
MARINE & TERRESTRIAL ENVIRONMENT

Iron Road undertook a substantial review of all possible port locations on the Eyre Peninsula before choosing Cape Hardy as the most appropriate site for a deep water port.

Cape Hardy is a natural deep water location with the onshore land resting within a natural amphitheatre with a rise traversing the western boundary providing both a visual and sound barrier.

A marine study area was identified as the area of marine and coastal environment potentially being impacted by the construction and operation of the proposed port. This area extended roughly 6 km along the coastline and 3 km from shore, covering 29 km².

Marine studies were conducted on the bathymetry, hydrodynamic environment, seabed conditions, water quality, marine and benthic habitats, flora and fauna, fish species and marine megafauna, marine noise and vibration, fisheries and aquaculture, and invasive marine species.

A field survey at the proposed port site was undertaken which involved detailed fauna surveys, habitat and landform descriptions, detailed survey of vegetation monitoring plots, and land condition assessments.

Key Facts

- Cape Hardy is readily accessible to deep water
- No dredging required to enable access for large vessels.
- No breakwater required.
- The port design avoids known critical habitat, key breeding colonies, foraging grounds for coastal fauna, fish species, benthic fauna and marine megafauna
- No introduced noise sources from the port or related industrial activities.
- Nearest aquaculture leases are approximately 33 km north in the Arno Bay region and 30 km south at Cape Euler.
- The Port Neill Aquaculture zone is located approximately 2.5 km from the closest point of the proposed jetty.
- Southern Right Whale Monitoring and Management Plan being prepared to protect this important species.
- The jetty will be constructed in stages using a jack-up barge for impact piling to minimize disturbance to the seabed.
- The design and alignment of the causeway, wharf and jetty structures avoid areas of dense seagrass which in turn avoids habitat impacts.
- The staged construction will minimise long-term alterations to site hydrodynamics and bathymetry to localised areas, with construction equipment in place for short durations only
- A covered conveyer system, telescopic ship loader and veneering of stockpiles aims to minimize loss by spills or dust generation
- No wastewater discharge into the marine environment is proposed with full containment of all wastewater and sewage on site
- Stormwater will be captured and treated on site to eliminate contaminated run off to the sea.
- There is a registered Indigenous Land Use Agreement with the Barngarla in place over the land and water.

FAQ

What is the impact upon the marine environment of propeller wash from either tugs or the Cape size vessels entering or leaving the confines of the port?

Vessels will be under the control of tugs within the port area. Given this, and the water depth, impacts on seagrass from propeller wash will be minimal. This evades the issue of the tugs propeller wash. Confine answer to depth, distance from seabed grass, etc?

How much marine habitat will be cleared?

The extent of habitat proposed to be cleared during construction is limited to an area within the project footprint, and the area immediately surrounding the offshore infrastructure. Habitat clearance was conservatively estimated based on the footprint of the proposed port development (including temporary construction areas) with an additional 5 m buffer. When considered in a regional context, the proposed habitat clearance required for construction of the offshore infrastructure does not represent a significant effect to the viability of marine flora communities.

Ship movements during both construction and operation will also disturb the seabed and habitats as a result of the installation of nav aids, anchoring, propwash and vessel scour. Impacts from ship movements will be managed through the implementation of procedures, such as limiting ship speeds within the port site and utilising tugs to manoeuvre large vessels into place.

How will invasive species be managed from ships entering port?

All vessels utilising the port will be required to comply with the national guidelines relevant to biofouling and ballast water (Australian Quarantine and Inspection Service Australian Ballast Water Management Requirements (DAFF 2011) and the Biosecurity Act 2015 to mitigate the risk of introducing pest species to the marine environment.

Operational ports have the potential to introduce Introduced Marine Species (IMS). Some IMS such as mussels have the potential to build up biological reefs thereby changing the bathymetry of an area. IMS can outcompete existing native communities and smother existing benthic habitat (in the case of some algae), causing seagrass loss that could alter the bathymetry of an area by destabilising sediment and causing sediment loss.

Regular monitoring of the marine study area would be undertaken for the detection of new marine species (including pests), allowing for an early response to the introduction of invasive marine species (IMS) if required. The marine monitoring would be compared back to the baseline marine survey to determine the introduction of any marine species or IMS.



Cape Hardy from the Spencer Gulf

In addition to the EIS Amendment Report being available for review and comment in the coming weeks, Iron Road's website holds a wealth of information on the history of the CEIP and the Cape Hardy port which can be found at www.ironroadlimited.com.au.

Should you have any questions or insights for the project team regarding Stage I, please contact Iron Road on 08 8214 4400 or email at its dedicated address: community@ironroadlimited.com.au