

MOORE REEF LOCALITY 2 SITE PLAN

(Prepared August 2001)

Note 1: On 1 July 2004, the Great Barrier Reef Marine Park Zoning Plan 2003 came into effect. It changed the zoning and activities allowed in zones for the Marine Park. Moore Reef is now zoned Marine National Park Zone, for more information please refer to the Zoning Plan and maps.

Note 2: Pursuant to paragraph 4.2.1(1)(b) of the Zoning Plan 2003, the following Special Management Area has been designated over Moore Reef:

- Moore Reef No Dorries Detached (Marine National Park Zone) Special Management Area.

Note 3: In December 2004, the *Cairns Area Plan of Management 1998* was amended. The amendments provided greater flexibility for larger vessels and vessels with large group sizes. At Moore Reef Locality 2:

- up to 100 passengers are allowed on a vessel if it is moored at a permitted mooring or if anchored at the Reef Anchorages; and
- a large vessel (35-70m) may anchor at Moore Reef Locality 2 (outside the Reef Anchorage) for the protection from northerly winds only in accordance with an approved anchoring strategy (*Cairns Area Plan of Management 1998*, subclause 1.6(17A)).

1. Background

Site planning is an integral part of the Cairns Area Plan of Management. Site planning was required at a number of Locations in the Cairns Area to provide for a balance of recreational and commercial access consistent with the protection of conservation, scientific and cultural values.

Site plans were prepared for the following Locations: Lizard Island Localities 2 and 3; Opal Reef; Tongue Reef; Agincourt Reefs; Hastings Locality 1; Briggs Reef; Norman Reef; Michaelmas Cay Locality; Upolu Cay Reef; Green Island Reef Locality 1; Flynn Reef; Milln Reef; Moore Reef Locality 2; Normanby Island Reef; Russell and Round Island Reefs.

Site planning occurred progressively and draft plans were presented for comment to all the interested parties. Site plans for Lizard Island Localities 2 and 3 were finalised in August 1999, while the remaining draft plans were discussed at site planning meetings held in Cairns and Port Douglas from 11 to 14 December 2000. All comments received were considered in the preparation of the final plans.

2. Site planning objectives

The following summarises the objectives of site planning in the Cairns Area:

- Provide an appropriate balance of private and public access opportunities
- Provide for Reef Anchorages where reasonable access will not be inhibited by moorings.
- Minimise damage to fish spawning aggregation sites and disturbance of fish spawning aggregations when determining the location of Reef Anchorages, moorings and pontoons.
- Minimise the impact on significant dugong habitat when determining the location of Reef Anchorages, moorings and pontoons.
- Minimise disturbance to significant cultural and heritage values when determining the location of Reef Anchorages, moorings and pontoons.
- Ensure that Reef Anchorages, moorings or pontoons are not located within an existing research or monitoring site if the project design would be adversely effected by anchoring.
- Minimise damage to coral from anchoring when determining the location of Reef Anchorages, moorings and pontoons.
- Determine a maximum number of moorings and pontoons for Locations with no limit (refer to Schedules 6 and 7 of the Cairns Area Plan of Management).

Note: Approval for new private moorings and pontoons will remain subject to detailed impact assessment.

3. Site description and map

Moore Reef is a crescentic type reef at latitude $16^{\circ} 52'$ longitude $146^{\circ} 14'$ within the Cairns Section of the Marine Park (Figure 1). The reef is 2650 ha in area.

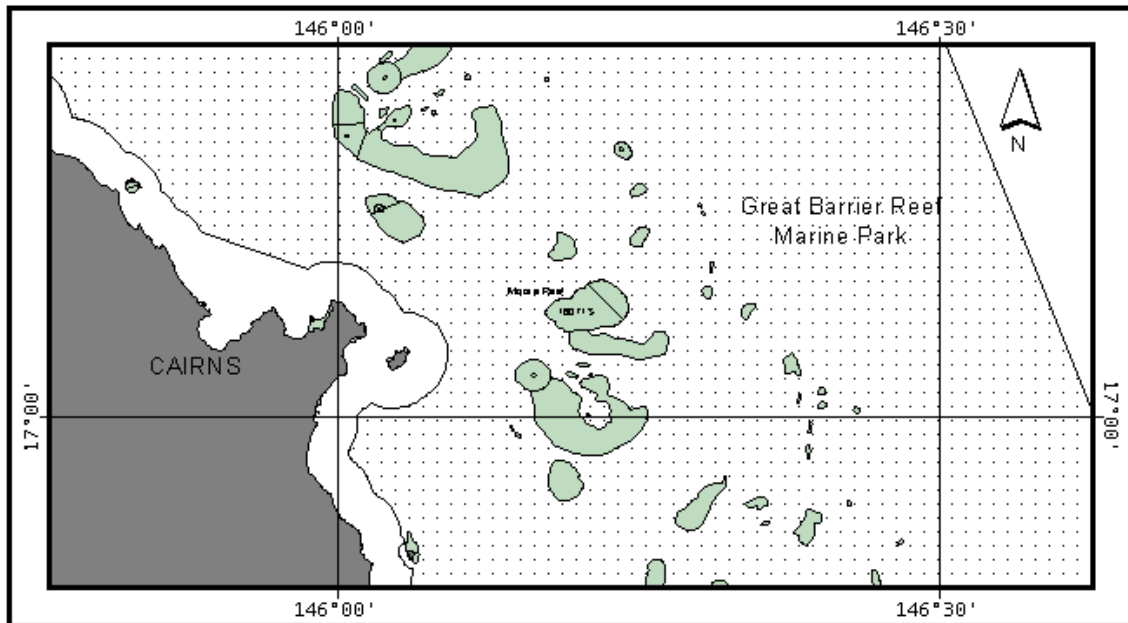


Figure 1: Location of Moore Reef in the South Offshore Cairns Sector

4. Values

4.1 Coral

Moore Reef is a fairly large reef complex providing a myriad of coral environments. Some areas are flushed by clear water ocean currents whereas others are sheltered with generally higher turbidity. The coral communities of these habitats are diverse and vary considerably in relation to their surrounding environment.

4.2 Seagrass

There have been no official seagrass surveys conducted at Moore Reef. No seagrass was found during QPWS site surveys. QDPI Fisheries Seagrass Ecology Group believe that seagrass may grow in patches around the reef as suitable conditions exist on the sheltered side of the reef.

4.3 Fish spawning

Fish spawning aggregation sites have been identified at Moore Reef. Further research and monitoring will be undertaken to establish the significance of these sites.

4.4 Commercial

Moore Reef is split into two zones, Locality 1 is a National Park Zone while Locality 2 is a Habitat Protection Zone. Fishing or collecting is prohibited on the north eastern National Park section of Moore Reef. 19 permits have been issued for collecting beche-de-mer, six for collecting trochus shells and 32 for collecting marine aquarium fish within the Habitat Protection Zone only. There are no coral leases on Moore Reef.

4.5 Recreation

Recreational users can access Moore Reef readily during fair weather periods. Recreational fishers use Locality 2 due to its Habitat Protection Zoning whereas recreational divers can access both Localities.

4.6 Tourism

Moore Reef is a heavily used tourist destination, with 10 tourist operators holding permits to visit and anchor daily, six operators with permits to visit daily without anchoring and 380 tourist operators holding roving permits. During the 1998/99 year a total of 17,362 tourists visited Moore Reef.

There are 18 moorings, two pontoons and two helicopter pontoons permitted on the reef.

4.7 Cultural

Moore Reef and the surrounding reefs and waters are of particular interest to the indigenous Gungandji people.

4.8 Research and monitoring

Ayling and Ayling (1995) completed a monitoring study of the impact of the Sunlover Cruises pontoon in 1995. The study indicated that there was little impact from the pontoon to benthic communities and a moderate amount of impact on hard coral from snorkelling activities.

5. Summary of submissions received – Cairns Area Plan of Management

The draft Cairns Area Plan of Management was released for public comment in August 1997. A total of 160 submissions were received on the Plan. Of the 160 submissions received, six referred to Moore Reef. The following paragraphs summarise relevant comments.

Several submissions referred to the right of traditional owners to access their cultural resources and it was suggested that specific operations interfering with these rights ought to cease operations (submissions #1084, #1083, #1085 and #1086).

Another submission expressed a concern about the exclusion of the public due to the large numbers of commercial moorings inhibiting access to the location (submission #1137).

6. Issues

6.1 Appropriate balance of use (mooring and anchoring)

There are currently permits held by tour operators for 15 moorings, one pontoon and one helicopter landing platforms (helipad) at Moore Reef Locality 2 (see attachment). There is one designated reef anchorage wholly within the Locality, with the remaining two straddling Locality 1 and 2.

The majority of commercial moorings in Locality 2 are concentrated at the south-western end and public access may need to be considered in this area.

6.2 Protection of conservation values

Anchoring or inappropriate mooring placement and design can damage fragile coral communities. The designation of reef anchorages and pre-selection of potential mooring sites required an assessment of the bio-physical characteristics of identified areas to ensure that conservation values are upheld. Broad surveys of all potential sites were conducted and their suitability as mooring sites or reef anchorages was assessed.

Fish spawning aggregation sites (FSASs) have been identified at the Location. There is potential for disturbance of spawning activity by tourism activity during spawning episodes. FSASs will need to be considered in the selection of new mooring, pontoon or reef anchorage sites.

7. Current management strategies

7.1 Cairns Section Zoning Plan (Zoning Map: BRA Q156)

The reefs and waters surrounding Moore Reef are within the Great Barrier Reef Marine Park. The north eastern section of Moore Reef is zoned as National Park under the Zoning Plan. Activities allowed in National Park Zones include diving, boating, anchoring and photography. Activities which are prohibited in this zone include line fishing, trolling, bait gathering and netting, commercial fishing, spearfishing and collection of coral or shells.

The waters surrounding the reef in the north eastern part are zoned as Buffer Zone. Prohibited activities in Buffer Zones are the same as for the National Park Zone, with the exception of trolling and bait netting for pelagic species.

The south western portion of the reef is within the Habitat Protection Zone. Fishing (with the exemption of trawling) is allowed.

7.2 Cairns Area Plan of Management

The Cairns Area Plan of Management was released by the Great Barrier Reef Marine Park Authority in June 1998 to provide strategies for protecting values of the offshore areas from Cairns and Port Douglas, the Ribbon Reefs, Lizard Island and the Frankland Islands. The following is a summary of the major strategies in the Cairns Area Plan relevant to Moore Reef:

- The north eastern section of the reef (the National Park section) is identified as an intensive use location with no group size limits. The south western section of the reef is identified as a moderate use location with a group size limit of 60 people.
- There are three reef anchorages in the northern part of the reef, these are preferred anchoring sites where the Authority will not permit the installation of any new private moorings or pontoons. Reef Anchorages have been defined to encourage the use of places that are least likely to cause damage to coral and to provide some places where access will not be restricted by the presence of moorings.
- Anchoring a vessel or aircraft is prohibited within a 50 metre radius of a permitted mooring or within a 200 metre radius of a pontoon.
- The Plan allows 15 permitted moorings and one pontoon at Moore Reef Locality 2.

8. Site planning strategies (refer to figure 2)

8.1 Reef Anchorages

Discussions among interested parties during the Site Planning meeting supported a Reef Anchorage at the Site 'RA 1'. A Reef Anchorage will be designated as shown in figure 2. Schedule 8 of the CAPOM will be amended to reflect the change.

8.2 Private moorings

Two sites were identified for the placement of moorings, subject to detailed site assessments to determine suitability.

9. References

- Ayling AM and Ayling AL, 1995. Moore Reef - Monitoring of the Impact of the Sunlover Cruises Pontoon. Report for the Great Barrier Reef Marine Park Authority.
- Great Barrier Reef Marine Park Authority 1998, *Cairns Area Plan of Management*, Great Barrier Reef Marine Park Authority. Townsville.
- Great Barrier Reef Marine Park Authority 1997, *Submissions to the Cairns Area Plan of Management*, Great Barrier Reef Marine Park Authority, Townsville (unpublished).

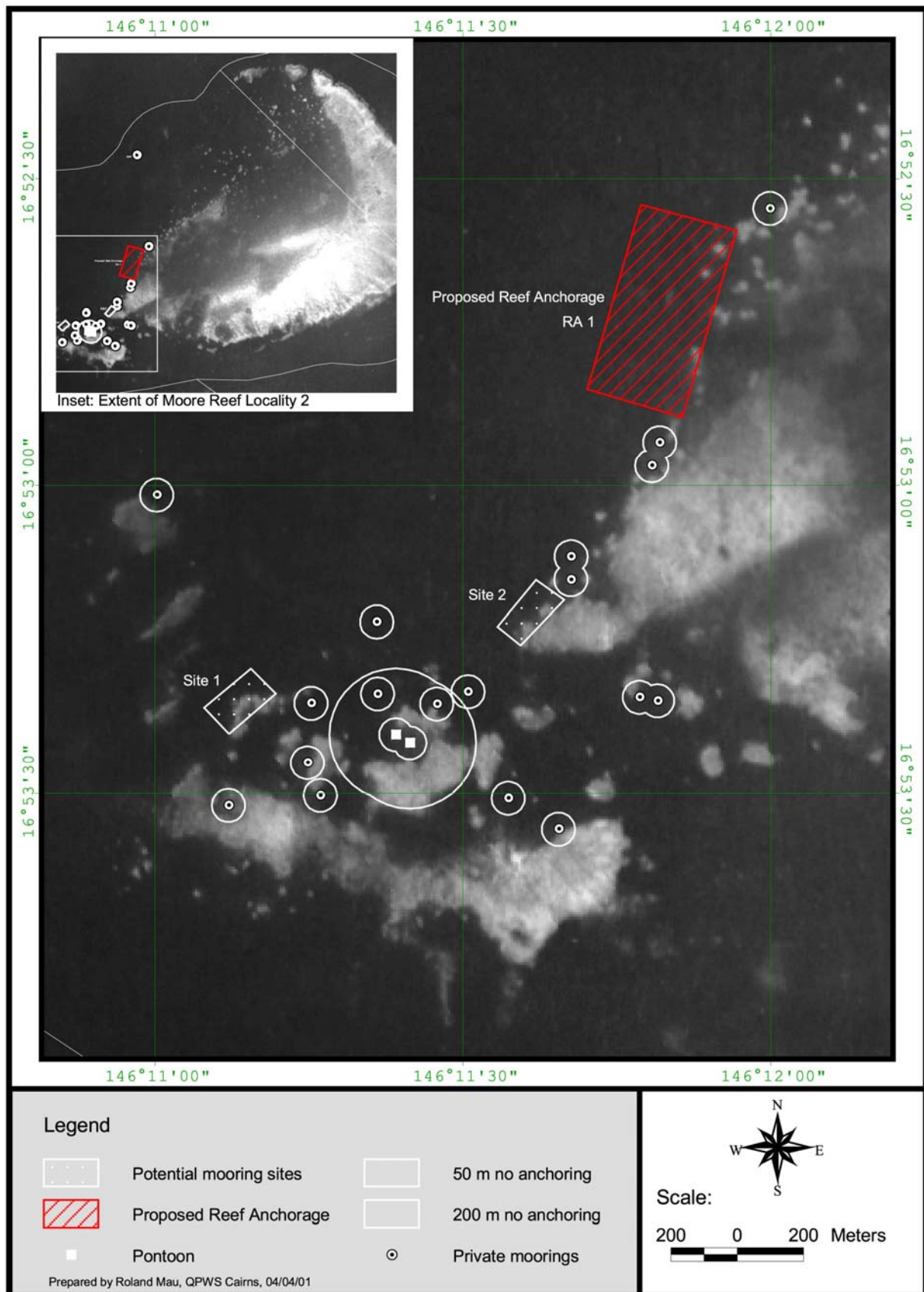


Figure 2: Moore Reef Locality 2 Site Plan