



Australian Government

Great Barrier Reef
Marine Park Authority

Douglas Shoal Remediation Project

Helping the reef recover

Example of undamaged underwater life at
Douglas Shoal (2010)

Background

In April 2010, the cargo ship *Shen Neng 1* ran aground on Douglas Shoal, off central Queensland.

Douglas Shoal is in the Great Barrier Reef Marine Park and in the sea country of the Gooreng Gooreng, Gurang, Byellee and Tarebilang Bunda people. It is a large, flat-topped shoal supporting abundant fish life and protected species such as sea snakes and marine turtles.

The grounded vessel remained on Douglas Shoal for 10 days, shifting position with the tides, until it was refloated and towed away. With an impact area of approximately 42 hectares, it left the largest ship grounding scar known in the Great Barrier Reef, and possibly the world.

While the grounding caused physical damage to the shoal, it also introduced chemical contamination from the ship's anti-fouling paint.

Remediation project

In late 2016, the Great Barrier Reef Marine Park Authority established the Douglas Shoal Remediation Project with \$35 million from a settlement associated with the grounding incident. The primary objective of the project is to support the natural recovery of Douglas Shoal by addressing:

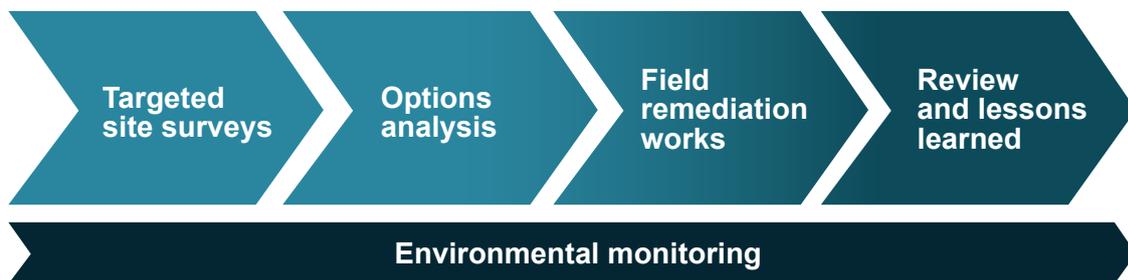
- Contamination caused by the ship's anti-fouling paint
- Rubble created as the ship scraped across the shoal
- The flattening of the shoal's natural bumps and crevices that are habitat for plants and animals.





Examples of damage caused by the grounding (2010 and 2011)

Key phases of the project are shown below. The target completion date is 2022, though this will depend on the outcomes of the early phases. Difficult sea conditions frequently experienced at Douglas Shoal mean the clean-up must be carefully planned, for the safety of workers and protection of the environment. Even after the clean-up is finished, it may take many decades for the shoal to fully recover.



Project activities

Targeted site surveys and mapping

Targeted site surveys at the impacted areas were completed in June 2019, including visual surveys and sediment sampling. Areas of damage and contamination are being mapped out, which will help focus clean-up efforts.

Remediation options analysis

The options analysis will review and analyse potential remediation methods. This could include removing contaminated material, and stabilising or re-forming damaged areas. A variety of methods may be required, due to the various impacts of the grounding.

Field remediation works

Field remediation works will focus on cleaning up contamination and damage, to support the natural recovery of Douglas Shoal.

Tenders

Any future commercial opportunities will be listed on AusTender at www.tenders.gov.au.

Monitoring

Environmental conditions will be closely monitored before, during and after field remediation works. This will improve understanding of which remediation methods are most effective.

Lessons learned

It is important that lessons learned from this incident are shared with other marine managers in Australia and internationally.

Traditional Owner participation

Sea rangers from Gidarjil Development Corporation are supporting project activities, through site surveys, on-vessel support and bringing their broader experience and connection to sea country.

This ensures the project understands and respects the Traditional Owner values of the area.

For more information, please contact the Great Barrier Reef Marine Park Authority at douglas.shoal@gbmpa.gov.au.