



Dredging and Spoil Disposal Policy

To provide a transparent, consistent and contemporary approach to environmental impact management of dredging and spoil disposal in the Great Barrier Reef Marine Park.

1. General

- 1.1 Proposals for dredging and spoil disposal in the GBRMP will be assessed in accordance with GBRMPA's policy for Environmental Impact Management.
- 1.2 Proponents must comply with the *National Ocean Disposal Guidelines for Dredged Material 2002*.
- 1.3 Dredging and spoil disposal are unlikely to be approved if these activities may damage sensitive environments.
- 1.4 The methods used for dredging should minimise the impact on the environment.
- 1.5 The selection of disposal site is to provide the best overall environmental outcome recognising the high conservation value of the GBRMP. The proponent may be required to prepare a Long Term Management Plan for ongoing works.
- 2.3 Dredge spoil, which is contaminated above the Maximum Levels defined in the *National Ocean Disposal Guideline for Dredged Materials 2002*, must **not** be disposed of to the GBRMP.
- 2.4 An environmental levy based on environmental risk alternatives and cubic metre of spoil disposed to the GBRMP will be charged to facilitate our general principles of user pays.
- 2.5 The environmental levy (section 2.4) will not apply to Queensland Department of Transport and Queensland ports that are party to a program of environmental enhancement and management activities that result in ongoing improvement to dredging and dredge material management practices in the GBRMP.

2. Specific

- 2.1 Disposal of dredged spoil to the marine environment in the GBRMP is to only occur at a GBRMPA approved dumping ground.
- 2.2 Annual maintenance dredge spoil volumes for each spoil ground in the GBRMP will be capped to a limit, which

will be determined by GBRMPA in consultation with the relevant port authority. In emergency situations the annual dredge volume may be revised.

Background

Background information

Dredging has occurred in the Great Barrier Reef Region since the establishment of ports along the Queensland coast. For example, dredging for navigational purposes was first initiated in Townsville in 1883 and in Cairns in 1888. Most large scale dredging and spoil disposal within the GBRMP is associated with ports who

undertake such works to maintain port accessibility which is important to the regional economy.

Furthermore, with the expansion of the tourist industry and increasing recreational requirements, the demand for all-tide access to facilities such as boat ramps, canal developments and marinas has rapidly increased.

Dredging and the disposal of the associated spoil within and adjacent to the Great Barrier Reef Marine Park (GBRMP) and the Great Barrier Reef World Heritage Area (GBRWhA) have become contentious issues for the GBRMPA, stakeholder groups and the general public. If inappropriately managed, dredging 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. Such processes need to be carefully managed to ensure any adverse effects are prevented or confined to areas of low conservation value. The establishment of a formal dredging policy is seen as an essential element in the successful management and mitigation of environmental impacts associated with dredging and sea dumping in the GBRMP and GBRWhA.

Most large-scale dredging and spoil disposal associated with the activity of ports in Queensland occurs in the GBRWhA (such as Townsville, Mackay, Hay Point and Gladstone) and this is outside the direct legislative responsibility of the GBRMPA. Environment Australia (EA) is the lead Commonwealth agency for proposals which occur in the GBRWhA. EA will continue to liaise with GBRMPA and will have regard to this policy.

There is one large dredging project currently permitted in the GBRMP (Cairns port is permitted 500,000 cu m pa) and several smaller scale capital dredging and spoil disposal projects have been completed for marinas such as Nelly Bay Boat Harbour.

Some methods of dredging are preferred because they have less environmental impact. For example, a cutter suction dredge is generally considered preferable to a dragline, bulldozer or grab. Mobile suction dredges have



Silt curtains can be used to minimise impacts of turbidity and sediment on adjacent sensitive environments.

the potential to impact on some species, such as turtles. While such instances are rare, additional measures such as fitting a turtle-deflecting device to the head of a dredge can be used to minimize risk.

GBRMPA has developed these policies based on historical Marine Park Authority decisions, best available scientific and management information, community consultation and current GBRMPA practice. In the specific case of a proposed environmental levy based on dredge spoil disposal, GBRMPA is keen to implement a new fee for this activity because of our general principles of user pays and equity to all users of the Marine Park.

Legislation

Most of the proposals examined by GBRMPA are located in the inshore areas of the GBRMP, often adjoining and sometimes straddling Federal, State and Local Government jurisdictions. Relevant legislation includes:

Great Barrier Reef Marine Park Act 1975. The object of this Act is to make provision for the establishment, control, care and development of a marine park in the Great Barrier Reef region. The main sections of the Act which apply to structures include Discharge of waste (Section 38J) , Removal of property (Section 38H), Restoration of the environment (Section 61A). Regulations may be made regulating or prohibiting acts in the Marine Park (Section 66).

Under section 38 of the *Great Barrier Reef Marine Park Act 1975* it is an offence to carry out an operation for the recovery of minerals

in the GBRMP, which may include some dredging operations. There is also the *Great Barrier Reef Region (Prohibition of Mining) Regulations 1999* which were gazetted on the 23 December 1999. These regulations identify “mining operations” which include ‘operations for the recovery of minerals’ as a prohibited activity in the Great Barrier Reef Region but outside the GBRMP.

Great Barrier Reef Marine Park Regulations 1983. Regulation 117 states that GBRMPA must make an assessment prior to making a decision to grant a permissible activity in the Great Barrier Reef Marine Park. Part 8 – Environmental Management Charge, contains specific charges per quarter for structures and discharge of waste.

Environment Protection and Biodiversity Conservation Act 1999. An approval under Part 9 of the EPBC Act is not required for an action (where that action would otherwise need an approval under the EPBC Act) if the action is occurring in the GBRMP and the person is authorized to take that action under a permit, zoning plan or plan of management issued or



Land-based disposal (or beach nourishment) of dredged sand is generally preferred to sea dumping.

made under the GBRMP Act 1975. GBRMPA is, however, required to seek and consider any advice of the Commonwealth Minister for the Environment and Heritage in respect of such an action, prior to making any permit decision.

Environment Protection (Sea Dumping) Act 1981 employs measures to control unregulated dumping at sea by a vessel, platform, aircraft or other man-made structures.



Courtesy of Port of Brisbane Corporation.

Large suction dredge vessels are used to maintain navigation channels of Queensland ports.

Definitions

Capital Dredging

Dredging for navigation, to enlarge existing channel, port, marina and boat harbour areas or to create new ones. 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.

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), minimize the impact of spoil disposal on the aquatic environment, and to remove sources of contamination in the dredge spoil. A LTMP sets performance indicators and monitoring to achieve improvements.

Maintenance Dredging

Dredging to ensure that previously dredged channels, berths or construction works are maintained at their designated dimensions.

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.

Spoil Disposal

The relocation of dredge spoil from the dredging site to a designated disposal site. Disposal sites may include marine or land based receiving facilities.



Barge mounted grabs have been used for dredging but they can create turbid plumes.

References

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Further Information

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Review

This policy will be reviewed in October 2007.

October 2004



Australian Government

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