

NORMAN REEF 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. Norman 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 Norman Reef:

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

1. Background

The Cairns Area Plan of Management was gazetted in 1998 after being prepared in accordance with the *Great Barrier Reef Marine Park Act 1975*. The Cairns Planning Area comprises many places, biological communities and species of high nature conservation, scientific and cultural value. The Plan aims to protect and conserve these values, while allowing for a range of opportunities.

An important strategy of the Plan is detailed, site-specific management of an identified area. Site planning is 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

Norman Reef (16-030) is a planar type reef within the Cairns Section at latitude $16^{\circ} 26''$ longitude $146^{\circ} 0''$ (Figure 1). The area of the reef is 430 hectares.

Norman Reef is a designated National Park Zone enclosed by a 500 metre Buffer Zone as specified in the Cairns Section Zoning Plan (1992).

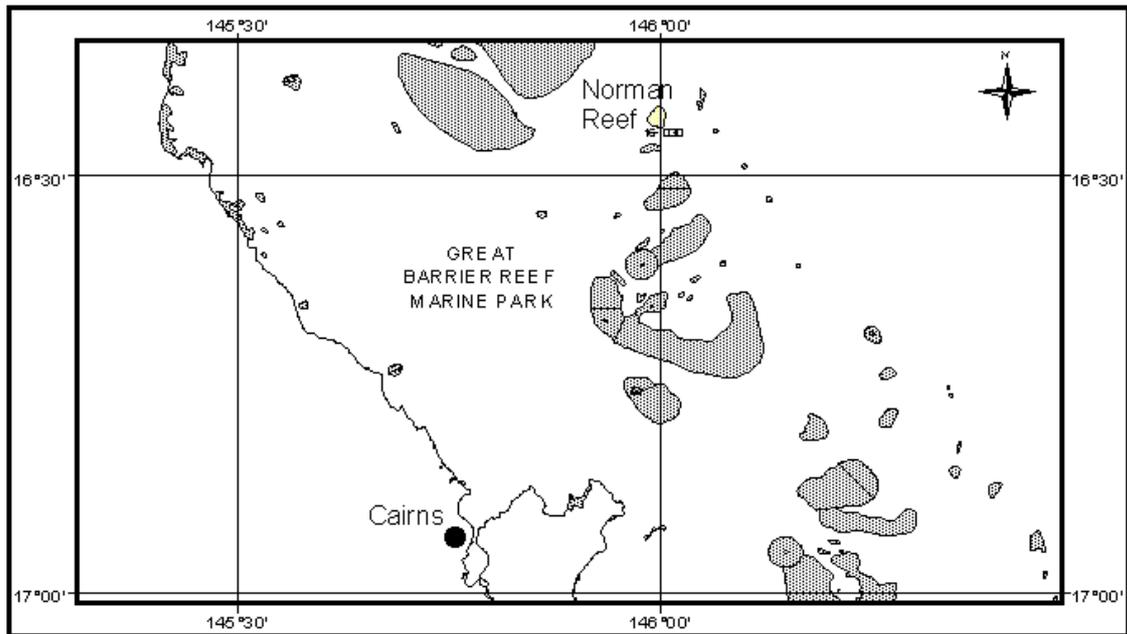


Figure 1: Location of Norman Reef in the Offshore Cairns Sector

4. Values

4.1 Coral

Norman Reef has long been considered one of Cairns's prime reef destinations due to its prolific coral growth and water clarity. The coral has had a history of significant natural disturbances from cyclones, and more recently, crown-of-thorns starfish outbreaks.

4.2 Seagrass

There have been no official seagrass surveys conducted at Norman Reef. No seagrass was found during QPWS site surveys. Seagrass experts from DPI Northern Fisheries Centre in Cairns predict limited seagrass may occur at this site.

4.3 Fish spawning

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

4.4 Commercial

Commercial fishing, spearfishing and collection of coral or shells is not permitted within the waters surrounding Norman Reef. However, the Queensland Aquarium Supply Divers Association has identified Norman as a preferred anchorage location.

4.5 Recreation

The underwater seascape of Norman Reef is aesthetically attractive due to its diverse coral communities and clear water attributed to flushing by oceanic currents. However, due to its significant distance from the mainland and no-fishing zoning provision, visitation by recreational boaters is limited.

4.6 Tourism

Norman Reef is a popular destination for tourist operations with almost 109,000 tourists visiting during one year (1998/99).

4.7 Cultural

Norman Reef and the surrounding area is known to be of interest to a number of local Aboriginal groups including the Gungandjii People.

4.8 Research and monitoring

Norman Reef is one of the reefs surveyed annually as part of the Australian Institute of Marine Science's Long-term Monitoring Program and the Department of Primary Industries' Long term Fish Monitoring Survey.

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. The following paragraphs outline relevant comments to the Norman Reef site plan.

An existing marine tourism operator with access to other Locations expressed a desire to apply for moorings at popular sites such as Norman Reef (submission #147). Another comment expressed the need for all new moorings, including those at Norman Reef, to be owned and maintained by associations as this was the only way to ensure use by multiple companies and hence maximisation of benefits to the public (submission #138).

Another submitter felt that Norman Reef was one Location with “ more moorings... than necessary’ (submission #074). Concern was also expressed about the exclusion of the public from Norman Reef due to the extensive use by the marine tourism industry and the CAPOM 50 metre no anchoring provision (submission #137).

6. Issues

6.1 Appropriate balance of use (mooring and anchoring)

There are currently 11 installed permitted mooring systems and a further four installed permitted moorings associated with the pontoon at Norman Reef.

The Cairns Area Plan identifies Norman Reef as a potential site for a second pontoon pending further investigations during site planning. The Cairns Area Plan identifies the need for site planning to determine whether a Reef Anchorage is appropriate and the total number of allowed moorings at Norman Reef.

Consideration of public access will be required when identifying the appropriate number of private moorings. The public consultation process on the draft Cairns Area Plan of Management (August 1997) raised concerns that the existing numbers of private moorings was already in excess of what was needed and prevented access by other users.

6.2 Protection of conservation values

The coral at Norman Reef generally has a high conservation value due to its apparent species diversity and aesthetic appeal. 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.

Although a recent crown of thorns starfish outbreak has reduced coral cover in many areas, past experience indicates that the reef should recover over time. There are limited areas of sandy substrate suitable for anchoring without damaging the coral environment.

Fish spawning aggregation sites (FSASs) have been identified at the Location. There is potential for disturbance of spawning activity by tourism activity during spawning events. 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 Norman Reef are within the Great Barrier Reef Marine Park. Norman Reef is zoned as National Park Zone under the Zoning Plan. Diving, boating, anchoring and photography are among activities allowed within the waters surrounding Norman Reef. 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 southern section of the National Park Zone 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

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 Norman Reef:

- Norman Reef is identified as an Intensive Use Location. The Plan does not limit group sizes at Norman Reef.
- 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.
- Site Planning will determine the number of permitted moorings and pontoons and may include designation of Reef Anchorages.

8. Site planning strategies (refer to figure 2)

8.1 Pontoon site

The CAPOM identified the need for site planning to determine the number of permitted pontoons at Norman Reef. Given constraints of existing use ie. the positions and number of existing facilities, potential interference with FSAS, and the bio-physical characteristics of the sites surveyed, a second pontoon site could not be identified at Norman Reef. Therefore, only the one existing pontoon will be permitted at Norman Reef.

8.2 Reef Anchorage

Site assessment of Norman Reef found that there was limited scope for a designated Reef Anchorage. Further discussions among interested parties during the Site Planning meeting supported the view that insufficient area was available to designate a Reef Anchorage. Therefore, there will be no designated Reef Anchorage at Norman Reef.

(Note: As designated Reef Anchorages are effectively ‘no mooring zones’, vessels may still anchor in suitable areas subject to the provisions of the CAPOM)

8.3 Private moorings

Allowing for the 50 metre and 200 metre no anchoring provisions of the CAPOM, access opportunities and nature conservation issues, several potential mooring sites were identified in the draft Site Plan. Further discussions with interested parties were conducted during the Site Planning meeting. It was determined that two new moorings could be placed on the north-western side of the reef, and an additional three private moorings were to be considered for placement on the southern side, subject to detailed site assessments to determine suitability.

8.4 Public moorings

In view of constraints in identifying a suitable Reef Anchorage, public access will need to be assured to the site through placement of a public mooring. Historically, QPWS has identified a site at the south-western end of Norman Reef for public use. This site will be investigated further for its suitability as a public mooring site.

9. References

Sweatman, H. Bass, D, Cheal, A, Coleman, G, Miller, I, Ninio, R, Osborne, K, Oxley, W, Ryan, D, Thompson, A, and Tomkins P. 1998, *Long-term Monitoring of the Great Barrier Reef - Status Report Number 3*. Australian Institute of Marine Science. Townsville

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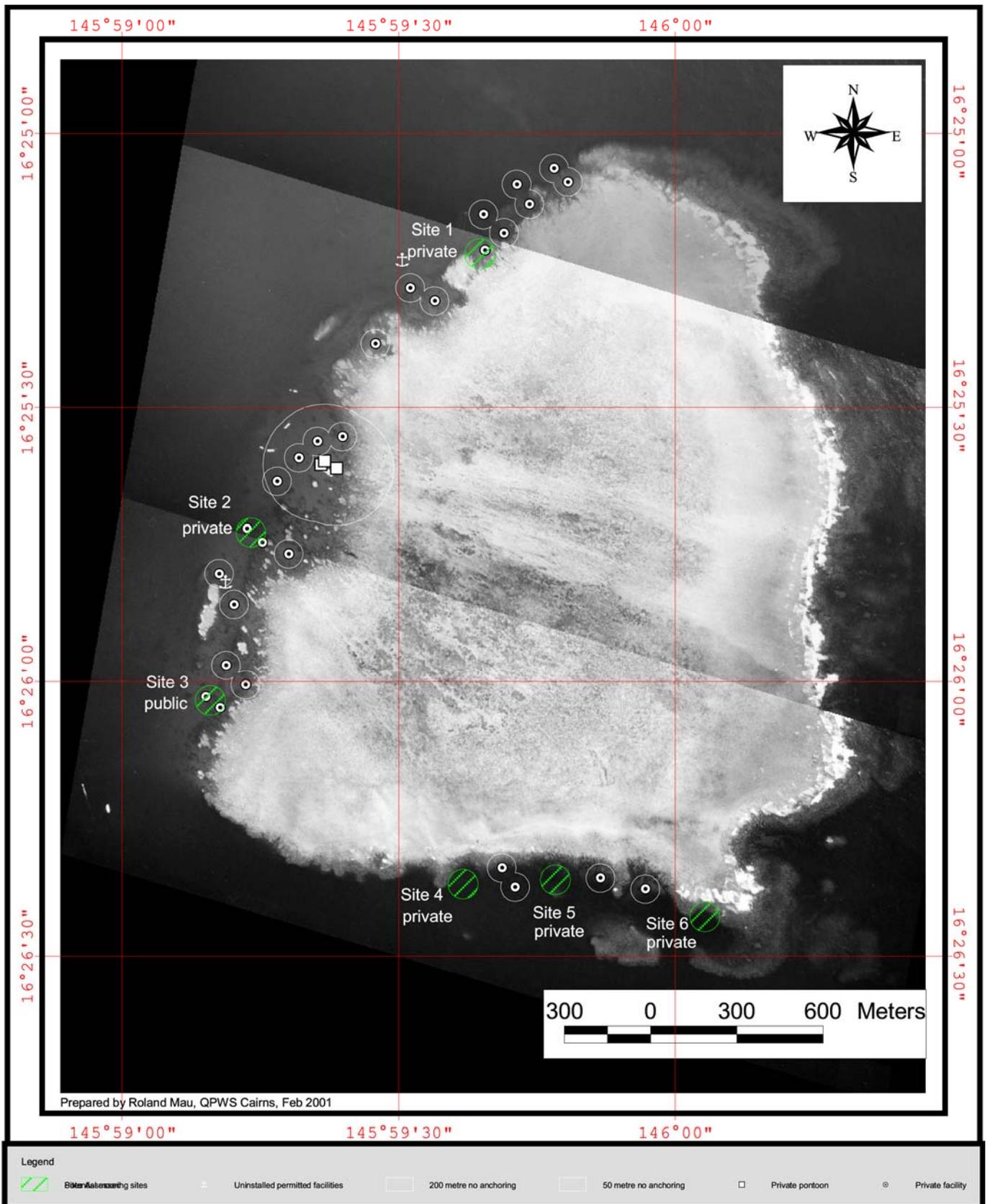


Figure 2: Norman Reef Site Plan