

Keppel Bay Resilience Project

- No Anchoring Areas

Reef Protection Markers (RPMs) are white, pyramid-shaped buoys (joined by an imaginary line) with blue Marine Park labels. They create the boundary of a No Anchoring Area, where anchoring is not allowed inshore of the line of buoys. RPMs must not be used to moor vessels, but may be used as descent lines for diving. The Great Barrier Reef Marine Park Authority (GBRMPA) and Environmental Protection Agency (EPA), in consultation with the community, have selected four sites for No Anchoring Areas in Keppel Bay. These sites are:

- Barren Island - north-western side
- Great Keppel Island – Big Peninsula
- Great Keppel Island – Monkey Beach Reef, allowing access to beach
- Humpy Island - west of the campground



What activities can I do in a No Anchoring Area?

You can undertake any activities that are normally allowed in that area in accordance with the Zoning Plan. The only activity that is disallowed is anchoring. Reef Protection Markers cannot be used to moor vessels, but may be used as descent lines for diving.

Why install No Anchoring Areas?

Reefs within Keppel Bay have been affected by both coral bleaching and flooding and are also experiencing increased levels of use. With increasing use comes a greater pressure on the plants and animals that call Keppel Bay home.

Unfortunately, some reefs in Keppel Bay are showing signs of anchor damage. Minimising these impacts helps to increase reef resilience (helping to keep the reefs healthy and strong so that if they are faced with a disturbance or an ongoing pressure, such as climate change, they are able to survive).

No Anchoring Areas are currently in place in other areas throughout the Marine Park, such as the Whitsundays, Magnetic Island and Lady Musgrave Island, and have proven successful in these places. A healthy reef is good news for all users of the Marine Park, as it enhances their marine experience and ensures they can continue to do the activities that they enjoy.

Will the sites be monitored?

Yes. Annual monitoring will occur at the four sites, and the resilience assessment of each site will be compared to their profile from the baseline assessments in 2007 and 2008. The results of the monitoring will be made available. This is a trial to look at how No Anchoring Areas can help maintain the health of the reef in Keppel Bay. The amount of time the No Anchoring Areas are in place depends on how the reef responds to this protection measure.

Trialling management responses to climate change

Normally when we install Reef Protection Markers, the decision is based solely on anchor damage. However, in this project, we used additional criteria such as how healthy the site is compared to others in Keppel Bay, as well as how likely the sites are to respond to the management measures. In addition to this, an individual profile (health assessment) was carried out at each site.

The individual profile described:

- The current level of resilience of the reef (high or low)
- The level of management influence (how much the site will benefit from management tools like No Anchoring Areas)
- Habitat type (Type A, B, C or D)
- Current zoning for the area.

It was important that we were able to select sites with a mix of high and low resilience and habitat types. This ensures that reefs with a low resilience level are given the opportunity to recover, and sites with a high resilience are protected in case of a significant bleaching event. The table on the next page provides the summary profile on each site selected for consideration, as well as the final four sites selected.

Site Name	Level of Management Influence*	Resilience Rank*	Habitat Type	Zoning
Bald Rock (23-032)	Medium (15)	Low (22)	Sloping to depth, branching and tabulate corals (Type A)	Habitat Protection (dark blue)
Barren - Hole in Wall (23-031)	Medium (16)	High (9)	Sloping to depth, branching and tabulate corals (Type A)	Habitat Protection (dark blue)
Great Keppel Island - Big Peninsula (23-012b)	Low (23)	High (5)	High turbidity and/or wave energy, high coral diversity (Type C)	Habitat Protection (dark blue)
Great Keppel Island - Monkey Beach Reef (23-012e)	High (8)	Low (28)	Slopes to sand base, low coral diversity (Type B)	Marine National Park (green)
Half Tide Rocks (23-802)	High (5)	Low (30)	Slopes to sand base, low coral diversity (Type B)	Habitat Protection (dark blue)
Humpy Island (23-016)	High (2)	Low (31)	Slopes to sand base, low coral diversity (Type B)	Conservation Park (yellow)
Pelican Island (23-017)	High (1)	Low (29)	High turbidity and/or wave energy, high coral diversity (Type C)	Habitat Protection (dark blue)
West of Pleasant (Conical) Island (23-002)	High (7)	Low (25)	Rocky, complex structure, low coral cover and diversity (Type D)	Habitat Protection (dark blue)

* Categories - High (1-10), Medium (11-20), Low (21-31). Thirty-one sites were assessed as part of this project, from which the eight sites above were selected. The rankings for the level of management influence and resilience have been obtained by comparing all 31 sites with each other.

Community consultation

Community input was sought to help select the four sites within Keppel Bay. A targeted approach to stakeholder consultation was used for this project. Discussions were held with individual members of the Capricorn Coast Local Marine Advisory Committee, Traditional Owners (including the members of the Woppaburra Steering Committee), commercial and recreational fishers, Great Keppel Island residents, yachties, tourism operators, Rockhampton and Yeppoon residents, Fitzroy Basin Association, Rockhampton Regional Council, key researchers and CapReef. Information has also been available on the GBRMPA website under Have Your Say.

Is this part of a larger project?

Yes. The No Anchoring Areas are one approach being employed that will help to increase the resilience of Keppel Bay against future impacts from climate change and other disturbances. In 2009, the GBRMPA and EPA will further develop a management framework with the community for addressing future use in Keppel Bay.

For more information on this project, please contact the Planning Unit on 07 4750 0700 or the Southern Regional Office (Rockhampton) on 07 4921 4055.



Australian Government
Great Barrier Reef
Marine Park Authority



Queensland Government
Environmental Protection Agency