



Dredging coral reef habitat – operating a facility or carrying out works for the development of marine infrastructure

June/2016

Objective

To provide guidance to delegates when considering an application for permission for operating a facility or carrying out works for new marine infrastructure or the expansion of existing marine infrastructure that includes undertaking dredging of living coral reefs.

Target audience

Agency staff; applicants for permission for operating a facility or carrying out works for the development of new marine infrastructure in the Marine Park or the expansion of existing marine infrastructure that includes undertaking dredging of living coral reefs.

Purpose

1. To ensure that development of new marine infrastructure or the expansion of existing marine infrastructure does not have an adverse environmental impact on coral reef habitats in the Marine Park.

Related legislation/standards/policy

2. This policy deals specifically with the dredging of living coral reefs and does not replace existing policy relating to impacts on coral more broadly. This policy does not remove existing requirements for activities requiring permission in the Marine Park, to avoid, mitigate and manage impacts in close proximity to sensitive environments, such as coral reefs.
3. [Great Barrier Reef Marine Park Act 1975](#) (GBRMP Act): provides that the Authority may prepare and publish plans and policies about the ways in which the Authority intends to manage the Marine Park or perform its other functions (Section 7(4)).
4. [Great Barrier Reef Marine Park Regulations 2019](#) (GBRMP Regulations): provide for the considerations in deciding whether or not to grant a permission – in relation to an application for use or entry to the Marine Park.
5. [Great Barrier Reef Marine Park Zoning Plan 2003](#): provides that in some zones carrying out works including dredging and the operation of a facility including building the facility within the Marine Park requires permission from the Authority.
6. The following Authority documents, as updated from time to time, are relevant to this policy:
 - a. Policies: Environmental Impact Management; Structures; Dredging and spoil disposal policy
 - b. Guideline: Translocation of species in the Marine Park.
7. [Environment Protection and Biodiversity Conservation Act 1999](#) (EPBC Act) and associated significance guidelines for matters of national environmental significance.

Context

8. Coral reefs are the cornerstone of the Great Barrier Reef ecosystem and its evolutionary history. Their species diversity, habitat value and natural beauty are major contributors to the Reef's outstanding universal value as a world heritage area. The Great Barrier Reef is the world's largest coral reef ecosystem, ranging over 14 degrees in latitude and comprising more than 2900 separate coral reefs.

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9. The condition and trend of coral reef habitats within the Great Barrier Reef Marine Park have declined over the past 30 years as highlighted in the 2014 Outlook Report, more recently in the Reef 2050 Long-Term Sustainability Plan (the Reef 2050 Plan) and subsequent monitoring data.
10. The overall status of coral reef habitats is generally measured by assessing the proportion of a reef covered by living coral — known as coral cover. A 2012 analysis of the Australian Institute of Marine Science's long-term dataset showed hard coral cover had significantly declined between 1987 and 2012. According to the 2012 analysis the decline has been most severe on reefs south of latitude 20 degrees (near Bowen) particularly since 2006. More recent data from the Australian Institute of Marine Science shows an overall improvement in coral cover from 2012 to 2015, particularly in the southern third of the Reef, but not to 1986 levels.
11. These declines in coral cover are largely the result of a combination of cyclones, crown-of-thorns starfish outbreaks and previous mass bleaching events (1998 and 2012), with insufficient time for recruitment and growth between these disturbances. Elevated loads of nutrients, sediments and pesticides in land-based run-off are likely to have affected recovery periods in inshore areas. While coral reefs have a natural ability to recover from periodic disturbances, corals exposed to chronic pressures, such as poor water quality, will have less resilience.
12. The most recent mass bleaching event occurred in early 2016 when sea surface temperatures were well above average throughout the Great Barrier Reef due to a combination of climate change, the strong El Niño and local weather patterns. February and March 2016 were the hottest months on record on the Reef (since records began in 1900), resulting in mass bleaching, with an estimated 93 per cent of reefs experiencing bleaching of some kind. In general, there was a gradient of decreasing severity of bleaching from north to south along the Reef.
13. The 2016 bleaching event, together with the declines in coral cover over the preceding 30 years highlight the need to protect coral reef habitats. The 2014 Outlook Report noted that all actions, whether big or small, to reduce the threats to the Reef will help restore condition and will improve its outlook. The Reef 2050 Plan highlights the need to restore resilience of ecosystems in the face of current and future threats; for example, from climate change. A resilient ecosystem refers to the capacity of that ecosystem to either resist (absorb) an impact or to recover from that impact. The Authority recognises that in view of the recent severe bleaching it does not want to adversely affect those parts of the Reef that remain in good condition by allowing any dredging of coral.
14. This policy is consistent with the Authority's *Great Barrier Reef Region Strategic Assessment Program Report* and contributes to the following commitments under that report:
 - a. Streamlining, harmonising and enhancing management tools
 - b. Further develop operational activities that support Reef recovery and build resilience
 - c. Develop guidance material to assist in determining the acceptability of impacts.
15. This policy is also linked to the recommendation in the Strategic Assessment Report 'promote a strategic approach to the development and operation of marinas and other access infrastructure along the Great Barrier Reef coast' (REC12).
16. This policy is consistent with the *Reef 2050 Long-Term Sustainability Plan* and contributes to the following actions under the plan:
 - a. 'avoid, mitigate or offset impacts on marine and coastal ecosystems to restore Reef Resilience and ecosystem health' (EHA18)
 - b. 'continue to refine and improve guidance and procedural requirements for avoiding, mitigating and offsetting impacts to the Reef from industry activities using standardised policies, procedures and guidelines' (EBA11).

General principles

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17. The Authority's preferred environmental outcome for the Great Barrier Reef is that the development of new marine infrastructure or expansion of existing marine infrastructure should not reduce coral health, cover and diversity. This is consistent with the Australian Government's preference as stated in the *Reef 2050 Long-Term Sustainability Plan*.
18. The Authority recognises the need to provide clear guidance and procedural requirements to proponents:
 - a. on the standards and thresholds that will be taken into account through the assessment process
 - b. for avoiding, mitigating and offsetting direct impacts on coral reef habitats using standardised policies, procedures and guidelines.
19. The Authority recognises, that given the recorded decline of coral cover in the Marine Park and the generally poor condition of the southern inshore regions of the Great Barrier Reef Region, any activity that requires the dredging of living coral assemblages would constitute a significant impact on a value of the Marine Park.
20. The Authority will minimise, where possible, the cumulative impacts affecting coral reef habitats by avoiding direct impacts that are within its legislative control.

Specific principles

21. The Authority's priority for protecting coral reef habitats when considering new marine infrastructure or the expansion of existing marine infrastructure will be to avoid direct impacts including the dredging of coral reef habitats.
22. The Authority is unlikely to grant permissions that involve capital dredging of living coral reef (which is proposed to remove both living coral and the underlying reef structure) for new marine infrastructure, or the expansion of existing marine infrastructure.
23. The Authority does not intend that this policy will affect the operation of existing permitted facilities including maintenance dredging of existing permitted facilities. However, where an applicant applies for a change to an existing permitted facility, then this policy will be considered.

Implementation

24. This Policy will take effect from the date it is approved.
25. The Authority will consider this policy in all relevant applications for permissions for dredging living coral reef (which is proposed to remove both living coral and the underlying reef structure) for new marine infrastructure or the expansion of existing marine infrastructure.

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.

Facility

As defined in subsection 3(A)(9) of the *Great Barrier Reef Marine Park Act 1975*, includes a building, a structure, a vessel, goods, equipment or services.

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*.

Maintenance dredging

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

Marine Infrastructure

Includes but is not limited to boat harbours, barge channels, boat ramps, ferry landings and marinas; but excludes pontoons and jetties.

New marine infrastructure means marine infrastructure that has not been granted a Marine Park permission and which has yet to be built in the Marine Park.

Existing marine infrastructure means marine Infrastructure that has been granted a Marine Park permission and has been built in the Marine Park.

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 the *Environment Protection and Biodiversity Conservation 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
- (g) the Great Barrier Reef Marine Park.

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

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Further information

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