launch ramp near causeway. Observed during 2023 fauna surveys in wetlands along Greyhound Rd and there are numerous records across the search area.

SPECIES	EPBC Act	NPWS Act	Source	Date of last record	Species known habitat preferences	Likelihood for use for habitat - comments
<i>Diomedea exulans</i> (Wandering Albatross)	VU	V	1,2,5	2017	Large seabird which nests on remote islands and forages in open waters of the southern oceans, at the edge of the continental shelf, or in pelagic waters just off the shelf. Juveniles and non-breeding adults circumnavigate Antarctica, often passing close to the Australian mainland.	Unlikely. Oceanic species. There is one record of two birds seen off the Port Lincoln beachfront.
<i>Haematopus fuliginosus fuliginosus</i> (Sooty Oystercatcher)		R	2,3,4	2025	The Sooty Oystercatcher is strictly coastal, usually within 50 m of the ocean. It prefers rocky shores but will be seen on coral reefs or sandy beaches near mudflats.	Known. Highly likely to use coastal shoreline at launch ramp near causeway. Observed during 2023 fauna surveys on tidal flats along Greyhound Rd. Numerous records in assessment area.
<i>Haematopus longirostris</i> (Pied Oystercatcher)		E	1,2,4	2025	The Pied Oystercatcher prefers mudflats, sandbanks and sandy ocean beaches and is less common along rocky or shingle coastlines. May occasionally be found in estuarine mudflats and short pasture.	Known. Highly likely to use coastal shoreline at launch ramp near causeway. Observed during 2023 fauna surveys on tidal flats along Greyhound Rd. Numerous records in assessment area.
<i>Haliaeetus leucogaster</i> (White-bellied Sea Eagle)		E	1,4	2023	White-bellied Sea-Eagles build a large stick nest, which is used for many seasons in succession. The nest can be located in trees, cliff-face ledges or rocky outcrops but may also be placed on the ground where there are no suitable trees. They range around the coast of Eyre Peninsula, fishing over the water.	Known. Recorded in Lincoln Cove Marina and samphire areas along Greyhound Rd and known to nest nearby. Observed opportunistically during 2021 and 2023 field surveys.
<i>Macronectes giganteus</i> (Southern Giant-Petrel)	EN	V	1,2,5	1999	Breeds in Antarctica and sub-Antarctic islands. Forage at sea mainly on the surface for fish, cephalopods and birds, and also scavenge on land. Observed congregating around fishing vessels and sewage outfalls.	Possible. There are a few records on lower EP, all around the Coffin Bay area with one offshore record 5 km east of the outfall pipeline.
<i>Pandion haliaetus cristatus</i> (Eastern Osprey)		E	1,4	2023	Mostly found in coastal areas but occasionally travel inland along rivers. They range around the coast of Eyre Peninsula and require extensive areas of open fresh, brackish or saline water for foraging. Eastern Ospreys build a large stick bowl usually in the top of a dead or partly dead tree, but can also nest on stacks along rocky shores, and increasingly on man-made structures such as power poles, bridges, and purpose-built nest platforms on poles. Forage over water, mostly for fish.	Known. Observed over the wetlands along Greyhound Rd during 2023 fauna surveys. Numerous records in the area, including in last 3 years. Known to nest at the entrance to the Lincoln Cove Marina.
<i>Sternula nereis nereis</i> (Fairy Tern)	VU	E	1,3,4,5	2024	Shorebird, inhabiting a variety of habitats including offshore, estuarine or lacustrine islands, wetlands, beaches and spits. They nest above the high-water mark on sites where the substrate is sandy and the vegetation low and sparse.	Known. Highly likely to use coastal shoreline at launch ramp near causeway. Observed in the wetlands near Greyhound Rd during the 2021 and 2023 field surveys and there are numerous records across the search area.

SPECIES	EPBC Act	NPWS Act	Source	Date of last record	Species known habitat preferences	Likelihood for use for habitat - comments
<i>Thalassarche melanophris</i> Black-browed Albatross	VU		1,2,5	2010	A small-medium albatross which breeds on subantarctic and Antarctic islands and ranges widely when not breeding, favouring warmer coastal or shelf waters of Australia, New Zealand, South Africa and South America. Forages along Australia's southern coastline from Perth to Brisbane, taking food from the sea surface or just below. Feed mostly on fish, cephalopods, jellyfish and scavenged species. The species is common inshore, sheltering in harbours, bays and channels. Observed gathering at sewage outfalls.	Possible. Suitable foraging habitat is available. There is one record for a Black-browed Albatross tracked off Port Lincoln.
<i>Thalassarche cauta steadi</i> (White-capped Albatross)	VU		1,5	NA	A medium albatross, endemic to New Zealand with five breeding sites on offshore islands. Australia is within the foraging range with tracking studies indicating that the species disperse to waters adjacent to south-eastern Australia, particularly north-east of Tasmania.	Unlikely. Oceanic species. No records within 5 km of proposed works.
<i>Thinornis cucullatus cucullatus</i> (Hooded Plover)	VU	V	5	NA	Inhabits ocean beaches, particularly wide beaches backed by dunes with large amounts of seaweed, creek mouths and inlet entrances. It may also occur on near-coastal saline and freshwater lakes and lagoons, tidal bays and estuaries, on rock platforms, or on rocky or sandy reefs close to shore.	Unlikely. Recorded in Lincoln NP, but there are no records near Billy Lights Point or the coastline or wetlands along Greyhound Rd or Proper Bay.
<i>Tringa brevipes</i> (Grey-tailed Tattler)		R	2,3	2023	A migratory shorebird which spends the boreal winter foraging on muddy and sandy coasts in Asia and Australia. Usually seen in small flocks and prefer sheltered coasts with intertidal mudflats or reefs and rock platforms.	Highly likely along shoreline at launch ramp. There are several records for the species at Billy Lights Point.
<i>Tringa glareola</i> (Wood Sandpiper)		R	3	2020	A small wading bird seen in small flocks or singly on inland shallow freshwater wetlands, often with other waders. They prefer ponds and pools with emergent reeds and grass, surrounded by tall plants or dead trees and fallen timber (Birdlife Australia Bird Profiles, 2018). Breeding in Northern Hemisphere, they migrate to the Southern Hemisphere in the southern spring and summer.	Possible along shoreline at launch ramp near causeway. There are two records for the species across the search area.
<i>Tringa nebularia</i> (Common Greenshank)	EN		2,3,5	2023	Breeds across northern Europe and Asia; migrating to Africa, southern Asia and Australia during the boreal winter. The species occurs in all types of wetlands, being recorded in most coastal regions, foraging at the edges of mudflats or shallows. They roost both on the coast and inland, in	Known. Highly likely along shoreline at launch ramp near causeway. Observed during 2023 field surveys and there are numerous records across the coastal and wetland areas of the assessment area.

SPECIES	EPBC Act	NPWS Act	Source	Date of last record	Species known habitat preferences	Likelihood for use for habitat - comments
					estuaries and mudflats, mangrove swamps and lagoons, and in billabongs, swamps, sewage farms and flooded crops.	
<i>Xenus cinereus</i> (Terek Sandpiper)		R	2	2020	Migratory species, breeding in Northern Hemisphere, and flying to the Southern Hemisphere in the southern spring and summer. Usually found on the coast in mangrove swamps, tidal mudflats and the seashore.	Possible. Suitable shoreline habitat available at launch ramp near causeway. One recent record, near boat ramp at Billy Lights Point.
MAMMALS						
<i>Eubalaena australis</i> (Southern Right Whale)	EN	V	1,2,5	2014	A large baleen whale with a circumpolar distribution in the Southern Hemisphere. Breeding aggregations occur over a wide environmental range across the entire southern Australian coast, although preferred habitat generally includes shallow sloping sandy bottom bays that provide protection from prevailing wind and weather. Reproductive areas where females calve and nurse their young appear to be exclusively coastal.	Likely. There are numerous records off the Port Lincoln coastline. However, local sightings are of transient animals and the area is not a known aggregation site for the species.
<i>Megaptera novaeangliae</i> (Humpback Whale)		V	2	2009	A widely distributed baleen whale which migrates between feeding areas towards the poles and breeding areas near the equator. It feeds on plankton, krill, and fish in coastal or shelf waters.	Possible. There are a few records of the species off the coast of Port Lincoln.
<i>Neophoca cinerea</i> (Australian Sea Lion)	EN	V	1,2,4,5	2023	Marine species which breeds on remote coastlines or on islands, and forages at sea. They use a variety of coastal habitats as haul-out sites, from exposed islands, reefs and rocky terrain to sandy beaches and vegetated fore dune.	Known. Observed during field surveys to the east side of Billy Lights Point and there have been several sightings at Billy Light Point and Port Lincoln foreshore.
REPTILES						
<i>Caretta caretta</i> (Loggerhead Turtle)	EN	E	1,5	-	Loggerhead turtles forage in all coastal states and the Northern Territory, but are uncommon in South Australia, Victoria and Tasmania. They feed predominantly on benthic invertebrates in habitats ranging from near shore to shore to depths of 55 m.	Unlikely. No records within 5 km of site.
<i>Dermochelys coriacea</i> (Leatherback Turtle)	EN	V	1,2,5	2025	Marine species. Leatherback turtles are known to forage and migrate throughout Australia. They are an oceanic species, remaining planktivorous throughout their life, feeding on	Likely. There are a few records for the species within the search area, the most recent on the coast of Port Lincoln National Park.

SPECIES	EPBC Act	NPWS Act	Source	Date of last record	Species known habitat preferences	Likelihood for use for habitat - comments
					jellyfish and large planktonic ascidians (e.g. sea squirts) in the water column.	
FISH						
<i>Carcharodon carcharias</i> (Great White Shark)	VU		1,2,5	2003	The species primarily inhabits continental and insular shelf waters but is also known to use the open ocean. It often occurs close inshore near the surf-line and may move into shallow bays. Commonly found in inshore waters in the vicinity of islands, and often near seal colonies.	Likely. Suitable habitat is available.
Source; 1- BDBSA, 2 - AoLA, 3 – NatureMaps, 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable; NP&W Act; E= Endangered, V = Vulnerable, R= Rare						

Criteria for the likelihood of occurrence of species within the Study area.

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provide limited habitat or feeding resources for the species. Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provide no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area. No records despite adequate survey effort.

4.3 Cumulative impact

When exercising a power or making a decision under Division 5 of the Regulations, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

A risk assessment of ecological impacts to the marine environment associated with operations was provided in the Development Application Report (SA Water 3 June 2024). A summary of relevant findings is presented here.

Turbidity During Construction Phase

During the construction phase sediment disturbance will increase turbidity. The risk of the project to benthic organisms is low. Disturbance in sensitive habitats such as dense seagrass beds will be avoided. The dredged material has low potential for creating sustained high turbidity. Residual risks will be managed through a Dredge Management Plan which will require EPA approval.

Marine Organism Entrainment

Particle tracking modelling has been used to estimate the impact of the seawater intake on marine fauna. The seawater intake is elevated 3 to 4 m above the seabed and will not present a risk to benthic fauna. Modelling found that entrainment during intake of water presents a low risk to the marine environment.

Brine Disposal

Concentrated brine will be discharged through a seabed mounted diffuser structure. The brine will be approximately double the ambient salinity. The purpose of the diffuser is to effectively and rapidly mix the brine to avoid impacts on the marine environment. The diffuser is required to achieve a minimum dilution of 40:1 which equates to a salinity concentration of 0.987 mg/L above background concentrations. This is conservatively estimated to provide a safe dilution level based on ecotoxicology investigations.

Outside of the 30 m initial mixing zone around the diffuser itself, the predicted changes in salinity are within the natural background salinity variability experienced by seagrass and therefore present a very low risk to seagrass, macroalgae, fish and other mobiles species and sessile benthic invertebrates.

There may be salinity impacts to vegetation within the initial 30 m mixing zone. Modelling is underway to determine salinity conditions and potential additional impacts to vegetation.

4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Regulations, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimise, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance – outline measures taken to avoid clearance of native vegetation

The project avoids impacts to the coastal, intertidal and nearshore zones by adopting subsurface tunneled pipelines. The dense *Posidonia* beds, which occur out to approximately 360 m from the mean high tide are avoided due to the tunnelling solution incorporated into the design.

Six of the eight proposed anchor locations for the dredge barge have been selected to avoid interaction with seagrass.

A side scan sonar survey of the clearance areas is planned in January 2025 to quantify and confirm dredging impacts.

b) Minimisation – if clearance cannot be avoided, outline measures taken to minimise the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).

Impacts to the seabed environment have been minimised by using sensitive design and construction techniques. The original plan to excavate and backfill pipeline corridors was replaced with a lay-on-bed approach which limits the impact of the brine disposal pipeline to the footprint of the pipe itself.

The dredging methodology has been modified to reduced both direct and indirect impacts on marine habitat. The revised methodology will substantially reduce the extent of sediment disturbance. The dredge pump to be employed does not use a mechanical cutter head to dislodge material as was the case under the approved 2024 methodology and therefore avoids the resuspension of sediment and related increases in turbidity levels and/or sedimentation. Dredge spoil disposal methods will not impact the marine environment (e.g., via side casting or offshore dumping) as spoil will be returned to land via the floating pipeline, for onshore handling and disposal.

Anchoring requirements have been planned to minimise impacts on the seabed. This has included removal at the dredge site of spud anchors and a reduction in the number of five tonne anchors from 12 to 8. The selected arrangement utilises the minimum number of anchors to provide the required stability during the marine works including at times of strong wind.

By applying these measures, the total clearance of seagrass and macroalgae that was anticipated in the Development Application has been reduced from 2.3400 ha to 0.5138 ha.

c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimised, such as allowing for the re-establishment of the vegetation.

Rehabilitation of the marine environment is not practical and is not proposed.

d) Offset – any adverse impact on native vegetation that cannot be avoided or further minimised should be offset by the achievement of a significant environmental benefit that outweighs that impact.

The NVC will only consider an offset once avoidance, minimisation and restoration have been documented and fulfilled. The SEB Policy explains the biodiversity offsetting principles that must be met.

The residual impact of the works will be offset through payment to the Native Vegetation Fund.

4.5 Principles of Clearance (Schedule 1, *Native Vegetation Act 1991*)

The NVC will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The NVC will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

Principle of clearance	Considerations												
Principle 1a - it comprises a high level of diversity of plant species	<u>Relevant information</u> The methodology employed (i.e. towed camera surveys) to map dominant seabed vegetation is not accurate enough to provide detailed plant species lists. As such, the highest Native Plant Species Diversity score was applied for each plant community. Bushland Plant Diversity Score – M1, M2 and M3 = 30												
	<u>Assessment against the principles</u> Seriously at Variance - M1, M2 and M3												
	<u>Moderating factors that may be considered by the NVC</u> 												
Principle 1b - significance as a habitat for wildlife	<u>Relevant information</u> The seagrass communities (M1, M2 and M3) may provide foraging habitat for the following threatened species: <ul style="list-style-type: none">- Australian Sea Lion (EPBC Endangered)- Leatherback Turtle (EPBC Endangered)- Southern Giant-Petrel (EPBC Endangered)- Southern Right Whale (EPBC Endangered)- Black-browed Albatross (EPBC Vulnerable)- Great White Shark (EPBC Vulnerable)- Eastern Osprey (SA Endangered)- White-bellied Sea Eagle (SA Endangered)- Humpback Whale (SA Vulnerable) An additional 13 species of threatened shorebirds may use the rocky intertidal habitat at the site of the launch ramp. This habitat is not protected under the Native Vegetation Act. <table><tr><th>Vegetation Association</th><th>Threatened Fauna Score</th><th>Unit biodiversity Score</th></tr><tr><td>M1</td><td>0.1</td><td>93.78</td></tr><tr><td>M2</td><td>0.1</td><td>75.61</td></tr><tr><td>M3</td><td>0.1</td><td>76.12</td></tr></table>	Vegetation Association	Threatened Fauna Score	Unit biodiversity Score	M1	0.1	93.78	M2	0.1	75.61	M3	0.1	76.12
	Vegetation Association	Threatened Fauna Score	Unit biodiversity Score										
	M1	0.1	93.78										
M2	0.1	75.61											
M3	0.1	76.12											
<u>Assessment against the principles</u> Seriously at Variance: M1, M2 and M3													
<u>Moderating factors that may be considered by the NVC</u> The area of impact is very small compared to available habitat in the surrounding waters. The works are unlikely to have long-term impacts on populations of threatened species.													

Principle 1c - plants of a rare, vulnerable or endangered species	<u>Relevant information</u> No threatened flora species were recorded. Threatened Flora Scores - M1, M2 and M3 = 0
	<u>Assessment against the principles</u> Seriously at Variance: None At Variance: None
	<u>Moderating factors that may be considered by the NVC</u> – N/A
Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered:	<u>Relevant information</u> No threatened ecological communities will be impacted by the works. Threatened Community Score - M1, M2 and M3 = 1
	<u>Assessment against the principles</u> Seriously at Variance: None
	<u>Moderating factors that may be considered by the NVC</u> – N/A
Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.	<u>Relevant information</u> IBRA Associations and IBRA Subregions do not cover marine environments. Total Biodiversity Score – N/A
	<u>Assessment against the principles</u> – N/A
	<u>Moderating factors that may be considered by the NVC</u> – N/A
Principle 1f - it is growing in, or in association with, a wetland environment.	<u>Relevant information</u> Not applicable to marine environments
	<u>Assessment against the principles</u> – N/A
	<u>Moderating factors that may be considered by the NVC</u> – N/A
Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.	<u>Relevant information</u> Not applicable to marine environments N/A
	<u>Moderating factors that may be considered by the NVC</u>

Principles of Clearance (h-m) will be considered by comments provided by the local NRM Board or relevant Minister. The Data Report should contain information on these principles where relevant and where sufficient information or expertise is available.

4.6 Risk Assessment

Determine the level of risk associated with the application

Total clearance	No. of trees	0
	Area (ha)	0.19
	Total biodiversity Score	14.63
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1(b)
Risk assessment outcome		Level 4

4.7 NVC Guidelines

Provide any other information that demonstrates that the clearance complies with any relevant NVC guidelines related to the activity.

Not applicable

5. Clearance summary

Clearance Area(s) Summary table

Block	Site	Species diversity score	Threatened Ecological community Score	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
M	1	30	1	0	0.1	93.78	0.01	0.94	1			1.03	\$1,905.60	\$104.81
M	2	30	1	0	0.1	75.61	0.02	1.51	1			1.66	\$3,048.96	\$167.69
M	3	30	1	0	0.1	76.12	0.16	12.18	1			13.4	\$24,264.64	\$1,334.56
						Total	0.19	14.63				16.09	\$29,219.20	\$1,607.06

Totals summary table

Economies of Scale Factor	0.5
Rainfall (mm) Factor	N/A
SEB Points of Gain/ha Factor	7

SEB Uplift Factor	1.10
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Management Cost (\$/ha)	\$25,408.00
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	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	14.63	16.09	\$29,219.20	\$1,607.06	\$20,826.26

6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the Regulations. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that a SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

ACHIEVING A SEB

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

☒ Pay into the Native Vegetation Fund.

PAYMENT SEB

The SEB Policy states that if a SEB is required as a result of an approved activity undertaken under the Regulations, the applicant has a choice of either providing an on-ground SEB or a Payment SEB. However, if a proposed clearance will have an offset obligation of greater than 150 SEB Points Required, the NVC will first request that a reasonable attempt be made to identify an on-ground SEB before a payment will be accepted.

If a proponent proposes to achieve the SEB by paying into the Native Vegetation Fund, summary information must be provided on the amount required to be paid and the manner of payment:

- Payment amount required (including admin. fee) \$20,826.26

7. Appendices

Appendix 1 Fauna Survey - Baseline assessment of fish diversity and abundance at the proposed Boston Bay desalination site August 2025 (Flinders University)

Appendix 2 Marine Assessment Scoresheets.

Appendix 3 Flora Species Analysis

- Boston Bay Marine Habitat Video Analysis March 2023 (J Diversity)
- EP Desalination Project Habitat Mapping Report Rev 1, 19 May 2025 (J Diversity)