



Australian Government

Great Barrier Reef
Marine Park Authority

GREAT BARRIER REEF REGION STRATEGIC ASSESSMENT

Strategic Assessment Report

Draft for public comment



The Great Barrier Reef Marine Park Authority acknowledges the continuing sea country management and custodianship of the Great Barrier Reef by Aboriginal and Torres Strait Islander Traditional Owners whose rich cultures, heritage values, enduring connections and shared efforts protect the Reef for future generations.

None of the recommendations in the report, if implemented, are intended to have the effect of extinguishing native title.



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GLOSSARY OF COMMONLY USED TERMS AND ACRONYMS

Action: Includes a project, a development, an undertaking, an activity or series of activities, and an alteration to any of these things. (Adapted from EPBC Act)

Adaptive management: A systematic process for continually improving management practices through learning from the outcomes of previous management. It includes a monitoring, evaluation, reporting and improvement cycle. (Adapted from *A guide to undertaking strategic assessments*)

Authority: Great Barrier Reef Marine Park Authority.

Avoiding impacts: Measures taken so that actions have minimal negative effect on the environment. (Adapted from *A guide to undertaking strategic assessments*)

Basin: An area of land where surface water channels to a hydrological network and discharges into the sea (for example a whole river system). Within the Great Barrier Reef catchment 35 basins have been defined, based on the major river systems. A basin can include small creeks and streams that discharge directly to the sea.

Benthic: The bottom of the seafloor which includes the collection of organisms living on or in the bottom.

Biodiversity: The variability among living organisms from all sources (including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part). It includes diversity within species and between species, and diversity of ecosystems. (EPBC Act and GBRMP Act)

Bycatch: Any animal, plant or marine product that was unintentionally caught (that is, not targeted) during commercial, recreational or traditional fishing activities including Queensland's Shark Control Program. Bycatch can either be retained (see by-product) or discarded.

By-product: Any animal, plant or marine product that was unintentionally caught but retained during a commercial, recreational or traditional fishing activity.

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

Carrying capacity: The number of individuals an ecosystem can support without having any negative effects. It also includes a limit of resources and pollution levels that can be maintained without experiencing high levels of change.

Coastal ecosystem: Inshore, coastal and adjacent catchment ecosystems that connect the land and sea and have the potential to influence the health and resilience of the Great Barrier Reef.

Coastal reclamation: The process of creating new land where there was ocean, wetlands, or other waterbodies by filling the area with 'land fill' or infrastructure such as groynes and jetties.

Coastal zone: The area of land and sea in or adjacent to the Great Barrier Reef containing Queensland waters plus adjacent inland areas either within five kilometres of the coast or less than 10 metres above sea level (whichever is the further).

Cultural keystone species: The species that play special cultural roles for Indigenous and local peoples and are the ones they depend upon most extensively to meet their needs for food, clothing, shelter, fuel, medicine, and other necessities of life. These are the species that become embedded in a community's cultural traditions and narratives, their ceremonies, dances, songs, and discourse. Cultural keystone species can vary widely from one region to another and from one culture to another.

Cumulative impact: The impact on the environment resulting from the effects of one or more impacts, and the interactions between those impacts, added to other past, present, and reasonably foreseeable future pressures.

Cumulative risk: The combined risks to the environment by multiple impacts.

Discarded catch: See non-retained catch.

Driver: An overarching cause of change in the environment. (*Australia State of the Environment Report 2011*)

Ecologically sustainable use: Use of natural resources within their capacity to sustain natural processes while maintaining the life-support systems of nature and ensuring the benefit of their use to the present generation does not diminish the potential to meet the needs and aspirations of future generations. (EPBC Act)

Ecosystem: A dynamic complex of plant, animal and microorganism communities and their non-living environment interacting as a functional unit. (EPBC Act)

Ecosystem-based management: An integrated approach to managing an ecosystem and matters affecting that ecosystem, with the main object being to maintain ecological processes, biodiversity and functioning biological communities. (GBRMP Act)

Ecosystem services: Actions or attributes of ecosystems of benefit to humans, including regulation of the atmosphere, maintenance of soil fertility, food production, regulation of water flows, water filtration, pest control and waste disposal. It also includes social and cultural services, such as the opportunity for people to experience nature. (*Australia State of the Environment Report 2011*)

Environment: Ecosystems and their constituent parts, including people and communities; natural and physical resources; the qualities and characteristics of locations, places and areas heritage values of places; and the social, economic and cultural aspects of the above. (EPBC Act and GBRMP Act)

EPBC Act: *Environment Protection and Biodiversity Conservation Act 1999.*

Extraction: The removal of any animal, plant or marine product through legal commercial, recreational or traditional fishing activities including Queensland's Shark Control Program.

Geomorphology: Scientific study of landforms and the processes that shape them. (*Australia State of the Environment Report 2011*)

GBRMP Act: *Great Barrier Reef Marine Park Act 1975.*

Great Barrier Reef catchment: The area adjacent to the Great Barrier Reef Region which drains into the Region.

Habitat: The environment occupied by an organism or groups of organisms. (Adapted from EPBC Act)

Halimeda: Green macroalgae which is responsible for distinctive circular deposits on parts of the Great Barrier Reef.

Heritage value: A place's natural and cultural environment having aesthetic, historic, scientific or social significance, or other significance, for current and future generations of Australians. (EPBC Act and GBRMP Act)

Impact: An event or circumstance which has an effect, either positive or negative, on a value.

Indigenous person: A person who is a member of the Aboriginal race of Australia; or a descendant of an Indigenous inhabitant of the Torres Strait Islands. (GBRMP Act)

Indigenous: For the purposes of the strategic assessment, the term 'Indigenous' should be read to apply specifically to Traditional Owners and Traditional Owner groups.

Indirect impact: An impact that is not the direct result of a particular action but has been made possible by that action. These include downstream or upstream impacts, as well as facilitated or consequential impacts resulting from further actions (including actions by third parties). (Adapted from *A guide to undertaking strategic assessments*)

Inshore: Enclosed coastal and open coastal water bodies which extend from the mean low water mark out to approximately 20 kilometres, but also includes areas further offshore that are habitats for recognised inshore specialist species.

Integrity: A measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes. (*Operational guidelines for the implementation of the World Heritage Convention* paragraphs no. 88–95)

Listed migratory species: A migratory species that is native or included under a relevant international convention, which has been placed by the Environment Minister on the published list of migratory species. (Adapted from EPBC Act)

Listed threatened species: A native species which is extinct, extinct in the wild, critically endangered, endangered, vulnerable or conservation dependent, as set out in the published list of threatened species established by the Environment Minister. (Adapted from EPBC Act)

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

Marine Park: Great Barrier Reef Marine Park.

Matters of national environmental significance: Those matters defined in the *Environment Protection and Biodiversity Conservation Act 1999*.

Mesphotic reefs: Corals found at water depths where light penetration is low.

Mitigating impacts: Measures put in place to reduce the level of impact arising from an action, including indirect and cumulative impacts. (Adapted from *A guide to undertaking strategic assessments*)

Morphology: The form and structure of animals and plants, without regard to their functions.

Non-retained (or discarded) catch: Marine life caught by commercial, recreational or traditional fishers which has been discarded. This includes targeted species discarded due to size or catch restrictions, low market value, 'catch and release' practices, or bycatch that has been unintentionally captured.

Outstanding universal value: Cultural and/or natural heritage which is so exceptional as to transcend national boundaries and to be of such significance to humanity as a whole to make it worthy of special protection. (Adapted from *Operational guidelines for the implementation of the World Heritage Convention*)

Offshore: Offshore water bodies extend from approximately 20 kilometres out to the edge of the Great Barrier Reef Marine Park boundary.

Offsetting impacts: Measures intended to compensate for the residual adverse impacts of an action on the environment. (Adapted from *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, 2012)

Palaeochannel: An ancient stream or riverbed, cut into the rock or soil and overlaid by sediment after the stream has changed its course or dried up.

Palaeoecology: The systematic study of the ecological relationships which prevailed among fossil plants and animals.

Pelagic: Relating to or living in or on oceanic waters. The pelagic zone of the ocean begins at the low tide mark and includes the entire oceanic water column and living organisms that inhabit this zone for all or part of their life (for example, plankton, pelagic fish).

Poaching: The illegal take of any animal, plant or marine product from land that is not one's own or is under official protection. It also includes the illegal take of a protected species.

Protected species: A species that is a cetacean; a listed marine species, a listed migratory species, a listed threatened ecological community, or a listed threatened species; a species of marine mammal, bird or reptile that is prescribed as endangered wildlife, vulnerable wildlife or rare wildlife under the *Nature Conservation Act 1992* (Qld); a species declared to be a protected species for the purposes of this definition; a species declared to be a strictly protected species for the purposes of this definition. (GBRMP Act)

Precautionary principle: The principle that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage. (EPBC Act and GBRMP Act)

Pressure: An activity or group of activities that cause an impact on a value.

Program: The Authority's management arrangements, including future commitments, as described in the Program Report.

Recreation: An independent visit for enjoyment that is not part of a commercial operation. It is distinct from tourism where a visitor pays to use a commercial operation. (*Recreation Management Strategy for the Great Barrier Reef Marine Park*)

Refugia: An area where an organism can survive during a period of unfavourable conditions.

Resilience: The capacity of an ecosystem to recover from disturbance or withstand ongoing pressures.

Region: Great Barrier Reef Region as defined in the *Great Barrier Reef Marine Park Act 1975*.

Retained catch: Marine life caught and kept by commercial, recreational or traditional fishers including targeted and non-targeted species.

Risk: The possibility of something happening that impacts on objectives. It is the chance to either make a gain or a loss and is measured in terms of likelihood and consequence. (*Australian Standard for Risk Assessment* (AS/NZS ISO 31000:2009))

Ship: Vessels greater than 50 metres in overall length or carrying specialised product regardless of length (for example, oil tankers, chemical or liquefied gas carriers).

SEWPaC: The former Commonwealth Department of Sustainability, Environment, Water, Population and Communities, now the Department of the Environment.

State Development Area: Defined areas established to promote economic development for industry, infrastructure corridors and major public works.

Take: The act of or attempt to remove, gather, catch, kill, destroy, dredge for, raise, carry away, bring ashore, interfere with and obtain (by other means) an animal, plant or marine product.

Taxa: Groups of one or more populations of organisms.

Threshold: The breaking point above which an ecosystem or a component of an ecosystem can no longer sustain natural processes and remain in a healthy condition (for example, the point at which there is a phase shift from coral-dominated or algal-dominated reefs).

Throughput: The quantity of cargo that is passed through a port in a given period (exports and imports).

Tourism: Commercial activities that provide transport, accommodation or services to people who are visiting the Region principally for enjoyment. (Derived from GBRMP Act)

Trading port: A trading port refers to a port that has an associated pilotage area as defined in schedule 5 of the Transport Operations (Marine Safety) Regulation 2004. In these areas, the regional harbour master has the authority to direct the master of a ship to navigate or operate a ship in a prescribed way.

Traditional Owner: An Indigenous person recognised in the Indigenous community or by a relevant representative Aboriginal or Torres Strait Islander body as having spiritual or cultural affiliations with a site or area in the Marine Park or as holding native title in relation to that site or area; and who is entitled to undertake activities under Aboriginal or Torres Strait Islander custom or tradition in that site or area.

Traditional Owner group: The group of Traditional Owners who, in accordance with Aboriginal or Torres Strait Islander custom, speak for a site or area.

Trophic: Of or relating to nutrition.

Trigger value: A point which, if exceeded, would mean there was a significant risk of adverse effects on an ecosystem or a component of an ecosystem. Exceeding a trigger value would 'trigger' action to address contributing impacts and/or review the trigger value.

Turbidite: A type of sedimentary rock composed of layered particles that grade upward from coarser to finer sizes and are thought to have originated from ancient turbidity currents in the oceans.

Value: Those aspects or attributes of an environment that make it of significance.

Vulnerability: The degree to which a system, organism or community is susceptible to, and unable to cope with, an impact.

World Heritage Area: Great Barrier Reef World Heritage Area.

Wellbeing: The combination of economic prosperity, community liveability and environmental integrity, which is determined by the quality, quantity, distribution, use and preservation of economic, human, social and natural capital. (Commonwealth of Australia (2012) Sustainability Framework (Version 0– April 2012). Department of Sustainability, Environment, Water, Populations and Communities, Canberra, Australia)

Zones of influence: Areas where impacts have detectable effects on values.

