

Aboriginal and Torres Strait Islander peoples are the Traditional Owners of the Great Barrier Reef area and have a continuing connection to their land and sea country.

Reef 2050 Plan Plans of management support Reef 2050 policies

Purpose

Plans of Management are a legislative tool under the *Great Barrier Reef Marine Park Act 1975* that can be used to apply specific management rules to an area within the Great Barrier Reef Marine Park, consistent with the overall object of the Great Barrier Reef Marine Park Act.

The purpose of this case study is to examine how the draft Reef 2050 policy documents for net benefits and cumulative impact management can be applied when drafting and implementing Plans of Management.

Context and scope

The Great Barrier Reef Marine Park Authority (the Authority) uses various tools to manage the Great Barrier Reef Marine Park. One tool is location-specific Plans of Management (PoM) that seek to achieve ecologically sustainable outcomes for those places, consistent with the objects of the Great Barrier Reef Marine Park Act 1975 (the Act).

PoM focus on issues specific to an area of the Great Barrier Reef Marine Park (Marine Park). They address potential impacts and provide for the long-term protection and conservation of the environment, biodiversity and heritage values within that region. PoM also include site-specific management arrangements for locations identified as sensitive (Cairns, Hinchinbrook and the Whitsundays). Examples of special arrangements for an area could include: limiting tourist group sizes, setting no-anchoring areas or prohibiting use.

PoM provide opportunities to identify cumulative impacts and implement management measures to maintain, restore and enhance Reef health. They do not directly address threats outside the Marine Park, but consider their downstream impacts on the health and condition of values.

Application

The intent of the cumulative impact and net benefit policies is to provide a systematic approach to the way in which cumulative impacts are considered and guide the development of special arrangements to maintain and/or restore values, tailored to the location.

Net Benefit

PoM respond to how threats, activities and conservation will be managed in a region to achieve ecological sustainable use and protection of values. A PoM describes the planning area it encompasses, identifies areas that need special management, and includes provisions for managing use and access to the planning area. If specific values are threatened, proposals to reduce or eliminate those threats can be considered. This can include management proposals for recovery, protection and conservation of species and ecological communities that are in poor/declining, or at/below, critical thresholds, delivering a net benefit.

Condition based management triggers for values can also be put in place to inform management response, such as managing effects from natural disasters and overuse of sites. This approach has already been used in the Authority's Marine Tourism Contingency Plan.

Cumulative Impact Management

Due to the size of the area encompassed by a PoM, and the complexity of issues it manages, PoM are a point in time assessment of values and use. However the objectives of a PoM reflect planning horizon time factors that relate to reduction or elimination of threats, recovery and changing community expectations. Through this issue based planning horizon, PoM development considers the reasonably foreseeable effects from cumulative impacts on the planning areas.

PoM overall intent is to protect and conserve identified values of the planning area, while allowing for ecologically sustainable use. Cairns, Hinchinbrook and Whitsunday Plans of Management were developed recognising that tourism operations were reasonably expected to become more numerous than other uses, and cumulative in effect, particularly when anchoring or setting down passengers. The measures employed by the PoM to manage cumulative effects to meet this foreseeable pressure included:

- Limiting access, use, intensity and type of tourism activities allowed
- Ensuring consistent permit decision making by the Authority
- Implementing conservation and protection measures specific to identified values.

The governance of PoM also support many of the best practice governance principles identified in the policies (refer to relevant principles in the cumulative impact management and net benefit policies), such as:

- Consultation in their development
- Objectives allowing for community groups to collaboratively enter into a joint management agreement with the Authority
- Legally enforceable
- Providing strategic direction to assessment and decision-making through the joint permission system between the Authority and the Queensland Parks and Wildlife Service.

Outcome

Implementation of principles and steps outlined in the draft cumulative impact management and net benefit policies will improve consistency in the way the range of threats and values are identified and managed in PoM development.

PoM provide an opportunity to assess pressures affecting values within the PoM area. While direct action to mitigate impacts can only occur within the PoM area, the effect of impacts from activities outside the area can be considered in the management approach.

PoM can support the delivery of net benefit outcomes. For example, the Shoalwater Bay (Dugong) Plan of Management was prepared in response to decline in dugong numbers in the southern section of the Marine Park. The Plan provides a framework for managing use of the Shoalwater Bay Area to ensure that dugongs are managed to enable their recovery and continued protection and conservation. The Plan supports net benefit action by identifying:

- key threats to dugong in the area, for example, commercial netting (within the meaning of the zoning plan), traditional hunting and gathering and the use of vessels
- critical habitats that support dugong Shoalwater Bay has been identified as the most important dugong seagrass habitat in the southern region of the Marine Park, supporting the largest dugong population in the Marine Park south of Cardwell. It is also remote from human settlement (and therefore threats)
- management responses that directly contribute to recovery and reducing threats to improve the condition of values (dugong and habitats that provide ecosystem services that support dugong)
- processes for monitoring of actions in the Plan through surveillance, enforcement and research, which inform adaptive management (e.g. if further dugong mortality occurs, and is shown, or is reasonably suspected, to be related to human activity, further action will be

taken to remove the cause or causes).

There is an opportunity to improve how we evaluate the effectiveness of PoM through the adoption of terms and approaches described in the cumulative impact assessment and net benefit policies and use of condition thresholds which will be regularly evaluated through the Great Barrier Reef Outlook Report and the Reef 2050 Integrated Monitoring, Modelling and Reporting Program (RIMReP). Performance measures would need to be clearly stated to assess the effectiveness of PoM arrangements.

Insights

A PoM can only address the effect of threats and issues within its area, but it can consider the cumulative impacts from both within and outside the Marine Park. Objectives of PoM include the reduction or elimination of threats to the values of the planning area, including the effects of climate change and poor water quality from land based sources. The resulting effects of these pressures may require additional management measures to be put in place within the PoM to ensure the recovery and conservation of values within the PoM.

This also is an opportunity to build partnership approaches and align actions to reduce those impacts (Figure 1).

The structure and development of PoM can be implemented as a regional strategy for managing cumulative impacts and guiding net benefit outcomes by identifying values, identifying pressures, and establishing appropriate management approaches to inform decision-making (Figure 1).



Figure 1 – Plan of Management decision and development steps where Reef 2050 policies would be applied

Acknowledgments

The Great Barrier Reef Marine Park Authority greatly appreciates the contributions from our partners in developing this case study:

- Whitsunday Plan of Management Taskforce; and
- Whitsunday Plan of Management Advisory Group.