



Guidelines

Applications for restoration/adaptation projects to improve resilience of habitats in the Great Barrier Reef Marine Park

(Revision 1) October / 2018

Objective

To provide guidance to regulators (exercising powers of the Great Barrier Reef Marine Park Act 1975 (C'th) and the Marine Parks Act 2004 (Qld)) and applicants when considering an application for permission to conduct restoration and / or adaptation projects to improve resilience of habitats in the Great Barrier Reef Marine Park and the Great Barrier Reef Coast Marine Park (hereafter referred to as the Marine Parks).

Target audience

Great Barrier Reef Marine Park Authority and Queensland Parks and Wildlife Service staff; applicants for permission to conduct restoration and / or adaptation projects to improve resilience of habitats in the Marine Parks.

Purpose

 To inform restoration and / or adaptation projects designed to improve the resilience of marine park habitats, while ensuring they do not have a disproportionate adverse impact on the ecological, biodiversity, heritage, social or economic values of the Marine Parks.

Related legislation / standards / policy

- 2. For applications in the Marine Parks, this guideline should be read in conjunction with the Environmental Impact Management Policy: Permission System and other relevant legislation, policies and standards, as listed within Appendix 1.
- 3. The Managing Agencies will have regard to other relevant legislation, such as the *Environment Protection* (Sea Dumping) Act 1981 and the *Environment Protection and Biodiversity Conservation Act* 1999.

Context

- 4. Coral reefs are fundamental to 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. However, the condition and trend of coral reef habitats within the Marine Parks has declined over the past 30 years as highlighted in the Reef 2050 Long-Term Sustainability Plan 2018 (the Reef 2050 Plan) and subsequent monitoring data. Together with the acute impacts of consecutive mass coral bleaching events in the summers of 2015/16 and 2016/17 and more frequent and severe tropical cyclones, the capacity of existing management arrangements to support resilience is no longer enough.
- 5. There is a need for more active and targeted intervention in the Marine Parks to protect and restore specific coral reef habitats. The Reef 2050 Plan highlights the need to restore the resilience of all ecosystems in the face of current and future threats such as from climate change. The 2017 Reef Blueprint established an approach moving forward would be to adopt additional measures to not only protect and mitigate but to support reef recovery, including the establishment of restoration demonstration site(s) to test, improve and, where appropriate, scale-up restoration methods.
- 6. The Managing Agencies recognises that global efforts to mitigate climate change through effective emissions reduction is essential to reduce climate change impacts on the Great Barrier Reef. Alongside this, the Managing Agencies consider there are a range of activities that can enhance protection, reduce impacts and facilitate recovery in order to increase the resilience of coral reef habitats.

These activities will be done with the managing agencies, Traditional Owners, partners and stakeholders to reduce the impacts of climate change and increase resilience of coral reef habitats.

The Managing Agencies' risk-based permission system provides an avenue to enable restoration and adaptation projects to occur within a strong framework for assessing and managing risks while maintaining environmental protection and understanding public views about such activities. As the Managing Agencies' knowledge increases, its management arrangements will adapt.

General principles

- The Managing Agencies supports reef restoration and / or adaptation projects that are intended to improve the condition and resilience of coral reef habitats provided the benefits of the project outweigh the risks associated with the activity (both long and short-term). Any risks should be avoided, mitigated or minimised to an acceptable level. This will be determined through an assessment process that is risk based in accordance with the Managing Agencies' Risk assessment procedure.
- The Managing Agencies will be transparent with regards to the costs and timeframes associated with the permit processes associated with reef restoration and / or adaptation projects.
- 10. The Managing Agencies may prioritise applications of those reef restoration and / or adaptation projects that they believe are of most value to the Marine Parks or that will address priority knowledge gaps (for example, as detailed in the Science Strategy and Information Needs 2014-2019, the 2017 Reef Blueprint or other relevant documents). These applications will be prioritised where appropriate whilst also ensuring a robust assessment is in place to manage any relevant impacts.
- 11. Given the degraded condition in many areas of the Marine Parks, the Managing Agencies recognise that, in certain circumstances, risks associated with intervening may be outweighed by the risks of doing nothing. Nonetheless, the Managing Agencies take the view that interventions should be implemented in a staged way, with low-risk interventions implemented and assessed for effectiveness first, whilst higher-risk interventions will require pilot studies and proof of concept before they are considered for full-scale implementation.
- 12. The Managing Agencies will assess the predicted benefits of a reef restoration and / or adaptation project against the risk of inaction. The Managing Agencies acknowledge that there may be scientific uncertainty in relation to reef restoration and / or adaptation projects and this will also be considered as part of the assessment process.
- 13. Over time, as our knowledge of reef restoration and / or adaptation activities increases and uncertainty decreases, consideration of risk will be adjusted to account for the changing condition of different areas of the Marine Parks and social acceptance of the need to intervene or of particular restoration/adaptation activities.
- 14. The Managing Agencies recognise that some restoration and / or adaptation techniques may require substantial research and development before they are (may be) ready for full-scale implementation. Evidence that a project has the potential for use at an effective scale prior to allowing in-situ trials will be an important consideration. The Managing Agencies further recognise that not all restoration and / or adaptation projects may be successful.
- 15. The Managing Agencies understand that whilst the main purpose of reef restoration and / or adaptation projects should be to improve the resilience of habitats, some projects will also support the social, cultural and economic values of the Marine Parks.
- 16. The Managing Agencies recognise that in order to be financially viable, some restoration and / or adaptation projects will require association with commercial projects. Projects of a commercial nature are likely to attract assessment fees as well as additional assessment considerations (e.g. ability to adequately develop and fund the activity).
- 17. The Managing Agencies encourage Marine Parks pilot studies to be small scale to demonstrate proof of concept and trial technological advancements that are able to be properly monitored, scalable and to allow successful implementation with social acceptance.

GBRMPA document No: 100472 Revision: 1 Page 2 of 15

- 18. The Managing Agencies will consider the applicant's/research institute's previous experience in similar restoration and / or adaptation projects before granting a permit. Applicants with limited previous experience are encouraged to partner with those that have demonstrated experience.
- 19. The Managing Agencies encourage applicants to conduct reef restoration and / or adaptation projects in partnership with Traditional Owners and research institutions.
- 20. Reef restoration and / or adaptation projects proposed in the Remote Natural Area must be consistent with the requirements of this area as outlined in Part 3 of the Zoning Plan and in the Regulations.
- 21. Generally, the Managing Agencies require all structures, equipment and facilities to be removed prior to expiry of a permit (if the permit is not being continued). Any restoration and / or adaptation projects that require the installation of materials or structures that are intended to be permanently left in the Marine Parks, i.e. become incorporated into the environment and not require further interference or maintenance, will be assessed on a case-by-case basis in accordance with the Regulations. Considerations include, but are not limited to:
 - a. the aims of the project;
 - b. the materials proposed;
 - c. the public good nature of the proposal;
 - d. likelihood of future impact to the environment if not removed;
 - e. likely impacts of full or partial removal;
 - f. Marine Parks zoning; and
 - expected timeframe for the materials/structures to be fully incorporated into the intended habitat.
- 22. The Managing Agencies encourage the use of biodegradable materials for structures/facilities that are intended to stay in the Marine Parks and become incorporated into the reef habitat over time. The Managing Agencies discourage the use of plastic (e.g. cable ties) unless no other reasonable options are available.
- 23. The Managing Agencies are likely to require a deed of agreement for reef restoration and / or adaptation projects that involve the installation of significant research equipment, structures or facilities that are considered high-risk to Marine Parks values if not-maintained, become un-attached or are not removed.
- 24. As part of the deed of agreement the Managing Agencies may also require a bond (in the form of a bank quarantee, cash or undertaking) for projects that involve a permission to operate a facility (which includes structures).
- 25. For the purposes of permitting reef restorations and / or adaptation under the Great Barrier Reef Marine Park Zoning Plan 2003 and the Great Barrier Reef Coast Marine Park Zoning Plan 2004 (hereafter referred to as the Zoning Plans), the Managing Agencies consider that reef intervention projects could generally be a subset of any of the following permission types focussed on the primary purpose:
 - A research permission
 - b. A tourism permission
 - An aquaculture operation permission C.
 - d. A facility or tourist facility permission
 - Carrying out works e.
 - f. Any other purpose
- 26. The Managing Agencies are unlikely to support the harvest of coral colonies (or coral fragments) for commercial or non-commercial purposes where that harvest is likely to cause localised depletion that may impact on future recruitment processes and/or lead to decreased ecosystem health.
- 27. The Managing Agencies are unlikely to permit high-risk experimental trials in sensitive environments, on high value reefs or in areas with high connectivity to other reefs.
- 28. The Managing Agencies are unlikely to support the conduct of a pilot study (research program) in particular zones or locations if it involves the installation of structures that are intended to remain in the Marine Park post study, if those structures and/or intervention projects would not otherwise be permitted within the same zone and location.

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GBRMPA document No: 100472 Revision: 1 Page 3 of 15

For example

Converting a coral gardening pilot study into an aquaculture operation is not supported in a Marine National Park Zone, Plan of Management (POM) or Special Management Area that prohibits aquaculture operations.

29. The Managing Agencies are unlikely to grant permissions for certain reef restoration and / or adaptation projects, in certain locations, consistent with the precautionary principle and legislative documents such as the Zoning Plans and the relevant Plans of Management. 1

For example

Examples of projects that would be unlikely to get a permission include:

- Introduction of chemicals or minerals to encourage localised phytoplankton blooms; a.
- b. Introduction of natural or bioengineered pathogens as biological control agents (e.g. viruses);
- Use of material that is likely to introduce marine pests; c.
- d. Introduction of genetically modified material;
- Projects that may artificially increase endemic species to outbreak levels (e.g. Drupella spp.); e.
- f. Projects that increase risks to protected species;
- Medium risk projects that have no **proof-of-concept**; g.
- h. High risk projects that have not undergone a Great Barrier Reef specific research pilot study;
- Reef intervention projects in the Marine National Park Zone unless those projects are directly i. associated with nearby tourism activities (demonstrated by consultation or partnerships) or meet the requirements for conduct of research in that zone;
- Restoration and / or adaptation pilot studies in the Preservation Zone: j.
- k. Commercial reef intervention projects that involve collecting coral from Public Appreciation Special Management Areas, Scientific Research Zone, Buffer Zone, Marine National Park Zone for the purposes of transplanting/translocating elsewhere in the Marine Parks.
- 30. Table 1 provides an indication of the risk and assessment approach likely to be applied to particular activities, noting that each application is considered individually on its merits and the Managing Agencies have the final decision on whether to grant or refuse a permit. The Managing Agencies will update information in this guideline to reflect current thinking and evolving adaptive management over time.

Table 1: Types of reef restoration and / or adaptation activities, risks and their likely assessment approach (refer to the application guidelines), based on risk.

Individual project risk will be determined using the Managing Agencies' risk assessment procedure for the permissions system. Note that the risk rating of any given activity type may be elevated if the activity is proposed in a location of particular ecological, social, economic, or cultural sensitivity. The risks provided in the table below are for general guidance only and may differ depending on the temporal and spatial scale of the activity

Activity (general guidance only)	Examples	Likely Assessment Approach/Permit ²	Mitigation
LOW RISK			
Generally will not require GBR specific pilot study as proof of concept already established			
Small scale	The removal of sediment from	Routine / Tailored	
removal of	coral may prevent coral stress and	assessment/permit	

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GBRMPA document No: 100472 Revision: 1 Page 4 of 15

¹ The Authority recognises that as knowledge increases and uncertainty decreases this list may change over time. The list is reflective of our current state of knowledge (2018).

² The assessment approach taken for State only Marine Park permits will be in accordance with Queensland Parks and Wildlife Service Assessment Procedures.

Activity		Likely Assessment	
(general	Examples	-	Mitigation
guidance only)		Approach/Permit ²	
sediment from	thereby increase coral resilience to		
coral	other stressors.		
Removal of	The physical removal of coral-	Routine commercial research	Likely to require monitoring and
smothering algae	limiting algae from coral reef	permit or Tailored	reporting.
from coral or bare	settlement surfaces.	assessment/permit	
rock surfaces			
Re-orienting coral	Overturning (righting) coral	Routine / Tailored assessment /	
colonies and / or	upended by cyclones or other	permit depending on whether	
affixing broken	destructive forces and returning	the request is pro-active or	
coral fragments	coral bommies to the water at the	reactive.	
	same place / reef (does not include		
	translocation between reefs).		
	Reattaching coral fragments /		
	colonies to the substrate with		
	adhesive (e.g. epoxy cement)		
	following an incident (e.g. ship		
	grounding or cyclone). Such actions		
	will most likely not involve moving		
	the coral to a holding/staging area		
Dames and of COTC	prior to reattachment.	Doubling COTS assessment /	Manitaging and separating
Removal of COTS	In accordance with the GBRMPA	Routine COTS assessment /	Monitoring and reporting.
and <i>Drupella</i> spp.	guidelines.	permit Tailoned accessore and the arms it	
Habitat stabilisation /	Stabilisation of coral rubble and could include mesh frames / coral	Tailored assessment/permit depending on the scale and	
substrate	spiders. This will increase the solid	materials used to stabilise	
consolidation	reef base after an incident and may	illaterials used to stabilise	
consolidation	also include the removal of algae to		
	prepare the surface and / or		
	enhancement of crustose coralline		
	algae growth.		
Fragmentation /	Local scale restoration of a site	Tailored assessment/permit	Corals must be transplanted within the
transplantation	using healthy fragments from a	including considerations for	same genepool.
of corals to	different site within the same reef	research equipment	Limits for coral take apply- see
transplant within	complex to support quicker		research guidelines.
same reef	recovery.		Some research equipment may require
complex (with or	Could include a nursery stage on		a deed.
without coral	either racks, trees or other. May		Research equipment must be removed
nursery stage)	also include Biorock (mineral		at permit expiry (except for those that
	accretion for substrate stabilisation		are meant to incorporate into the reef
	or recovery) and coral gardening ² .		habitat e.g Biorock).
	Coral transplantation at Tourism		
	<u>Sites.</u>		
Coral larval re-	Local scale larval collection and	Tailored assessment/permit	Conditions dependant on the type of
seeding within	distribution within the same reef		equipment used to collect and
same reef	complex.		distribute coral larvae.
complex			

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GBRMPA document No: 100472 Revision: 1 Page **5** of **15**

² The Authority views the difference between coral gardening and an artificial reef in that corals growing on artificial reefs are meant to stay in-situ whilst corals growing on racks, trees, etc are mainly intended for outplanting back into the natural environment.

Coral		scale pilot study encouraged	
translocation	This may include coral re-seeding, fragmentation, coral gardens / nurseries if they are moved between reefs.	Tailored assessment/permit	Translocation plan will be required. <u>Adherence to the GBRMPA Position</u> <u>Statement on the translocation of</u> <u>species (and any subsequent versions).</u>
Small artificial reefs <20m ²	Placement of small artificial reefs.	Tailored assessment / permit or Public Information Package (PIP) depending on zone, location and community support.	Note that most artificial reefs will require a permit under the Sea Dumping Act as well. Public consultation will be most likely be required. Structure / facility may require a deed / bond and an Environmental Management Plan.
Assisted Gene Flow (AGF)	The active movement of genes among populations through laboratory reared larvae or juveniles, movement of fragments or adult colonies. AGF is within the same species.	Tailored assessment / permit and joint risk assessment (with colleagues from OGTR, DoEE, DAF and DES).	Ecological containment, physical containment and biological containment. Translocation plan will be required. Adherence to the GBRMPA Position Statement on the translocation of species (and any subsequent versions).
Ultra-thin film for shading	Involves the addition of a thin film to the surface of the water to reduce temperature below and increase shading.	Tailored assessment/permit.	Conditions dependant on type of research equipment used.
HIGH RISK			
Will require proof Medium (>50m²) and Large (>100m²) artificial reefs	of concept and projects must have Placement of medium and large artificial reefs.	rainitial small-scale pilot study Tailored assessment / permit or Public Information Package (PIP) depending on zone, location and community support.	Note that most artificial reefs will require a permit under the Sea Dumping Act as well. Public consultation will be most likely be required. Structure / facility may require a deed / bond and an Environmental Management Plan.
Installation of large infrastructure / facilities	Large scale engineering projects that involve the installation of facilities (such as pontoons) in the Marine Parks. This would include water mixing technologies, use of fans and sprays, wave driven ocean pumps, sprinklers and reef cooling physical shading structures.	Tailored assessment or Public Information Package. Will depend on size and scale.	Deeds / bonds Environmental Management Plans.
	The process of combining different	Tailored assessment / permit	Ecological containment, physical
Hybridisation	species to create a hybrid with a distinctly different genetic makeup.	and joint risk assessment (with colleagues from OGTR, DoEE, DAF and DES)	containment and biological containment. Translocation plan will be required. Adherence to the GBRMPA Position Statement on the translocation of species.
Hybridisation Geo-engineering	distinctly different genetic make-	and joint risk assessment (with colleagues from OGTR, DoEE,	containment and biological containment. Translocation plan will be required. Adherence to the GBRMPA Position Statement on the translocation of

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GBRMPA document No: 100472 Revision: 1 Page **6** of **15** Date: 01-Oct-2018

	entities, including those doing reef restoration projects.	Joint risk assessment within interested scientists / government regulators.	
Introduction of biological and / or chemical control mechanisms for COTS and <i>Drupella</i> .	Examples include attractants and dispersants for COTS and restocking populations of natural COTS predators.	Tailored assessment / permit. Joint risk assessment within interested scientists / government regulators.	Unknown at this stage.
Coral feeding and probiotics	Supply of food and probiotic treatments for corals during times of stress and recovery.	Tailored assessment / permit. Joint risk assessment within interested scientists / government regulators	Unknown at this stage.
Assisted Migration	Coral translocation of larvae, juveniles or adults from OUTSIDE the GBRMP to within the GBRMP.	Tailored assessment / permit or Public Information Package (PIP) depending on zone, location and community support.	Unknown at this stage.
Genetic engineering and synthetic biology	Enhancement of desired traits of coral reef organisms through genome editing and synthetic biology approaches.	Tailored assessment / permit or Public Information Package (PIP) depending on zone, location and community support.	Unknown at this stage.
Employment or use of potentially toxic chemicals	Use of chemicals for pest control, that is toxic to other marine species.	Tailored assessment / permit or Public Information Package (PIP) depending on zone, location and community support.	Unknown at this stage.
VERY HIGH RIS			
Cautious approac Introduction of non-native species	h; treat risks to reduce to the lowes Introducing corals with higher temperature tolerance from areas outside the Marine Parks (e.g. the Red Sea).	t acceptable level	
Introduction of natural or bioengineered pathogens or viruses	Introducing viruses to control pathogens associated with coral disease.	There is not enough knowledge and significant uncertainty. These projects have the potential to cause irreversible damage to the values of the Marine Parks.	
Use of materials that may introduce marine pests or artificially increase endemic species to outbreak levels	Increasing COTS predators to control COTS populations.		

Implementation

- 31. This Guideline will take effect from the date it is approved.
- 32. The Managing Agencies will consider this guideline in all relevant applications for permissions for reef restoration and / or adaptation projects.
- 33. The Managing Agencies will implement periodic reviews of the Guideline (and supporting Appendices) as new and pertinent information becomes available.
- 34. The Managing Agencies will develop supporting information to provide further clarity to applicants considering specific reef intervention projects.

GBRMPA document No: 100472 Revision: 1

- 35. The Managing Agencies will continue to work towards standardising permit assessment processes (including risk assessments) for reef intervention projects that are proven, mitigated, reliable and have standard methods (i.e. COTS control).
- 36. The Managing Agencies will make available information for applicants that is up-to-date, relevant and informative (see Appendix 2). This information will be updated to reflect current thinking and evolving adaptive management.
- 37. The Managing Agencies understand that there are likely to be additional legislative requirements for the conduct of these restoration / adaptation projects in the Marine Parks. The following should not be relied upon to reflect the total requirements. Applicants should undertake their own enquiries with government agencies to ensure they have met all legislative requirements for the Marine Parks.
 - a. The decision to allow a **structure / facility** to remain in the Marine Parks at the conclusion of a **pilot study** may require additional permits, including but not limited to a permit under the *Environmental Protection (Sea Dumping) Act 1981* (Sea Dumping Act).
 - b. Certain large or regional scale high-risk reef restoration and / or adaptation projects may also require, in addition to a Marine Parks permit, referral to the Department of the Environment and Energy under the Environment Protection and Biodiversity Conservation Act 1999 if they are likely to have significant impacts on matters of national environmental significance. For more information on this refer to the Department of the Environment and Energy website and the Information Sheet on Deemed Applications under the EPBC Act.
 - 38. The Great Barrier Reef Marine Park Authority developed this guideline with assistance from the Queensland Parks and Wildlife Service (QPWS) for application in the Great Barrier Reef World Heritage Area. Approval of this Guidline by the QPWS is for application in all Queensland marine parks and should be read and interpreted in that context.
 - 39. This guideline applied generally to all marine park habitats. Reference to 'coral reef habitats' and 'reef' is not intended to be exclusive of non-reef marine park benthic habitats.

Definitions

Artificial reef

In the context of reef restoration and / or adaptation projects the Managing Agencies view an artificial reef as a substrate on which corals grow which is meant to remain in the Marine Parks.

Aquaculture operation

Has the meaning as defined in the *Great Barrier Reef Marine Park Zoning Plan 2003*. In the context of reef restoration and / or adaptation projects, the Authority is of the view that an aquaculture operation is an activity of a commercial nature only.

Commerciality or commercial nature

In determining if an activity is of a commercial nature, the Managing Agencies consider if the primary purpose of the activity constitutes, or has sufficient connection with, the provision of goods or services for reward (either monetary or non-monetary). Refer to the Authority's Guidelines for applications for joint permissions.

Coral Nursery / Coral Gardening

A coral propagation activity done for the primary purpose of non-commercial coral reef conservation / restoration (e.g. research). In the context of reef restoration and / or adaptation projects, the Managing Agencies view an artificial reef as a substrate on which corals grow which is meant to remain in the Marine Parks, whilst coral gardening is considered to be corals growing on racks, trees, etc that are mainly intended for outplanting back into the natural environment.

Ecosystem health

Well-functioning ecological systems, such as coral reef and associated habitats, underpin the resilience of the Great Barrier Reef and contribute to our quality of life and to human wellbeing. A healthy ecosystem is a key part of the Reef's integrity, biodiversity and heritage values. An ecosystem is considered healthy if it is able to maintain its structure and function in the face of external pressures.

Facility

Has the meaning as defined in subsection 3(A)(9) of the Great Barrier Reef Marine Park Act 1975

Hybrid

Means the offspring of two distinct species.

Guideline GBRMPA document No: 100472 Revision: 1

Part 5

A Part 5 of the Great Barrier Reef Marine Park Zoning Plan 2003 provide for additional purposes for use or entry, including use or entry to a zone or part of a zone for undertaking management activities. There may be instances where intervention and / or adaptation proposals may be implemented by the Managing Agencies under Part 5 of the Zoning Plan. These are usually only considered for those reef restoration / adaptation projects that the Managing Agencies wishes to partner with.

Pilot study

In the context of reef restoration and / or adaptation projects a pilot study is a small scale preliminary study conducted in the field in order to evaluate feasibility, time, cost, adverse impacts, and gain knowledge prior to allowing a full-scale restoration/adaptation activity.

POM

Plan of Management.

Proof of concept

In the context of reef restoration and / or adaptation projects proof of concept is typically derived from pilot studies, literature reviews and scientific papers.

Restoration and / or adaptation

An action or set of actions deliberately undertaken in order to change the health status (prevent decline, enhance recovery or restore degradation) of one or more species or coral reef habitat locations.

Queensland Parks and Wildlife Service

Means the Queensland Parks and Wildlife Service division of the Department of Environment and Science.

Scale

In the context of reef restoration and / or adaptation projects means the following:

Local small scale: 1-100m² Local large scale: 100-1000m² Reef small scale: 1-5km² Reef large scale: 5-20km² Regional scale: 20km²

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.

State Marine Parks

Means the Queensland Great Barrier Reef Coast Marine Park, Great Sandy Marine Park and Moreton Bay Marine Park as declared undr the Marine Parks (Declaration) Regulation 2006 (qld) to the extent of maintainine complementarity with the Commonwealth as far as practicable and in accordance with applicable Queensland Government Policy.

State Marine Park Zoning Plans

Means the Marine Parks (Great Barrier Reef Coast) Zoning Plan 2004, Marine Park (Great Sandy) Zoning Plan 2017 and Marine Parks (Moreton Bay) Zonging Plan 2008.

Structure

In the context of reef restoration and / or adaptation projects a structure is a facility.

Tailored assessment

Has the meaning as defined in the Environment Impact Management - Permission System Policy. A tailored assessment is a type of assessment approach. Tailored assessments require the applicant to provide more information and require the Managing Agencies to undertake a detailed assessment. These assessment are non-standard / non-routine in nature.

Tourist facility

Has the meaning as defined in subsection 3(A)(9) of the Great Barrier Reef Marine Park Act 1975.

Transplantation

In the context of reef restoration and / or adaptation projects transplantation involves moving corals (adults, juveniles, larvae) around the same reef complex / gene pool.

GBRMPA document No: 100472 Revision: 1 Page 9 of 15

Translocation

In the context of reef restoration and / or adaptation projects translocation involves moving corals (adults, juveniles, larvae) outside of the same reef complex beyond its accepted distribution, to areas which may contain genetically distinct populations or to areas with superior parasite or disease status.

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Document control information

Approved by: Chairman, PN1 on 1-Oct-18

Queensland Parks and Wildlife Service Executive Management

Group on 26-Feb-19

Last reviewed: 1-Oct-18

Next review: 30-Sep-23

Created: 1-Oct-18

Document custodian: Director, Environmental Assessment and Protection (PN187)

Replaces: Replaces version 0

Guideline GBRMPA document No: 100472 Revision: 1
Page 10 of 15
Date: 01-Oct-2018

Appendix 1. Related legislation / standards / policy

Great Barrier Reef Marine Park Act 1975 (GBRMP Act)

Great Barrier Reef Marine Park Regulations 1983 (GBRMP Regulations)

Great Barrier Reef Marine Park Zoning Plan 2003

Whitsundays Plan of Management

Hinchinbrook Plan of Management

Cairns Area Plan of Management

Marine Parks Act 2004 (Qld)

Marine Parks Regulations 2017 (Qld)

Marine Parks (Great Barrier Reef Coast) Zoning Plan 2004

Marine Parks (Great Sandy) Zoning Plan 2017

Marine Parks (Moreton Bay) Zoning Plan 2008

<u>Environment Protection (Sea Dumping) Act 1981</u> (Sea Dumping Act) regulates the loading and dumping of waste at sea. The Act fulfils Australia's international obligations under the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Protocol) to prevent marine pollution by dumping of wastes and other matter

Guidelines for the Placement of Artificial Reefs - London Convention and Protocol/UNEP

Further information on the Sea Dumping Act

<u>Environment Protection and Biodiversity Conservation Act 1999</u> (EPBC Act) and associated significance guidelines for matters of national environmental significance. In particular for the Great Barrier Reef Marine Park matter of national environmental significance.

Further information on assessments of matters of national environmental significance

The following documents, as updated from time to time, are relevant to this guideline:

- a. Policies: Permission system policy
- b. Position Statements: Translocation of species in the Marine Park; aquaculture; no-structures sub-zones
- c. Guidelines: Management of artificial reefs, COTS control, Managing scientific research; coral transplantation at tourism sites; Assessment guidelines; Application guidelines; Risk assessment procedure; Permission system service charter; EPBC referral deemed application information sheet

Page 11 of 15

GBRMPA document No: 100472 Revision: 1

Appendix 2. Information for Applicants

The Managing Agencies recommend that applicants make themselves aware of the assessment considerations as outlined in the Great Barrier Reef Marine Park Regulations 1983. It is the applicant's responsibility to review the relevant policies and guidelines and to ensure their application provides all the necessary information, including information contained in this document. It is important to note that the Great Barrier Reef Marine Park includes the subsoil beneath the seabed to a depth of 1,000 metres and also includes the airspace up to a height of 915 metres.

- The Managing Agencies recognise that projects may be for commercial or non-commercial purposes and may involve research or other activities. Assessment fees may apply to those projects classified as commercial (refer to Application Guidelines for further guidance). Costs will vary depending on whether or not public advertising is required under the Regulations. This decision will be made on a case-by-case basis depending on the scale and number of sites proposed, timeframes of any equipment or structures installed, and the proposed location of the reef(s), whether sensitive environments are in the area and the chosen location's level of use by others.
- The Managing Agencies will consider the applicant's ability to manage the development and ongoing operation / maintenance of the reef restoration and / or adaptation activity when making a decision on the application. The Managing Agencies is likely to require evidence of the financial viability of the applicant to develop, operate and monitor reef restoration and / or adaptation projects.
- The applicant will need to supply all information necessary to assess the application, in accordance with criteria outlined in the Regulations. The Managing Agencies may prepare a terms of reference for each specific proposal, which will explain the applicant's information requirements and will include input from consultation with the applicant, other relevant government departments and relevant stakeholders.
- The Managing Agencies are likely to require the applicant / research institution to demonstrate evidence of suitable experience and knowledge in the relevant reef restoration and / or adaptation projects. If the applicant cannot provide evidence of this then the Managing Agencies would recommend partnering with those that do.
- The Managing Agencies will strongly encourage all reef restoration and / or adaptation project applicants to provide evidence of consultation with relevant Traditional Owners including details of who was consulted and relevant Traditional Owners views about the propose activity.
- When preparing an application applicants liaise with the Managing Agencies on the information requirements and should at a minimum consider providing the information in the checklist for applications at Appendix 3.
- Applicants should consider the following principles when selecting materials to support their activities:
 - Materials should suit the objective of the proposed restoration and / or adaptation activity.
 - Materials should be clean, non-toxic and free of greases, oils, chemicals, and other potential contaminants.
 - Materials should not have been recently (within 3-5 years) treated with toxic compounds such as anti-fouling paints containing TBT (tributyltin).
 - Materials should be of sufficient strength to withstand day-to-day wear of the marine environment (i.e. should not easily fragment or break).
 - Materials should not immediately, or through decomposition, have the potential to harm or injure wildlife or affect the values of the Marine Parks.
- The Managing Agencies encourage applicants to consider the Guidelines for the Placement of Artificial Reefs - London Convention and Protocol / UNEP when developing artificial reef proposals.
- Permit terms are likely to be dependent on the nature of the activity and likely to be 3 to 5 years for proof of concept research projects.

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GBRMPA document No: 100472 Revision: 1 Page 12 of 15

- For projects that have already undergone a pilot study longer permit terms may be considered.
- Applicants should be aware that additional legislative requirements are likely to be required for certain
 activities to occur within the Marine Parks. It is the responsibility of the applicant to be familiar with their
 legislative requirements (e.g.. EPBC Act 1999, Sea Dumping Act 1981, Fisheries Act 1994 (Qld), Gene
 Technology Act 2000).

Guideline GBRMPA document No: 100472 Revision: 1
Page 13 of 15
Date: 01-Oct-2018

Appendix 3. Checklist of information required for applications for restoration/adaptation projects

The Great Barrier Reef Marine Park Regulations 1983 require specific information to be provided with a Marine Park application before the Authority considers the application to be properly made.

The following checklist provides the minimum information requirements to be submitted with any application for Marine Parks permission for reef restoration and / or adaptation projects. These checklists are not exhaustive and in some cases, the Authority may require further information from the applicant to address specific aspects of the proposal. Please note: information about the applicant (such as ACN if a company, ABN for a trading name, postal address, email address and phone number) is also required when submitting an application.

Submitting the required minimum information at the time of application reduces the need for the Managing Agencies to seek further information from applicants during the assessment process. This leads to more efficient assessment timeframes.

Permits are necessary to ensure that appropriate sites are selected, materials are suitable and appropriately prepared, there are no significant adverse impacts on the marine environment and that the reef restoration and / or adaptation project does not pose a danger to marine users. You should also refer to the research and facilities checklists to ensure you include what is needed to make a properly made application. You can find the other checklists here.

The timetable for reef restoration and / or adaptation projects depends on the risk involved and whether the proposed reef restoration and / or adaptation has been trialled or conducted in the Great Barrier Reef before. Applicants are advised to begin liaison with the Managing Agencies as early as practicable to ensure a comprehensive permit application is submitted and the material is adequately prepared.

Reef restoration and / or adaptation activities that include the installation of facilities may need to be publically advertised. This will add complexity and time to the permit assessment process.

Table 2 has the information requirements that are needed for reef restoration and / or adaptation applications. If this information is not provided at the time of application the Managing Agencies may decide that the application was not properly made and not accept the application.

Table 2: Information requirements at time of application for reef restoration and / or adaptation projects

Great Barrier Reef Marine Park Regulations – Mandatory application requirements The following checklist is considered the minimum information required at the time of application. These information requirements are needed as well as the information for research applications and if appropriate requirements for facilities.				
1.	Name and description of the proposed reef restoration and / or adaptation.	Submitted		
2.	Type of permission being applied for: research, tourism, aquaculture, facility, carrying out works?	Submitted		
3.	Justification- Why do you need to use the Marine Parks? What alternatives have been considered, and why have they been ruled out?	Submitted Not applicable		
4.	 Location of the proposed facility, restoration and / or adaptation site, including: ESRI files (preferred) or Differential GPS coordinates PDF map showing the proposed footprint of the facility and/or equipment installation, overlaid on a satellite image using the highest resolution imagery possible. 	Submitted Not applicable		
5.	Zone in which the proposed reef restoration and / or adaptation is to take place. Justification of how the proposed reef restoration and / or adaptation is consistent with the objectives of the zone. If research is proposed in Marine National Park or Buffer Zones - Explanation of why the research: Is relevant to, and a priority for, the management of the Marine Parks; or	Submitted Not applicable		

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Page 14 of 15

GBRMPA document No: 100472 Revision: 1

Guideline

Great Barrier Reef Marine Park Regulations – Mandatory application requirements			
The following checklist is considered the minimum information required at the time of application. These information requirements are needed as well as the information for research applications and if appropriate requirements for facilities.			
	 Cannot reasonably be conducted elsewhere. 		
	If research is proposed in Preservation Zone - Explanation of why the research:		
	 Is relevant to, and a priority for, the management of the Marine Parks; and Cannot reasonably be conducted elsewhere. 		
6.	For pilot studies that require proof of concept (refer to guideline) provide scientific papers <u>or</u> supporting rationale for likely success in the GBR Region.	Submitted	
	For pilot studies that are considered high risk (refer to guideline) provide proof of concept and scientific papers <u>and</u> supporting rationale for likely success in the GBR Region.	Not applicable	
7.	Consultation- which groups (including Traditional Owners) has the applicant consulted with? Provide evidence of any consultation that has already occurred, issues raised and how they have been addressed.	Submitted	
8.	Any impacts/benefits that are expected (positive or negative) from the proposed reef restoration and / or adaptation activity and timeframes involved to see evidence of those impacts.		
	Also consider how the proposed reef restoration and / or adaptation activity will improve the condition and resilience of the Great Barrier Reef and/or the values of the Great Barrier Reef (including social, cultural and economic values) and how will the risks associated with the activity (both long and short-term) be avoided, mitigated or minimised.	Submitted Not applicable	
9.	Details of any translocation that will take place. Provide, a completed translocation proposal (<u>refer to position statement</u>).	Submitted Not applicable	
10.	If you propose to install facilities and/or medium-large scale equipment in the Marine Parks provide an installation and a removal plan. Provide details of how the facilities will be secured in the Marine Parks. Provide a contingency plan for the facilities in extreme weather events. Refer to checklist for facilities for information requirements.	Submitted Not applicable	
11.	If you have been funded to undertake the activity, or have applied for funding to undertake the activity, a copy of your funding application and any commitments in relation to timeframes, milestones, locations, access or use of specific equipment, etc	Submitted Not applicable	

GuidelineGBRMPA document No: 100472 Revision: 1Page 15 of 15Date: 01-Oct-2018