



Australian Government

Great Barrier Reef
Marine Park Authority

CONSULTATION DRAFT

DRAFT REGULATION IMPACT STATEMENT

**Banning the disposal of capital dredge spoil
material in the Great Barrier Reef Marine Park**

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Introduction

This draft Regulation Impact Statement (RIS) has been prepared by the Commonwealth Great Barrier Reef Marine Park Authority (GBRMPA). The purpose of this document is to assist the public in making a submission on a regulatory proposal to ban the dumping of capital dredge spoil material in the Great Barrier Reef Marine Park (Marine Park). The Regulation will prevent the granting of permissions, by GBRMPA, for the activity under the *Great Barrier Reef Marine Park Zoning Plan 2003*.

This draft RIS has been developed in accordance with the Australian Government Guide to Regulation, March 2014, issued by the Office of Best Practice Regulation (OBPR) in the Department of the Prime Minister and Cabinet, and in consultation with the Department of the Environment's Deregulation Unit and OBPR.

This draft RIS will be updated once public submissions close and will be finalised in accordance with the Australian Government Guide to Regulation, March 2014, issued by OBPR.

The Great Barrier Reef

The Great Barrier Reef is an Australian icon and one of the most precious ecosystems on Earth. It is a world heritage property, recognised internationally for its outstanding universal value. Containing a maze of reefs and islands, it stretches more than 2300 kilometres along the Queensland coast (Map 1). It is the world's largest coral reef ecosystem, rich in biodiversity.

Aboriginal and Torres Strait Islander peoples are the Traditional Owners of the Great Barrier Reef area. The Australian Government acknowledges the Reef's Traditional Owners, past and present, and their unique and continuing connection with the area.

The Great Barrier Reef is critical to the cultural, economic and social wellbeing of the more than one million people who live in its catchment, and is valued by the national and international community. It is a marine protected area, conserving the Reef's environment and supporting a wide range of activities, including tourism, fishing, recreation, traditional use, research, defence, shipping and ports. The Reef's environment helps bring billions of dollars to Australia's economy each year and supports almost 70,000 jobs.

Inshore habitats in the northern third of the Marine Park, north of Cooktown, are believed to be in good or very good condition, due in large part to the relatively undisturbed catchment and a lack of development. Environmental assessments indicate the Reef is under pressure from a range of human activities, especially in the inshore waters south of Cooktown where declines in water quality, particularly excess sediment and nutrient levels, are reducing the system's resilience.

While the effects of dredge disposal are typically local in their effect, everyone's actions, whether big or small, to reduce threats and help restore its condition will improve the Reef's outlook. Combined, they will make the Reef more able to recover from the legacy of past actions and better able to withstand those predicted to threaten its future. The proposed new regulation will prevent further impacts to the Reef from capital dredge spoil disposal actions.



Timeline

On 10 November 2014, the Minister for the Environment, the Hon Greg Hunt MP, announced that he would be implementing a regulatory solution to ban the disposal of capital dredge spoil material in the Marine Park¹.

On 3 December 2014 the Marine Park Authority Board, responding to the Minister's policy direction, gave in-principle approval for a regulation to be drafted to prevent the granting of permissions for the disposal of capital dredge spoil material in the Great Barrier Reef Marine Park².

On 24 January 2015, the Minister for the Environment issued orders for the creation of regulations for the Great Barrier Reef Marine Park Authority to put an end to the dumping of capital dredge material in the Marine Park³.

Existing regulatory arrangements

The disposal of capital dredge spoil in the Marine Park is an activity that requires environmental impact assessment and permitting⁴. In addition to Marine Park-specific legislation, there are international and Commonwealth laws that control dumping of dredged material at sea to reduce and manage the associated impacts on the marine environment.

International

The 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, 1972 limits the types of materials that may be considered for ocean disposal. The aims of this Protocol are to protect and preserve the marine environment from all sources of pollution and to prevent, reduce and eliminate pollution by controlling the dumping of wastes and other materials at sea. Australia is party to this Protocol, which is administered by the Department of the Environment through the *Environment Protection (Sea Dumping) Act 1981* (the Sea Dumping Act).

Commonwealth

Great Barrier Reef Marine Park Act 1975 (GBRMP Act): The *Great Barrier Reef Marine Park Zoning Plan 2003* requires that the disposal of dredge spoil within the Marine Park requires permission from the Authority. This is achieved through the assessment of an application for the activity including the consideration of mandatory and discretionary considerations as outlined in the *Great Barrier Reef Marine Park Regulations 1983*. The purpose of GBRMPA's Dredging and Spoil Disposal Policy (2010) is 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 Ministerial media release 10 November 2014 'We're already putting an end to dumping in the Great Barrier Reef Marine Park' <http://www.environment.gov.au/minister/hunt/2014/mr20141110.html>

² Marine Park Authority Board Report Meeting 235 <http://www.gbrmpa.gov.au/about-us/our-board/summary-of-marine-park-authority-decisions/board-report-meeting-236>

³ Ministerial media release 24 January 2015 'Orders given to ban dumping of capital dredge material in Marine Park' <http://www.environment.gov.au/minister/hunt/2015/mr20150124.html>

⁴ Capital dredge spoil is the result of capital dredging activities. The term capital dredging is used to refer to dredging that is undertaken to create, lengthen, widen or deepen channels, berth areas, swing basins, marinas and harbour areas.

Environment Protection (Sea Dumping) Act 1981 (Sea Dumping Act): Australia regulates the loading and dumping of waste at sea under the Sea Dumping Act. The aim is to minimise pollution threats by: prohibiting ocean disposal of waste considered too harmful to be released in the marine environment and regulating permitted waste disposal to ensure environmental impacts are minimised. Permits are required for all sea dumping operations. Permits are most commonly issued for dredging operations. For sea dumping within the Marine Park, the Sea Dumping Act is administered by GBRMPA.

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act): Approval under the EPBC Act for the dumping of capital dredge spoil material in the Marine Park may be required depending on the scale of potential impacts to matters of national environmental significance. The EPBC Act decision is made by the Minister for the Environment or his delegate within the Department of the Environment. Although GBRMPA advice is considered in this decision as part of arrangements under a Memorandum of Understanding between GBRMPA and the Department, GBRMPA is not the decision maker. When an activity requires an EPBC Act approval, the decision on the EPBC approval must be made before GBRMPA is able to make a decision on the same activity.

The National Assessment Guidelines for Dredging (2009) set out the framework for the environmental impact assessment and permitting of ocean disposal of dredged material. The framework includes (i) evaluating alternatives to ocean disposal, (ii) assessing loading and disposal sites, (iii) assessing potential impacts on the marine environment and other users, and (iv) determining management and monitoring requirements. The Guidelines are intended to provide greater certainty about the assessment and permitting process as well as provide some guidance on opportunities for longer-term strategic planning. They also consider the range in size of differing dredge disposal activities.

There is also a range of Queensland legislation that applies to the disposal of capital dredge spoil material in State Coastal Waters.

Assessing the challenge

The Reef retains its outstanding universal value. It is the premier reef system in the world. In recent years there has been significant improvement in water quality indicators including an 11 percent reduction in sediments, 15 percent reduction in nitrogen and 28 percent reduction in pesticides. However, the *Great Barrier Reef Outlook Report 2014* and the *Great Barrier Reef Region Strategic Assessment Report*⁵ highlighted the challenges to the ecosystem, especially in the central and southern inshore areas of the Region. While noting the heritage values for these areas have been impacted by a number of factors associated with urban expansion, agricultural practices and development, these reports also highlight the importance of mitigating the impacts to the Reef.

Water quality was highlighted as a key risk to the Great Barrier Reef in both the 2014 Outlook Report and the Strategic Assessment Report. The 2014 Outlook Report concluded

⁵ 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>
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>

that “Greater reductions of all threats, at all levels, Reef-wide, regional and local, are required to prevent the projected declines in the Great Barrier Reef and to improve its capacity to recover.” This proposal addresses one of these challenges: the disposal and subsequent resuspension of capital dredge spoil⁶.

The direct and flow-on effects of disposal of dredge material in the Marine Park generally occur in the central and southern inshore areas that are already under pressure from an accumulation of impacts. The disposal of dredge material affects the condition of values at a local scale, primarily water quality, adding to existing challenges to the southern and central inshore ecosystems.

Potential impacts from the disposal of capital dredge spoil material depend on a number of factors including the volume and composition of the dredge material; oceanographic conditions in and around the disposal location; proximity of the disposal location to sensitive species and habitats; and the timing and frequency of dredge material disposal. Potential local impacts include the burial or smothering of benthic fauna and flora, degradation of water quality, and losses and modification of habitat.

Dumping of dredge spoil material may redistribute some sediments and nutrients into the water column. It is the effect of the redistribution and resuspension of significant quantities of fine sediments which is a key concern. Increases in turbidity at a local level may be caused by fine sediments in suspension. Fine sediments may come from the land and from the seafloor at the local level and may be resuspended by ocean currents, freshwater runoff, shipping and dredging activity.

Increases in turbidity may result in decreases in light penetration. Increased turbidity also affects coral growth, structure and survival. To reduce any potential pressure on the ecosystem, every effort should be made to reduce the amount of fine suspended sediment that is generated by human activities.

Past Marine Park capital dredge disposal permits

The amount of capital dredge spoil material that requires disposal is directly linked to major capital dredging campaigns, usually linked to port developments. The worldwide trend towards longer, deeper draft ships creates demand for wider, deeper channels and the associated need for dredging and infrastructure. Since 2000, GBRMPA has permitted the uncontained disposal of capital dredge spoil within the Marine Park on five occasions. In addition a sixth permission was granted for Great Keppel Island where all material will be contained in geotextile bags that will be use to form a rock wall (Table 1).

⁶ The impacts from the disposal of maintenance dredge spoil material will be addressed through other actions, including the master planning processes of ports under the Queensland Government’s Ports Strategy. Maintenance dredging is necessary to ensures vessels have safe and reliable access to our ports. Over time, sand and mud builds in shipping channels, potentially creating risks to ships and environmental hazards in the event of accidents. Maintenance dredging removes this material to ensure the channels can continue to be safely used. This practice has been occurring at long-established ports for more than a century, meaning a longer-term approach is required to reduce disposal in the Marine Park. Through master planning of ports, under the Queensland Government’s Ports Strategy, GBRMPA will continue to investigate options for reducing volumes of maintenance dredge material.

Table 1. Details of Marine Park capital dredge spoil material permits from 2000–2014

*GBRMPA also granted permits under the Sea Dumping Act for these activities. EPBC Act approvals were also granted for four of them.

Permit No. and Permittee G=GBRMP Permit*	Location	Marine Park Zone	Permitted volume (m ³)	Comments
Ports Corporation of Queensland – G05/13306.1	Hay Point	General Use Zone	9,000,000	Unconfined Ocean Disposal. Permit granted 12/12/2005 Works completed in 2008.
Ports Corporation of Queensland – G08/25493.1	Abbot Point	General Use Zone	280,000	Unconfined Ocean Disposal. Permit granted 11/03/2008 Works completed in 2008.
BM Alliance Coal Operations Pty Ltd – G10/16868.1	Hay Point	General Use Zone	275,000	Unconfined Ocean Disposal. Land disposal located outside the Marine Park. Permit granted 3/3/2010 Works completed in 2012
State of Queensland – G12/34915.1	Half Tide Boat Ramp (Hay Point)	General Use Zone	17,000	Unconfined Ocean Disposal. Permit granted 3/5/2012 Works completed in 2013
North Queensland Bulk Ports – G14/34897.1	Abbot Point	General Use Zone	3,000,000 Works have not commenced	Unconfined Ocean Disposal. On hold pending proposal to dispose on land and outcomes of court case. Permit granted 31/1/2014

Growth in Great Barrier Reef ports is highly dependent on global economic (e.g. demand and price for minerals and resources) and technological factors (e.g. increases in ship draft). The Strategic Assessment Report noted the demands for port expansion and in particular dredging were expanding over much of the past decade, driven principally by growth in the resources sector. These demands are now declining as a result of proposal withdrawals and, in particular, government direction.

Desired outcomes of Government action

The desired outcomes from this proposal are:

- to improve water quality in the Marine Park;
- to increase protection and conservation of the plants and animals of the Marine Park, including protected species; and therefore,
- to improve the Great Barrier Reef’s overall World Heritage values.

The *Great Barrier Reef Marine Park Act 1975* makes the Australian Government responsible for the protection and conservation of the Great Barrier Reef Marine Park and makes GBRMPA responsible for assisting in meeting Australia’s international responsibilities in relation to the environment and protection of world heritage (especially Australia’s responsibilities under the World Heritage Convention) (Part 1, Section 2A(2c) of the Act).

Additionally, in its management of the Great Barrier Reef World Heritage Area, Australia has

specific obligations under Article 4 of the World Heritage Convention:

Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the... natural heritage referred to in [Articles 1](#) and [2](#) and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.

Proposal to achieve the desired outcomes

GBRMPA considers that a key action to assist with achieving the desired outcomes is to implement a regulation to ban the dumping of capital dredge spoil material in the Great Barrier Reef Marine Park⁷. To achieve the intent of banning the disposal of capital dredge spoil material in the Marine Park, GBRMPA will no longer grant permissions for the activity.

The intention of the proposed regulation is that all future disposals into the Great Barrier Reef Marine Park of capital dredge spoil material should be banned from the date the regulation comes into effect (and include permissions that have already been granted for uncontained disposal).

The regulation should provide that

- there shall be no further disposal of capital dredge material in the Great Barrier Reef Marine Park from the date the regulation comes into effect.
- the Authority must not grant a permission for conduct that includes dumping of all and any capital dredge spoil material in the Great Barrier Reef Marine Park;
- the ban apply to existing permissions for conduct that includes uncontained disposal of capital dredge spoil material in the Great Barrier Reef Marine Park where they have not yet expired;
- the definition of capital dredge spoil material should not include amounts from very small scale dredging programs (less than 15,000 cubic metres), for example, those associated with an approach to a small boat ramp, reuse of sand for beach nourishment; and
- the definition of dumping should not include the burying of a cable, pipeline or tunnel for the purposes of critical infrastructure for islands, for example, those for water, telecommunications or electricity.

Rationale

The independent assessment of management effectiveness carried out as part of the Strategic Assessment found that Marine Park zoning provided a high level of certainty for some activities (such as extractive use), but does not provide explicit guidance on where many activities not regulated by the Zoning Plan can be carried out. The assessment

⁷ The proposal does not include the disposal of maintenance dredge spoil material because GBRMPA believes it is best dealt with through other actions, including the master planning processes of ports under the Queensland Government's Ports Strategy.

considered that greater certainty was required to inform where and how ports can operate within and adjacent to the Region. The proposed regulation would provide this increased level of certainty within the Marine Park.

GBRMPA's 2014 Outlook Report concluded that economic growth is projected to continue in Queensland with a large proportion of this growth occurring in and adjacent to the Marine Park. 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.

This report also highlighted that through management tools such as regulations, zoning plans, plans of management, permits and compliance, management agencies will continue to set and refine the environmental standards necessary to achieve the desired goals, outcomes and targets for the Reef's values.

The 2014 Queensland Ports Strategy sets out the Queensland Government's intention to contain development to five existing major ports four of which are in the Great Barrier Reef Region — Port of Gladstone, ports of Hay Point and Mackay, Port of Abbot Point and Port of Townsville. The limitation on the number of port areas will maximise efficiencies and economic outcomes, while minimising environmental impacts. The Strategy includes a commitment to prohibit capital dredging for the development of any additional deepwater port facilities outside of the long-established major port areas.

The proposed regulation reflects the Australian Government's commitment to ending the long-established practice of dumping capital dredge spoil material in the Marine Park. The Marine Park encompasses 99 per cent of the Great Barrier Reef World Heritage Area. The remaining one per cent is mainly comprised of port areas which are the responsibility of the Queensland government and which they have advised they will address separately. These ports come under the jurisdiction of the Queensland Government. At the time of the proclamation of the Marine Park, these areas were excluded in recognition that ports were already operating in these areas. The Australian Government considers that it is most appropriate to regulate the ban on disposal of capital dredge spoil material in the Marine Park through Commonwealth legislation under the *Great Barrier Reef Marine Park Act 1975*.

The proposal partially implements several commitments in GBRMPA's Great Barrier Reef Region Program Report, which was endorsed by the Minister for the Environment in August 2014⁸:

Streamlining, harmonising and enhancing regulatory tools

- Promote a strategic approach to the development and operation of marinas and other access infrastructure along the Great Barrier Reef coast (REC12)

Improving certainty

- Support development of a Queensland ports strategy that concentrates port activity to long-established major port areas in Queensland and encourage port

⁸ Great Barrier Reef Marine Park Authority 2014, Great Barrier Reef Region Program Report, GBRMPA, Townsville. <http://www.gbrmpa.gov.au/managing-the-reef/strategic-assessment>

master planning (in line with REC11)

This proposal also significantly addresses recommendation R5 from the World Heritage Centre / IUCN Monitoring Mission Report⁹, where there was an expectation that the Strategic Assessment would lead to:

- *Spatial policies that will identify appropriate and limited locations and standards for coastal development, and also identify areas that should not be subject to development, and which will provide greater business certainty regarding development proposals and community confidence and understanding of future development scenarios.*

Net benefits

This proposal safeguards the inshore northern third of the Marine Park (which is in good and very good condition) into the future from the potential impacts of disposing of capital dredge spoil material.

Together with other actions from Commonwealth, Queensland and local governments, industries and the community, this proposal is a valuable step to halt and reverse the any possible local impacts on the health and condition of the central and southern inshore waters of the Marine Park, particularly water quality. The primary activity in the improvement of water quality directly is through the reduction of sediments, nitrogen and pesticides.

Improvements in ecosystem condition, health and resilience in these areas of the Great Barrier Reef will benefit individuals, community groups (such as recreational boating clubs), and business (including tourism, commercial and charter fishing) that rely on a healthy and resilient ecosystem.

Impact on businesses

The proposed regulation will impact on businesses that undertake projects that intend to dispose in the Marine Park, capital dredge spoil in volumes greater than 15,000 cubic metres. Such capital dredging campaigns occur infrequently, are generally of longer duration (weeks to months/years), and generally remove seabed material with a wide range of particle sizes (gravel, sands, silts and clays).

This regulation would mostly affect the businesses that manage large ports (e.g. Queensland Ports Corporations) and hence tend to undertake the dredging on behalf of their clients using terminals at the ports.

As an island nation, Australia is dependent on maritime trade. Consequently, ports and their associated infrastructure are of significant economic and social importance to Australia. A number of Queensland's ports, including those adjacent to the Marine Park, are considered nationally significant for cargo throughputs and contributions to the national economy. This proposal will provide consistency in government decision making when considering the disposal of capital dredge spoil material in the Marine Park. This consistency should lead to greater certainty for businesses in the regulatory approval process and should assist businesses to develop and adapt their planning requirements into the future.

⁹ UNESCO 2012, *Mission Report Great Barrier Reef*, UNESCO, Paris, France.
http://whc.unesco.org/download.cfm?id_document=117104

This proposal also means that the lengthy and costly court cases resulting from third parties (usually environmental non-governmental organisations) appealing decisions made by environmental regulators would not occur. Such delays can add years and significant costs to the business before dredging and disposal activities even commence.

The proposal will ensure zero disposal in the Marine Park from either the Port of Abbot Point or Port of Cairns capital dredging proposals.

By removing the ability for GBRMPA to grant permission for the dumping of capital dredge spoil material, those businesses that rely on a healthy and intact ecosystem should benefit from the proposed regulation. This includes principally the commercial marine tourism industry and the commercial fishing industry.

The Great Barrier Reef supports significant commercial and non-commercial uses, especially commercial marine tourism and fishing. It is estimated that, in 2011–12, the Great Barrier Reef contributed approximately \$5.6 billion to the Australian economy and supported employment equivalent to about 69,000 full-time positions.

Commercial marine tourism continues to be the most significant use of the Reef — both in terms of economic value and employment. A reduction in Great Barrier Reef tourism would have significant negative effects on regional tourism in Queensland, which is estimated to be worth \$5.2 billion to the Australia economy. This would result in a reduction in earnings for local businesses that directly and indirectly service the tourism industry. In turn this could lead to increased unemployment in regional areas of Queensland.

The long-term attractiveness of the Great Barrier Reef as a tourism destination is largely based on the area's reputation as the world's largest and best known coral reef ecosystem — one that has spectacular and iconic species (whales, marine turtles, sharks, seabirds) — combined with high standard tourism and protected area management. Swimming, snorkelling, scuba diving and viewing animals are consistently popular tourist activities. The industry relies on the Great Barrier Reef retaining the characteristics and Outstanding Universal Value that make it a matter of national environmental significance and a world heritage property.

Commercial fisheries have been operating in the Great Barrier Reef for many decades and have played an important role in the development of regional Queensland. Fisheries product continues to be important to local communities, as well as domestic and international markets. A very high proportion (around 90 per cent) of the Queensland coastal population consumes fresh seafood. In a 2008 survey¹⁰, many consumers reported they preferred Queensland, wild-caught species, despite it being more expensive than imported seafood products, and many believed it would benefit their community and the Australian economy. Fisheries within the Great Barrier Reef continue to contribute a major component of Queensland's total seafood catch. In 2012 it represented about 52, 80, 21 and 30 per cent of Queensland's retained catch in the trawl, line, net and pot fisheries, respectively. In 2011–12 the economic contribution of the Reef's commercial fishing and aquaculture industries and

¹⁰ Tobin, R.C., Beggs, K., Sutton, S.G. and Penny, A. 2010, Baseline socio-economic data for Queensland east-coast inshore and rocky reef fishery stakeholders. Part D: Seafood consumers, Technical Report No. 8, Fishing and Fisheries Research Centre, James Cook University, Townsville.

its adjacent catchment to the national economy was estimated to be \$160.3 million.

Impact on community groups

The proposed regulation should not negatively impact community groups as the community does not undertake major projects that result in the need to dispose of capital dredge spoil in volumes greater than 15,000 cubic metres. Rather, the proposed regulation should positively impact community groups and scientific organisations as they are generally in support of increasing the protection of the marine environment within the Marine Park.

There should be no impact on community groups that enjoy recreational boating or even for the international yachting community that requires marinas for berthing while visiting Australia. The ability to cater for new small vessel boat ramps has been retained in the proposal.

Impact on individuals

The proposed regulation also should not negatively impact individuals. The ability for new boat ramps has been retained and should be able to cater for the projected population growth for the Great Barrier Reef catchment into the foreseeable future. Over the next 20 years, much of the Great Barrier Reef catchment is forecast to experience annual population growth of 1.6 per cent or higher, particularly in the southern half of the catchment. In comparison, the national rate of population growth is projected to slow, but remain above one per cent per annum over the next 20 to 40 years.

The number of recreational visits from residents in the catchment continues to increase, most likely as a result of three factors: population growth, an increase in the proportion of the population visiting the Reef and a rise in the average number of visits each person makes. It is estimated that 87 per cent of residents in coastal towns adjacent to the Reef have visited the area for recreation. The majority of coastal town residents feel there is no better place to undertake the recreation activities they enjoy than the Great Barrier Reef. There has been a steady increase in vessel registrations over the past few decades (Figure 1) which is likely to have translated into more recreational vessel trips in the Reef.

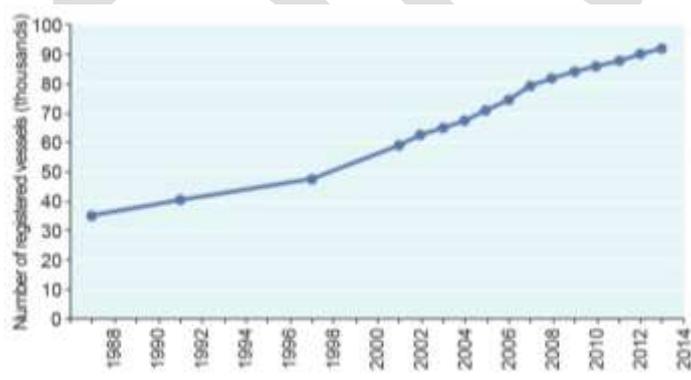


Figure 1. Number of recreational vessels registered in the catchment, 1987–2013

The number of vessels registered in areas close to the Great Barrier Reef has continued to increase. Source: Department of Transport and Main Roads (Qld)

People living adjacent to the Great Barrier Reef, as well as domestic and international visitors, use the area for a wide range of recreational activities, including fishing, snorkelling, diving, swimming, boating, beach and island walking, sightseeing, relaxing and socialising.

For residents of the catchment, going to the beach, fishing and boating were the most popular activities in 2013 (Figure 2).

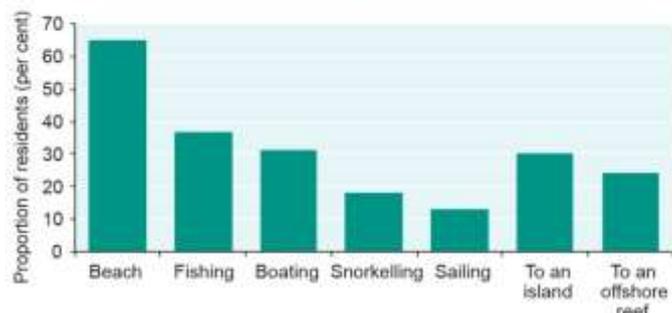


Figure 2. Main activities of catchment residents in the Great Barrier Reef, 2013

The graph shows the percentage of residents surveyed who undertake each type of activity more than once a year. Going to the beach was the most popular activity for residents, followed by fishing and boating.

Method for calculating compliance costs

Under the Australian Government's Regulatory Burden Measurement Framework, the costs borne by those affected by the regulation must be measured. This Framework calculates the likely regulatory burden of the proposed measure on businesses, individuals and not-for-profit organisations.

Affected stakeholders

As the regulation will prohibit the disposal of capital dredge spoil material in the Marine Park, only businesses undertaking capital dredging activities are likely to incur regulatory burden costs. Community groups and individuals are unlikely to make an application for such a permission.

To determine the number of businesses that are likely to be affected, GBRMPA has identified any potential projects that could seek to dispose of capital dredge spoil material in the Marine Park over the next ten years. This information was based on informal discussions with proponents and knowledge of existing approved capital dredging in or adjacent to the Marine Park for which no disposal grounds had yet been approved. Given the time taken to plan these developments, GBRMPA considers it unlikely that the Authority would not have knowledge of a development requiring capital dredge spoil dumping in the next ten years. Based on the information gathered, GBRMPA has identified businesses that are likely to be affected by the proposed regulation.

Regulatory costs to business

Following implementation of the proposed regulation, any businesses seeking to undertake capital dredging activities will need to design their development so that disposal of dredge spoil occurs in alternate sites outside of the Marine Park.

Under the current legislative environment, disposal of capital dredge spoil for each known development may occur in one (or in a combination of) the following four sites:

1. Land disposal
2. Ocean disposal - within the Great Barrier Reef Marine Park
3. Ocean disposal - within the exclusion areas inshore of the Marine Park

4. Ocean disposal - seaward of the Marine Park

After the regulation is enacted, potential dumping sites will be reduced to the following three locations.

1. Land disposal
2. Ocean disposal outside the Marine Park - within the exclusion areas inshore of the Marine Park
3. Ocean disposal outside the Marine Park - seaward of the Marine Park

It should be noted that these options represent the likely avenues a proponent might explore after this regulation takes effect, simply because they are not ruled out by law. By including them in this analysis, GBRMPA is not making any implication or judgement on their likelihood of approval.

Calculation of regulatory burden

The regulatory burden costs of the proposed regulation arise primarily from any increase in financial costs per cubic metre to businesses due to disposing of capital dredge spoil in sites outside the Marine Park. These costs would comprise:

- those expenses associated with the hire/lease/purchase of capital equipment and other costs incurred in the collection/ preparation/processing of capital dredge spoil to ready it for transport, (which may be more significant when the alternate disposal site is land-based – see below)¹¹; and
- the variable transport-related costs that depend on the distance the dredge material will travel to get to the alternate disposal site. This cost increases slightly as the distance increases (for example, the cost attributable to a distance of 20 km and 40 km from dredge site to disposal site is \$4.50 and \$4.88 per cubic metre respectively)¹².

GBRMPA found that disposal costs varied greatly depending on whether disposal occurred on land or in the ocean. Disposal on land has additional costs associated with activities such as de-watering, stabilisation and land reclamation / habitat restoration. However, as the cost per cubic metre associated with the distance travelled from the dredge site to the disposal site increased with distance, these variable distance-related costs became relatively more significant as the distance between the dredge site and the disposal location increased.

Table 2. Calculation of the cost impact of the proposed regulation on affected businesses

Potential disposal locations	Status Quo Costs (\$)	With Regulation Costs (\$)	Regulatory Burden (With Regulation minus Status Quo) (\$)
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¹¹ Costs associated with land disposal were sourced from *Appendix A - Literature Review and Cost Analysis of Land-based Dredge Material Re-use and Disposal Options of the Improved Dredge Material Management for the Great Barrier Reef Region report by Sinclair Knight Merz* <http://www.environment.gov.au/resource/improved-dredge-material-management-great-barrier-reef-region>.

¹² Cost attributable to distance were sourced from *Abbot Point, Terminal 0, Terminal 2 and Terminal 3 Capital Dredging Public Environment Report (EPBC 2011/6213/GBRMPA G34897.1) Appendix E GHD 2012, Dredged Material Relocation and Reuse Options Assessment Report pg 35 -38*.

Marine Park	A	-	(E+F+G) – (A+B+C+D)
Land	B	E	
Exclusion areas inshore of the Marine Park	C	F	
Seaward of Marine Park	D	G	

Table 2 above summarises the formula used by the GBRMPA to calculate the difference in the cost of capital dredge spoil disposal under the existing regulatory environment (Status Quo) and with the proposed regulation. In accordance with the Regulatory Burden Measurement Framework, these costs were divided by ten to give an average annual burden cost estimate over the next ten years.

Other options considered

GBRMPA has already considered other options to address the problem highlighted above.

Status Quo (not recommended)

This option would require no action and would maintain the status quo.

All capital dredge spoil material disposal activities would continue to require permits and be subject to case-by-case environmental assessments by the GBRMPA and potentially the Australian Government’s Department of the Environment and would still be required to meet the requirements for ocean disposal as outlined in the National Assessment Guidelines for Dredging. This does not provide an effective mechanism to address the cumulative effect of multiple capital projects across the Marine Park. This would likely result in flow on negative effects to businesses that rely on a healthy and intact ecosystem such as commercial marine tourism, charter and commercial fishing and recreational users as well as the aesthetic heritage values of the Great Barrier Reef.

This option also does not meet the full intent of the policy which is to ban all future disposal of capital dredge spoil material in the Marine Park. Dumping of capital dredge spoil material could still occur because there are existing permissions that allow for it in the Marine Park.

Maintaining the status quo also is unlikely to meet the expectation of the IUCN or the World Heritage Centre for the protection required for the Marine Park and risks the Great Barrier Reef being listed as a world heritage site ‘in danger’. The consequences of such a listing would include negatively affecting Australia’s reputation as a world leader in managing World Heritage sites and marine protected areas and cause the impression that the Great Barrier Reef is no longer worth visiting and hence a reduction in international tourists holidaying in Australia. The Reef’s Aboriginal and Torres Strait Islanders Traditional Owners, who consider the area as their traditional sea country, would not want to see their heritage values lost as result of ongoing degradation of the central and southern inshore area.

Maintaining the status quo also would not meet the expectation of the World Heritage Centre/IUCN Monitoring Mission Report - that as a result of the strategic assessment process there should be spatial policies to provide greater certainty for business regarding development proposals. The incomplete knowledge of impacts of capital dredge spoil disposal can result in uncertainty for proponents in the regulatory assessment process. It is common for significant work to be undertaken at significant cost to proponents before regulators have sufficient information to engage around project design and environmental

issues. Under existing regulation, project proposal decisions rely heavily on the monitoring and modelling carried out as part of the assessment process. The final decision on a Marine Park permit is made by a delegate based on all the facts available to and before them at the time. There is the potential for decisions to change over time depending on the available information or the policy of the day that the delegate considers.

Businesses may have trouble accessing suitable finances to cover the costs of their project if there is uncertainty about an approval being granted or if a court process is going to delay or potentially overrule a permit decision. This can have broader economic implications for those businesses and the economies of Queensland and Australia.

This policy option does not reflect the Australian Government's commitment to ending the long-established practice of capital dredge spoil dumping in the Marine Park.

Policy (not recommended)

The role of GBRMPA in policy development is confirmed in the *Great Barrier Reef Marine Park Act 1975* as set out below:

Section 7 Functions of the Authority

4. *The Authority may prepare and publish plans and policies about:*
 - a) *the way in which the Authority intends to manage the Marine Park or perform its other functions; and*
 - b) *the way in which the Authority considers that this Act or a zoning plan applies:*
 - i. *in relation to persons generally or a class of persons; or*
 - ii. *in relation to persons generally, or a class of persons, in relation to particular circumstances.*
5. *A plan or policy prepared under subsection (4) is not a legislative instrument.*

Although developing a policy to address the problem was considered, this option does not provide enough certainty about when capital dredge spoil disposal in the Marine Park should be allowed. Policy can only guide a delegate's decision in a regulatory process. It cannot fetter their ability to make a decision one way or another.

Under this option, disposal of capital dredge spoil material in the Marine Park would continue to require permits and be subject to environmental assessments by GBRMPA, and potentially the Australian Government's Department of the Environment, and would still be required to meet the requirements for ocean disposal as outlined in the National Assessment Guidelines for Dredging. This lack of certainty will have similar effects on the ecosystem as described for the status quo option above.

This option also does meet the full intent of the policy which is to ban all future disposal of capital dredge spoil material in the Marine Park. Dumping of capital dredge spoil material could still occur because there are existing permissions that allow for it in the Marine Park.

This option is unlikely to be considered sufficient by IUCN or the World Heritage Centre for the protection required for the Marine Park or improve business certainty and risks the Great Barrier Reef being listed as a world heritage site 'in danger'. The flow on effects of this are as described for the status quo option.

This policy option does not reflect the Australian Government's commitment to ending the long-established practice of capital dredge spoil dumping in the Marine Park.

Recent relevant consultation and advice to GBRMPA 2013-2014

The issue of disposal of dredge material has already been the subject of much public consultation and advice to GBRMPA over the past two years. A brief summary is provided below.

At the conclusion of the consultation of this current proposal, GBRMPA will analyse the submissions and summarise the key points in finalising this RIS. The final RIS will be made publicly available, together with all submissions at this time.

Public consultation

The Australian Government and the Queensland Government undertook a comprehensive strategic assessment of the Great Barrier Reef World Heritage Area and adjacent coastal zone in accordance with section 146 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Part of the statutory process for undertaking the strategic assessment was formal public consultation phase. During the 13 week consultation period (1 November 2013-31 January 2014), 6616 submissions were received.

Comments¹³ on activities focussed largely on port activities, although shipping, industrial development and fishing were also common sub-themes. Comments on impacts focussed on direct use impacts particularly dredging, spoil disposal and resuspension of dredged material. Critical comments in submissions specifically relevant to the disposal of dredge material included expressions that significant resources had been spent in delivering Reef Plan, but that outcomes were minimal or undermined by decisions to allow discharge of poor water quality (for example, from industrial development), and by decisions to allow dredge material to be disposed of in the Great Barrier Reef World Heritage Area.

Further public consultation on actions to protect the Great Barrier Reef occurred during a six week period from 15 September to 27 October 2014 on the Draft Reef 2050 Long-Term Sustainability Plan.

Advice

Tourism Reef Advisory Committee¹⁴

GBRMPA is advised on Great Barrier Reef Marine Park management issues through consultation with competency-based committees. First established in 1999, Reef Advisory Committees comprise a cross-section of stakeholder interests with expertise and experience in relevant areas. Tourism Reef Advisory Committee (TRAC) members provide a cross-section of stakeholder expertise and interests in areas relevant to tourism on the Great Barrier Reef.¹⁵ At their most recent meeting, the TRAC provided advice to GBRMPA on developing the whole-of-government approach to dredge and spoil disposal. Relevant to this proposal were the following points:

¹³ Great Barrier Reef region strategic assessment: supplementary report, GBRMPA, Townsville. <http://www.gbrmpa.gov.au/managing-the-reef/strategic-assessment>

¹⁴ Relevant excerpts Tourism Reef Advisory Committee Communique meeting 14-15 October 2014

¹⁵ TRAC membership for 2014-2017 <http://www.gbrmpa.gov.au/our-partners/reef-advisory-committee/tourism-reef-advisory-committee>

- Recognise, respect and continue to preserve the pristine status of the Far Northern Great Barrier Reef (from Port Douglas north) – no new capital dredging in that area and well-managed maintenance dredging at Cooktown.
- Commit to no disposal of capital dredge spoil in the Marine Park through legislation.

Local Marine Advisory Committee Chairs Weekend¹⁶

GBRMPA is advised on management issues about the Marine Park at a local level by voluntary community-based committees called Local Marine Advisory Committees (LMACs). LMACs enable local communities to have effective input into managing the Marine Park and provide a community forum for interest groups, government and the community to discuss issues around marine resources. During each three year term, GBRMPA brings together the 12 LMAC Chairs and another member from each LMAC for a weekend to discuss, amongst other things, the current priorities for GBRMPA. At the most recent meeting (11-12 October 2014), advice was provided to GBRMPA on developing a whole-of-government approach to dredge and spoil disposal. Relevant to this proposal, noting there was not consensus amongst all members, was that there should be no further dredge spoil in the Marine Park from capital dredging activities.

Proposed Implementation

The regulation should commence on the day after registration on the Federal Register of Legislative Instruments. GBRMPA is responsible for implementation of the regulation. Implementation includes communicating to potential applicants the requirements for the submission of applications for the disposal of capital dredge spoil material as well as internal business processes for assessing the applications. Following implementation of the preferred option, GBRMPA will continue to work closely with the port industry and key stakeholders to measure the ongoing effectiveness of the regulation in providing certainty for business as well as the achievement of ecosystem outcomes in the inshore waters of the Marine Park.

¹⁶ Relevant excerpts from the minutes of the LMAC Chairs Meeting October 2014