Australian Government



Great Barrier Reef Marine Park Authority

# Guidelines

## Activity Assessment – Tourist Program Involving Whale Watching or Swimming-with-whales

#### (Revision 0) Effective from 4 October 2017

#### Objective

To provide guidance on assessing whale-based tourism activities within the permission system

#### Target audience

*Primary: Great Barrier Reef Marine Park Authority officers assessing applications for permission. Secondary: Groups and individuals applying for permission; interested members of the public.* 

### Purpose

1. Permission decisions contribute to achieving the objects of the *Great Barrier Reef Marine Park Act* 1975.

## Context

#### Description of the activity requiring permission

- 2. Whale watching is defined in Part 4A of the Regulations as an activity (other than swimming-withwhales activity) conducted for the purpose of enabling tourists to observe cetaceans, including using a vessel or aircraft to find cetaceans for that purpose.
- 3. **Swimming-with-whales** is defined in the Part 4A of the Regulations as an activity for the purpose of enabling tourists to swim, snorkel or scuba dive with cetaceans, or to observe cetaceans while in the water with them, including:
  - a. using an aircraft or vessel to find cetaceans for that purpose
  - b. placing tourists in the water for that purpose.
- 4. A cetacean is a marine mammal within the taxonomic order Cetacea, which includes toothed whales of the suborder Odontoceti, baleen or toothless whales (of the suborder Mysticeti), dolphins and porpoises.
- 5. Because both whale watching and swimming-with-whales definitions refer to cetaceans, these guidelines apply to all cetaceans, including dolphins.
- 6. Tourist programs may only conduct whale watching and swimming-with-whales activities in the Marine Park if specifically given permission from the Great Barrier Reef Marine Park Authority (GBRMPA) to do so. See the <u>Application Guidelines</u> for guidance on what constitutes a tourist program.
- 7. Incidental whale watching occurs within the Marine Park as tourism operators opportunistically observe passing whales. Tourism operators who offer dedicated whale watching tours require a greater certainty of being able to guarantee whale sightings and may have dedicated spotter aircraft or drones relaying coordinates to the vessel.

#### Importance

- 8. The Marine Park is home to at least 30 species of whales and dolphins. Most are poorly studied, so little is known about their behaviour in the Marine Park.
- 9. Humpback whales are the species of whale most commonly sighted, especially during the migration season between May and September. Tens of thousands of humpbacks migrate each year from Antarctica to the Marine Park's warmer waters to mate or calf.
- 10. Dwarf minke whales are also regularly encountered between June and August in the northern Great Barrier Reef, particularly offshore Port Douglas and in the Ribbon Reefs.
- 11. As humpback whale numbers continue to recover, whale watching tours are growing in popularity as the chances of seeing whales in the Marine Park improve. Cetacean-based tourism is expected to become more economically important to tourism operators in the future.
- 12. There is also increased interest in opportunities to swim with whales and dolphins. Such programs are already popular in other parts of the world. Swimming with humpback whales tours started in 2014 in southeast Queensland (outside the Marine Park) and in 2015 in Western Australia.

## Management

#### Zoning and Legislation

#### Limits on granting permission

- 13. Regulation 88S(2) requires, among other things, that if an application relates to a tourist program involving whale watching or swimming-with-whales, GBRMPA must consider in the assessment whether the conduct will adversely affect a cetacean, the conservation status of a species of cetacean or a population of a species of cetacean.
- 14. The <u>Cairns Area Plan of Management</u> in conjunction with regulation 88U limit the activity of swimmingwith-whales as part of a tourist program to a maximum of nine (9) permissions and only to occur with dwarf minke whales. In addition, this activity will only be permitted to take place in the Offshore Port Douglas and Ribbon Reefs sectors of the Cairns Planning Area.
- 15. Regulation 88U caps the swimming-with-whale industry at nine (9) permissions at any one time. Any permissions that become available may only be allocated through an expression of interest process in accordance with Division 2A.3 of the Regulations.

#### Interacting with cetaceans

- 16. Part 4A of the Regulations limits all human interactions with whales and dolphins in the Marine Park. These limits apply to anyone interacting with whales, including private recreational boaters and commercial tourist programs. Some matters covered by these regulations are:
  - a. approach distances for different types of vessels and aircraft
  - b. approach distances for swimmers
  - c. additional restrictions on vessels, aircraft or swimmers approaching calves
  - d. prohibitions on feeding or touching cetaceans.
- 17. See Figure 1 for a graphic illustrating some of these regulations. Note there are many more regulations that are not shown in this graphic, including different requirements for calves.
- 18. Whale watching activities and swimming-with-whales activities must not be conducted using prohibited vessels (Regulation 117D(4) which include jet skis, parasails, hovercraft, hydrofoils, wing-in-ground effect craft and motorised diving aids (such as diver propulsion vehicles).
- 19. Part 4A of the Regulations is based on current understanding of whale behaviour, in particular humpback whales. As scientific research on these interactions progresses, GBRMPA may develop additional specific provisions or permission requirements for certain species.

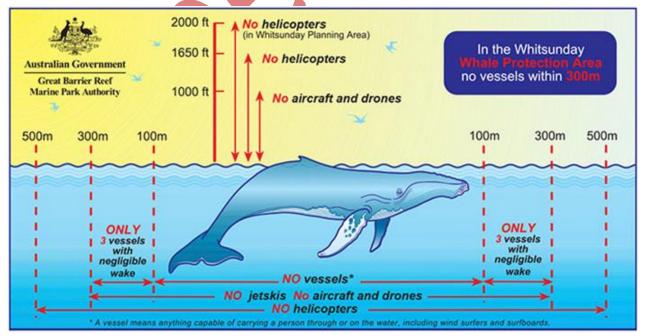


Figure 1: General vessel limits in Part 4A of the Regulations. © Great Barrier Reef Marine Park Authority

#### **Cetacean exemptions**

- 20. Under Regulation 117K(1)(c), a person may be given an exemption to the regulated approach distances, navigational requirements and other requirements detailed in Part 4A of the Regulations as part of permission for a tourist program involving swimming-with-whales or whale watching. The exemption may also apply to the vessel or aircraft used for that activity.
- 21. Requests for cetacean exemptions are assessed on a case-by-case basis in accordance with legislation. In particular, Regulation 88S requires GBRMPA to consider how the proposal might impact on individual whales or populations of whales. See the <u>Assessment Guidelines</u> for more information.
- 22. GBRMPA's Operational Policy on Whale and Dolphin Conservation in the Great Barrier Reef Marine Park (2000) and Policy on Managing Activities that Include the Direct Take of a Protected Species from the Great Barrier Reef Marine Park (2005) establish that GBRMPA is unlikely to grant a cetacean exemption for tourism vessels other than in exceptional circumstances where the activity is likely to contribute to the conservation of the species.
- 23. No exemptions have been granted for tourism vessels to approach closer than the regulated 100 metres from a whale. GBRMPA considers that for vessels, the limits in Part 4A of the Regulations provide adequate opportunities for the public to view and appreciate whales, while also avoiding interactions which might endanger both whales and vessels.
- 24. The only tourist exemptions granted recently have been for swimming-with-dwarf-minke-whales participants to enter the water closer than the regulated 100 metres. The exemption for 'people entering the water' allows for a vessel to stop at least 100 metres from a whale, the whale to approach the vessel and swimmers to then enter the water to observe the whale.

#### Whale protection area - Whitsundays

- 25. Schedule 2 of the Regulations delineates the boundaries of the only existing whale protection area, which encompasses most of the waters around the Whitsunday Islands. This is called the Whitsunday Whale Protection Area. This area was declared primarily to protect mothers and calves that congregate to rest in the relatively protected waters of the Whitsunday Islands. Additional limits apply to whale protection areas. Key limits include:
  - a. tourist programs are not allowed to conduct whale watching or swimming-with-whales tours
  - b. a person must not operate a vessel to approach within 300 metres of a whale
  - c. helicopters must not fly less than 2000 feet above a whale.
- 18. Regulation 117JB allows for the protection of whales in designated whale protection areas.

#### Policy

- 26. The activity of swimming-with-whales is managed as a special permission under the policy on <u>Managing Tourism Permissions to Operate in the Great Barrier Reef Marine Park (including</u> <u>Allocation, Latency & Tenure)</u> and requires allocation through an expression of interest process.
- 27. The <u>Code of practice for dwarf minke whale interactions</u> (2008) reflects GBRMPA's expectations for the swimming-with-whales tourism industry.
- 28. The <u>Australian National Guidelines for Whale and Dolphin Watching 2017</u> contain comprehensive best practice standards for whale watching and interaction including from land, vessels and aircraft. It is important that tourism operators recognise the signs of disturbance outlined in these guidelines and immediately move away from disturbed animals.
- 29. The GBRMPA <u>Operational Policy on Whale and Dolphin Conservation in the GBRMP 2007</u> provides a framework for the conservation of whales and dolphins by partnering with reef users and managing their activities in the Marine Park.
- 30. The GBRMPA publication of 2017 titled 'Great Barrier Reef Underwater Noise Guidelines: Discussion and Options Paper'<sup>1</sup> provides an overview of relevant international and national policies, technical guidance for underwater noise impact assessments, as well as reference summary on measuring and evaluating impacts of underwater noise on animals in the Great Barrier Reef.

## Common assessment considerations – links to values

#### **Biodiversity values**

- 31. Whales are recognised as one of the biodiversity values of the Marine Park. Their condition and trend are described in the <u>Outlook Report 2014</u> and the <u>Great Barrier Reef Region Strategic</u> <u>Assessment Report 2014</u>. There is little information on the condition of most whale populations. For humpback whales:
  - a. condition is good
  - b. trend is improving
  - c. management objective is to maintain populations in good condition.
- 32. GBRMPA acknowledges that little is known about the behaviour of the more than 30 cetacean species in the Marine Park. The limits in Part 4A of the Regulations are based primarily on the species most commonly interacted with around Australia (e.g., humpback whales and bottlenose dolphins). In 2016, the first ever reported sighting of a rare Omura whale was confirmed in the Marine Park.
- 33. Humpback whale numbers are increasing in the Marine Park. In 2004 surveys indicated a population of 7000 which had increased to 20,000 in 2015.<sup>2</sup> Population growth estimates are at 10-11 per cent per year.<sup>2</sup> As a result of the population growth more operators are expected to advertise and conduct dedicated whale-based tourist programs.
- 34. Tourist programs that conduct whale watching have the potential to impact cetaceans from human disturbance including: disruption of normal behaviours; displacement and avoidance of habitat areas; stress and injury; increased mortality and a reduction in breeding success. Disturbance can occur from vessels or aircraft approaching or harassing; swimming in proximity to cetaceans (which also presents risks to human health); increased noise; pollution or debris entering the marine environment; and vessel strike.
- 35. Dedicated whale-based tourist programs may pose a greater risk as the expectation to encounter whales is higher from visitors who are paying for this particular experience. As a result these operators may be more inclined to chase or approach cetaceans closer than the regulated approach distances (Figure 1). The risk of this actually occurring is considered to be low as the Regulations limit the number of vessels that can approach a whale and an assessment for permission assumes compliance with all statutory requirements.
- 36. The Regulations prohibit tourism programs from conducting whale watching in designated Whale Protection Areas (currently only the <u>Whitsunday Whale Protection Area</u> is declared in the Regulations) and from using prohibited vessels to conduct whale watching.

#### Historic heritage values

- 37. Commercial whale hunting was legal in Queensland until 1978 when all whaling was ceased in Australian waters, although humpbacks were protected starting in 1965.<sup>3</sup> The export of whale products was one of Australia's first primary industries as whale blubber was used for oil lamp fuel, lubricants, candles and beauty products.<sup>3</sup>
- 38. The Great Barrier Reef was popular with whalers from the 1790s to the 1870s. More than a dozen whaling vessels are estimated to have sunk in the Great Barrier Reef.<sup>4</sup>

#### Traditional Owner heritage values

39. Individual whales or whale species may be of significance to Traditional Owners. For example, the Woppaburra people of the Keppel Islands have the humpback whale as their spiritual totem. This includes the whales, their feeding grounds and migration routes, the songlines and stories associated with the totem, and potentially sacred sites associated with creation stories. See <u>Woppaburra heritage assessment guidelines</u> and <u>Traditional Owner heritage assessment guidelines</u> for more information about the significance of Traditional Owner heritage values.

#### Social values

- 40. Whales have a high public profile and are treasured by many people world-wide. Some of the strongest social values include:
  - a. Personal connection Local communities often feel personally connected to the annual migration of humpbacks. Specific whales, such as the albino humpback named Migaloo, may hold even more significance, particularly for people who have had the opportunity to see these iconic individuals.
  - b. Appreciation Whales inspire awe with their sheer size and their intelligence. Many people feel a strong sense of responsibility for whales, due to their near-extinction at the hands of humans.
  - c. Income and employment Tourism programs involving whale watching and swimming-withwhales are important contributors to employment within the Marine Park.
- 41. It is important to distinguish between biodiversity impacts and social impacts associated with whales. For example, the death of one whale might not impact on the overall population's biodiversity value, but might be a major social impact for schoolchildren who have been tracking its progress along the coast.
- 42. Allowing tourist programs to undertake whale watching will also have positive impacts on social values including appreciation and enjoyment as people tend to have strong connections to iconic marine fauna.
- 43. In the past, there has been some uncertainty about whether whale watching must be explicitly listed on a tourism permit. GBRMPA has now clarified its policy position on this matter. The agency confirms that whale watching is a low risk activity that can be conducted by all tourism operators, provided operators comply with the existing limits in Part 4A of the Regulations.
- 44. See the <u>Social value assessment guidelines</u> for more information about social value considerations.

## Hazards, mitigation and monitoring

45. Table 1 summarises the key hazards, possible impacts and possible mitigation measures. The table is focused on impacts to whales, but tourism programs can also impact on other values of the Marine Park. Such impacts are common across all tourism programs and not unique to whale watching so have not been addressed in these guidelines.

Hazard	Potential impacts	Possible mitigation measures		
Change in noise	<ul> <li>Anthropogenic noise can cause acoustic masking (e.g. unable to hear the communication of other animals), behaviour disturbance (e.g. reduce foraging time, hiding/retreating, approaching sound sources), non-auditory effects (such as physiological stress response to noise), temporary and permanent hearing loss, and reduction of prey availability or ability to find prey.<sup>1</sup></li> </ul>	<ul> <li>Manage noise levels of vessels, people, aircraft and equipment</li> <li>Comply with Part 4A of the Regulations to ensure whales are not approached too closely</li> <li>Follow codes of conduct</li> <li>No playback of underwater sound of recorded whale or dolphin sounds or song.</li> </ul>		
Contamination of air Contamination	<ul> <li>As air breathing mammals, whales are susceptible to a similar range of contaminants as humans</li> <li>Prolonged exposure can cause health issues.</li> <li>Irritation or infection of skin or</li> </ul>	<ul> <li>Reduce vessel and aircraft emissions</li> <li>Appropriately store and handle chemicals</li> <li>Comply with Part 4A of the Regulations to ensure whales are not approached too closely.</li> <li>Appropriately store and handle chemicals</li> </ul>		
of sediment or water	<ul><li>mucous membranes</li><li>Ingestion of contaminated food</li></ul>	Incident response plan and appropriate clean-up equipment on vessel		

#### Table 1: Summary of hazards, possible impacts and possible mitigation measures

CAUTION: Only the electronic copy of a document sourced from either GBRMPA's internal 'Master Document List' or external 'eLibrary' is controlled. Check the revision number of printed copies against these lists to verify currency.

Hazard	Potential impacts	Possible mitigation measures
	<ul> <li>Bioaccumulation of toxins in fat.</li> <li>Transmission of toxins to feeding calves</li> <li>Prolonged exposure can cause health issues</li> <li>May result in avoidance of important breeding or calving habitat.</li> </ul>	<ul> <li>Notify GBRMPA of any spills as soon as practicable</li> <li>Requirement to take all reasonable steps to prevent or minimise harm to the environment</li> <li>Appropriate rubbish disposal facilities onboard.</li> </ul>
Change in ecological processes Direct death	<ul> <li>Change of natural behaviour (feeding, mating, calving, nursing, migrating, resting)</li> <li>Displacement from important habitat</li> <li>Reduced reproduction</li> <li>Increased vulnerability to predators.</li> <li>Vessel or aircraft strike</li> </ul>	<ul> <li>Contribute to monitoring or research of whale and dolphin responses to vessels, aircraft or people</li> <li>Comply with Part 4A of Regulations</li> <li>Educate crew members to detect animal distress</li> <li>Limits on use of viewing platforms, mermaid lines or boom nets</li> <li>Establishment of no approach times (e.g.</li> </ul>
or removal of living things, including vessel strike	<ul> <li>Entanglement and drowning in swim lines, anchor ropes or other equipment.</li> </ul>	<ul> <li>when the animals are likely to be feeding, resting etc.)</li> <li>Not encouraging animals to bow ride</li> <li>Maintain communication with other</li> </ul>
Direct injury or disturbance of living things, including translocation	<ul> <li>Entanglement in swim lines, anchor ropes or other equipment</li> <li>Separation of calf from mother.</li> <li>Separation of pods or families</li> <li>Change of natural behaviour (feeding, nursing, migrating, resting)</li> <li>Displacement from important habitat</li> <li>Injury</li> <li>Stress</li> <li>Reduced reproduction</li> <li>Increased vulnerability to predators.</li> </ul>	<ul> <li>Maintain communication with other vessels/aircraft via radio</li> <li>Comply with relevant Codes of Conduct for the industry</li> <li>When conducting swimming-with-whales under specific special permission:         <ul> <li>Pre-swim brief for all participants</li> <li>Deploy maximum two safety ropes when swimming-with-whales (special permissions only)</li> <li>No more than 6 swimmers per line spaced 3-4 metres apart.</li> <li>Remove swimmers from water if animals show signs of distress (tail slapping, rapid changes in direction etc.)</li> <li>Minimum time between successive swim attempts</li> <li>No other vessel closer than 1000m to a vessel conducting swims</li> <li>No swimming with or in proximity to pods containing calves</li> </ul> </li> <li>Maximum watching time with a pod/population per day, including maximum time for each interaction, time required between successive swim attempts, and maximum cumulative watching time from all vessels/swimmers.</li> </ul>

Hazard	Potential impacts	Possible mitigation measures		
Marine debris	<ul> <li>Packaging or waste released into Marine Park</li> <li>Entanglement of wildlife</li> <li>Ingestion by wildlife resulting in illness or death</li> </ul>	<ul> <li>Equipment to be attended to at all times</li> <li>Requirement to notify of any loss or damage</li> <li>Reporting of any stranded or entangled wildlife</li> </ul>		
	<ul><li>Bioaccumulation of plastics in the food chain</li><li>Aesthetic impacts.</li></ul>	<ul> <li>Restrictions on type of material use (e.g. prohibit polystyrene)</li> <li>Responsible storage and removal of rubbish such as debris, fishing line, nets.</li> </ul>		

## Consequence

46. Consequences are to be determined on a case-by-case basis in consultation with Traditional Owners, guided by the GBRMPA <u>Risk assessment procedure.</u>

## Assessment information

- 47. Additional information may be required depending on the type of activity. This is outlined based on the assessment process. Refer to the Application Guidelines for more information on how assessment processes are determined.
- 48. Other examples of information that may be useful and could be requested through a further information request includes:
  - a. the use of any aircraft (including drones) for spotting purposes
  - b. educational materials and briefing package materials for crew and participants on appropriate behaviour.
- 49. Useful resources include:
  - a. <u>Minke Whale Project</u> site with information on dwarf minke whale research.
  - b. <u>Whale watching working group</u> International Whaling Commission.
  - c. <u>Whale SENSE</u> commercial whale watching education and recognition program by the U.S. National Oceanic and Atmospheric Association (NOAA).
  - d. <u>Managing swim with wild dolphin tourism in Australia: guidelines, operator practices and</u> research on tourism impacts – Zeppel 2009.
  - e. <u>GBRMPA Research Publication No. 112: Dwarf Minke Whale Tourism Monitoring Program</u> (2003-2008)

## Implementation

- 50. These guidelines will be reviewed and updated at least every three (3) years.
- 51. The Permission system policy and other assessment guidelines are available which provide further detail on how GBRMPA assesses, decides and manages specific aspects of the permission system and application process.
- 52. For actions that are wholly or partially outside the Marine Parks, the Authority will continue to liaise with the Commonwealth Department responsible for the *Environment Biodiversity and Conservation Act 1999.* Where a bilateral agreement exists between the Australian Government and the Queensland Government, depending on the terms of the agreement the Commonwealth Department's role may be delivered by the Queensland Government. The Authority will work with both levels of government according to agreed procedures, such as a Memorandum of Understanding, to provide advice on matters that may affect the Great Barrier Reef.

## Definitions

Refer to the <u>Permission System Policy</u> for a list of general definitions relating to the permission system. **Cetacean** 

Is defined in the Regulations as an animal of the Suborder Mysticeti or Odontoceti of the Order Cetacea

#### Swimming-with-whales

Is defined in the Part 4A of the Regulations as 'an activity for the purpose of enabling tourists to swim, snorkel or scuba dive with cetaceans, or to observe cetaceans while in the water with them, including using an aircraft or vessel to find cetaceans for that purpose and placing tourists in the water for that purpose.'

#### Whale watching

Is defined in Part 4A of the Regulations as 'an activity (other than swimming-with-whales activity) conducted for the purpose of enabling tourists to observe cetaceans, including using a vessel or aircraft to find cetaceans for that purpose.'

## Supporting information

- 1. McPherson, C., Yurk, H., McPherson, G., Racca, R. and Wulf, P. 2017, *Great Barrier Reef Underwater Noise Guidelines: Discussion and Options Paper*, Technical Report by JASCO Applied Sciences for the Great Barrier Reef Marine Park Authority, Townsville.
- 2. The University of Queensland 2015, *Abundance of the east Australian humpback whale population,* The University of Queensland, viewed 5 September 2017, <<u>Abundance of east Australian</u> <u>humpback whale population</u>>.
- Department of Environment and Energy 2017, Whaling, Australian Government Department of Environment and Energy, viewed 5 September 2017, < <u>Department of Environment - Whaling in</u> <u>Australia</u>>.
- 4. Gibbs, M. 21 October 2010, *From whaling to whale watching*, Queensland Historical Atlas, viewed 5 September 2017, < <u>Whaling and Whale watching</u>>.

## **Further information**

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