



## Dredging and Dredge Spoil Material Disposal Policy

Aug-19

### Objective

*To provide a transparent, consistent and contemporary approach to environmental impact management of dredging and disposal of dredge spoil material in the Marine Park.*

### Target audience

*Agency staff; applicants for permissions to undertake dredging and/or dredge spoil material disposal activities in the Marine Park.*

### Purpose

1. The establishment of a formal dredging and dredge spoil material disposal policy is seen as an essential element in the successful management and mitigation of environmental impacts associated with dredging activities in the Great Barrier Reef Marine Park (Marine Park).
2. This document will be considered when assessing applications for permissions to conduct dredging or to dispose dredge spoil material in the Marine Park.

### Related legislation / standards / policy

3. [Great Barrier Reef Marine Park Zoning Plan 2003](#): provides that dredging and the dumping of dredge spoil within the Marine Park requires permission from the Authority.
  - a. The Great Barrier Reef Marine Park Zoning Plan 2003 uses the term 'dumping of spoil'. For the purposes of this policy the term 'dredge spoil material disposal' is taken to be a reference to mean the same activity referred to as described under that Plan.
4. [Great Barrier Reef Marine Park Act 1975](#) (GBRMP Act): Under section 38AA of the GBRMP Act it is an offence to carry out an operation for the recovery of minerals in the Marine Park, which may include some dredging operations.
5. [Great Barrier Reef Marine Park Regulations 1983](#) (GBRMP Regulations): Regulation 88RA limits granting permissions for dumping by providing that the Authority must not grant a permission for an activity if the Authority is satisfied that the activity would constitute or involve Prohibited Dumping.
6. The following Authority documents, as updated from time to time, are relevant to this policy:
  - a. Policies: Environmental Impact Management; Structures.
  - b. Position Statements: Aquaculture within the Marine Park; Translocation of Species in the Marine Park.
  - c. Guidelines: Use of Hydrodynamic Numerical Modelling for Dredging Projects in the Marine Park.
7. [Environment Protection and Biodiversity Conservation Act 1999](#) (EPBC Act): Approval under the EPBC Act may also be required depending on the likelihood of significant impacts to Matters of National Environmental Significance from a proposed action. Pursuant to section 37AB(1) of the GBRMP Act:
  - if a proposal to take an action is referred to the Minister for the Environment under Division 1 of Part 7 of the EPBC Act; and

- the action, or a component of the action, involves doing a thing that would be an offence against the GBRMP Act if done without a permission under the GBRMP Regulations;
- then the referral is taken to be an application made in accordance with the GBRMP Regulations for that permission.

A memorandum of understanding between the Department of the Environment and the Marine Park Authority guides the integration and application of the two assessment processes under the EPBC Act and GBRMP Act.

- 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of wastes and other Matter, 1972 (the London Protocol) limits the types of materials that may be considered for ocean disposal. Australia is party to the [London Protocol](#), which is administered by the Department of the Environment through the *Environment Protection (Sea Dumping) Act 1981* (the Sea Dumping Act). Under this Act, ocean disposal of waste considered too harmful to be released in the marine environment is prohibited and waste disposal is regulated through permits to ensure environmental impacts are minimised. Permits most commonly issued under the Sea Dumping Act are for dredging operations and the creation of artificial reefs. For sea dumping within the Marine Park, the Sea Dumping Act is administered by the Authority.
- [National Assessment Guidelines for Dredging \(2009\)](#) set out the framework for the environmental impact assessment and permitting of the ocean disposal of dredged spoil material. The Authority considers these guidelines during the assessment of applications for permissions to dispose of dredge spoil material in the Marine Park.
- [United Nations Convention on the Law of the Sea 1982](#) (UNCLOS), amongst other things, sets out the rights and responsibilities of coastal States such as Australia with respect to submarine cables. Article 79(2) of the UNCLOS (which also regulates submarine pipelines) provides that a coastal State may not impede the laying or maintenance of telecommunications cables subject to the right of the coastal State to take reasonable measures for (a) The exploration of the continental shelf and the exploitation of its natural resources; and (b) The prevention, reduction and control of pollution from pipelines. Note UNCLOS also has obligations relating to pollution from dumping (Article 210).
- [Telecommunications Act 1997](#) (Cth) provides protections for submarine cables. Schedule 3A is consistent with UNCLOS. In respect of Australia's continental shelf (excluding Australian territorial sea and State waters). UNCLOS provides that all States are entitled to lay submarine cables on the continental shelf subject to compliance with Article 79 of UNCLOS.
- If dredging or disposal activities occur within the Great Barrier Reef (Coast) Marine Park (Qld), a State marine park permission may be required. Additional Queensland Government approvals under the *Sustainable Planning Act 2009*, *Fisheries Act 1994*, *Nature Conservation Act 1992* and/or the *Coastal Protection and Management Act 1995* may also be required depending on the location and nature of the dredging/disposal works. This will include the *Sustainable Ports Development Act 2015*.

## Context

- The Marine Park was established as a multiple-use area, providing for protection, ecologically sustainable use, understanding and enjoyment. The Great Barrier Reef Region supports significant commercial industries with ports and shipping activities providing vital links in the production chain for many industries and vital services for regional centres.
- Economic growth is projected to continue in Queensland with a large proportion of this growth occurring adjacent to the Marine Park. This is recognised in the Reef 2050 Long-Term Sustainability Plan and the *Sustainable Ports Development Act 2015* (Qld). Population in the Great Barrier Reef catchment is expected to continue to grow at rates well above the national average for the foreseeable future. Both these drivers change land-use patterns in the catchment, including expanding the urban footprint to accommodate an increasing number of residents and increasing demand for infrastructure such as marinas and boat ramps and the need to expand port capacity to provide services.

15. Dredging and the disposal of dredge spoil material have occurred in the Great Barrier Reef Region since the establishment of ports along the Queensland coast beginning in the late 1800s. Most ports and associated dredging and disposal activities occur outside the Marine Park and within the Great Barrier Reef Region and/or Great Barrier Reef World Heritage Area.
16. Most dredging and disposal activities within the Marine Park are associated with port development to create and maintain accessibility which is vital to the regional economy. Dredging and disposal activities are also required for creating and maintaining all-tide access to infrastructure generated from tourism and recreational requirements.
17. Maintenance dredging and the disposal of maintenance dredge spoil material have been occurring at long-established ports for more than a century. The Authority recognises that maintenance dredging is essential from time to time for the safe and efficient operations of ports, marinas and boat and barge ramps.
18. The *Great Barrier Reef Outlook Report 2014* and the *Great Barrier Reef Region Strategic Assessment Report* highlighted the deteriorating condition of the ecosystem, especially in the inshore areas of the Region south of Cooktown. These inshore waters are generally where dredge spoil material has historically been permitted to be disposed. These reports highlighted the high risk to the ecosystem and heritage values from a range of factors including impacts from climate change, land-based runoff affecting water quality, impacts from fishing including illegal fishing as well as the disposal of dredge spoil material.
19. If inappropriately managed, dredging and disposal activities may impact areas of conservation value through processes such as degradation of water and sediment quality, changes to the hydrodynamic regime, smothering of benthic flora and fauna, translocation of species and removal of habitat. These risks continue to be managed through a range of management tools including detailed impact assessment, leading practice adaptive management and monitoring, multi-jurisdictional assessment and conditioning, comprehensive national guidelines and international protocols.
20. Impacts within the Marine Park do not operate in isolation but overlap and interact with each other. Their accumulation through time and over an ever-increasing area is diminishing the resilience of the ecosystem. Therefore, consideration of the potential indirect and cumulative impacts from dredging and disposal activities is relevant for future management of those activities.
21. The proposed method used for dredging is assessed by the Authority on a case-by-case basis to ensure that the most ecologically sustainable and safest outcomes occur.
22. In relation to the laying of pipes, cables and tubes, the Authority recognises that telecommunications facilities are essential to the functioning of government, the community at large and private sector organisations in the Marine Park. With the ever increasing use of internet and other high demand communications services, the need for submarine cables and communications facilities is also increasing.

## General principles

23. The Authority's preferred environmental outcome for the Great Barrier Reef is that new port development should be restricted to within current port limits and outside Commonwealth and state marine parks and a focus given to ensuring high environmental standards are in place. This is consistent with the Australian Government's preference as stated in the *Reef 2050 Long-Term Sustainability Plan*.
24. The Authority will consider the *National Assessment Guidelines for Dredging 2009* in all relevant permission application processes associated with the disposal of dredge spoil material in the Marine Park.
25. The Authority is unlikely to approve permissions for dredging and disposal of dredge spoil material if the proposed activities are likely to damage sensitive environments or significantly impact on a matter of national environmental significance.
26. The Authority is likely to impose conditions on permissions to require that the selection of a dredge spoil disposal site should provide the best overall environmental outcome recognising the high conservation value of the Marine Park. The Authority may impose conditions on permissions requiring the development

of a Long Term Management Plan for ongoing works including ongoing monitoring of the site and cumulative impact assessment.

## Specific principles

27. Permission for disposal in the Marine Park of dredge spoil material contaminated above the sediment quality high values (Table 4 in the National Assessment Guidelines for Dredging) is unlikely to be granted by the Authority.

### **Maintenance dredging and disposal**

28. The Authority recognises that maintenance dredging is necessary to ensure vessels have safe and reliable access to Great Barrier Reef Region ports.
29. The Authority will work with other government agencies and industry to continue developing innovative solutions for managing maintenance dredge spoil material through the maintenance dredging framework identified in the *Reef 2050 Long-Term Sustainability Plan*.
30. The Authority recognises that weather events such as storms and cyclones have the potential to increase sediment deposition (resulting in the need for maintenance dredging) and are beyond the ability of managing agencies or ports to control.
31. The Authority expects medium and large proposals, (as defined in the *National Assessment Guidelines for Dredging 2009*), to carry out maintenance dredging and/or disposal of maintenance dredge spoil material in the Marine Park to be accompanied by hydrodynamic modelling.
32. The Authority is likely to require a condition on a permission that the disposal of maintenance dredge spoil material in the Marine Park is to only occur at an Authority-approved dumping ground.
33. The Authority will consider, if requested, the inclusion of extra contingency volumes in maintenance dredging and disposal permissions to account for unexpected siltation of the shipping channels due to storms and cyclones.

### **Capital dredging and disposal**

34. The Authority recognises that capital dredging is necessary to create, lengthen, widen or deepen channels, basins, ports, berths and other areas such as swing basins, marinas, boat ramps and harbour areas.
35. The Authority must not grant a permission for an activity if the Authority is satisfied that the activity would constitute or involve prohibited dumping (see regulation 88RA of the GBRMP Regulations).
36. The definition of 'prohibited dumping' does not include burying a pipe, cable, or tube with capital dredge spoil material if the material had been excavated to create the trench in which the pipe, cable or tube was laid. This exclusion is intended to allow the Authority to consider granting permissions for disposal of capital dredge spoil material for the purposes of infrastructure, for example those for water, telephone or electricity. It is not the Authority's intention to inadvertently prohibit the operation and development of necessary national and international communications infrastructure or other community infrastructure.
37. Capital dredge spoil material does not include material excavated as a result of dredging carried out for the sole purpose of maintaining an existing channel, basin, port, berth or other area for its intended use (i.e. maintenance dredging) or to protect human life or property. This exclusion is intended to allow the Authority to consider granting permissions for maintenance dredging or for emergency situations.
38. The disposal of very small scale (less than 15,000 cubic metres) amounts of capital dredge spoil material does not comprise prohibited dumping; however an environmental assessment through a permission application is still required for disposing of these small scale volumes in the Marine Park. This recognises the need to continue to allow for small boat ramps as the population within the Great Barrier Reef catchment continues to grow. This also allows for reuse of sand that is sourced from outside of the Marine Park for beach nourishment.

## Implementation

39. This Policy will take effect from the time it is approved by the Marine Park Authority.
40. This Policy will assist the agency with the implementation of several commitments outlined in the *Reef 2050 Long-Term Sustainability Plan* and the *Great Barrier Reef Region Strategic Assessment Program Report*.

## Definitions

### Capital dredging

Means dredging for navigation, to create new or enlarge existing channel, port, marina and boat harbour areas. Dredging for engineering purposes, to create trenches for pipes, cables, immersed tube tunnels, to remove material unsuitable for foundations and to remove overburden for aggregate.

### Capital dredge spoil material

Means material excavated as a result of dredging:

- (a) to create new channels, basins, ports, or other areas; or
- (b) to enlarge or deepen existing channels, basins, ports, berths or other areas; or
- (c) to remove material unsuitable for foundations; or
- (d) to create trenches for pipes, cables or tubes; or
- (e) for any other purpose incidental to creating a void.

However, **capital dredging** does not include dredging carried out for the sole purpose of:

- (a) maintaining an existing channel, basin, port, berth or other area for its intended use; or
- (b) protecting human life or property.

### Great Barrier Reef Marine Park (Marine Park)

Means the Great Barrier Reef Marine Park established by the *Great Barrier Reef Marine Park Act 1975*.

### Great Barrier Reef Region

Means the Great Barrier Reef Region established by the *Great Barrier Reef Marine Park Act 1975*.

### Long Term Management Plan (LTMP)

A LTMP is a strategic document, which identifies all opportunities to reduce the need to dispose to sea (including land disposal), minimise the impact of dredged material disposal on the aquatic environment, and to remove sources of contamination in the dredge material. A LTMP sets performance indicators and monitoring to achieve improvements.

### Maintenance dredging

Means dredging to ensure that channels, berths or other port areas are maintained at their designed dimensions.

### Maintenance dredge spoil material

Means material excavated as a result of maintenance dredging.

### Matter of national environmental significance

Means for the purposes of the Marine Park one of the seven matters of national environmental significance listed in Division 1, Part 3 of EPBC Act, which are:

- (a) world heritage properties;
- (b) national heritage places;
- (c) wetlands of international importance (listed under the Ramsar Convention);
- (d) listed threatened species and ecological communities;
- (e) migratory species;
- (f) Commonwealth marine areas; and
- (g) the Great Barrier Reef Marine Park.

### Prohibited dumping

Means dumping, in the Marine Park, an amount of capital dredge spoil material that prior to its excavation was, in situ, more than 15 000 cubic metres in volume. **Prohibited dumping** does not include burying a pipe, cable or tube with capital dredge spoil material if the material had been excavated to create the trench in which the pipe, cable or tube was laid.

### Sensitive environments

Sensitive environments are areas that contain populations or assemblages of organisms, or habitats, that are considered to have significant conservation and/or cultural heritage values. Examples may include dugong protection areas, fish spawning aggregation sites, seagrass beds, breeding areas, and diverse, rare or very old coral assemblages.



## Supporting information

1. *National Assessment Guidelines for Dredging (2009)*. Commonwealth of Australia, Canberra. 81 pp.
2. Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Outlook Report 2014*, GBRMPA, Townsville. <http://www.gbrmpa.gov.au/managing-the-reef/great-barrier-reef-outlook-report>
3. Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Region Strategic Assessment Report*, GBRMPA, Townsville. <http://www.gbrmpa.gov.au/managing-the-reef/strategic-assessment>
4. Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Region Program Report*, GBRMPA, Townsville. <http://hdl.handle.net/11017/2860>
5. Commonwealth of Australia, 2015, *Reef 2050 Long-Term Sustainability Plan*, Department of the Environment, Canberra. <http://www.environment.gov.au/marine/gbr/publications/reef-2050-long-term-sustainability-plan>

## Further information

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