

HASTINGS REEF LOCALITY 1 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. Hastings Reef Locality 1 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 Hastings Reef:

- Hastings Reef No Dories 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

Hastings Reef is a crescentic type reef within the Cairns Section of the Marine Park at latitude 16°31' longitude 146°01 (Figure 1). The reef area is 1020 ha.

Hastings Reef Locality 1 is the Buffer Zone of Hastings Reef described in item D.9 in the Schedule to the Zoning Plan; and the National Park Zone of Hastings Reef described in item E.1 in the Schedule to the Zoning Plan.

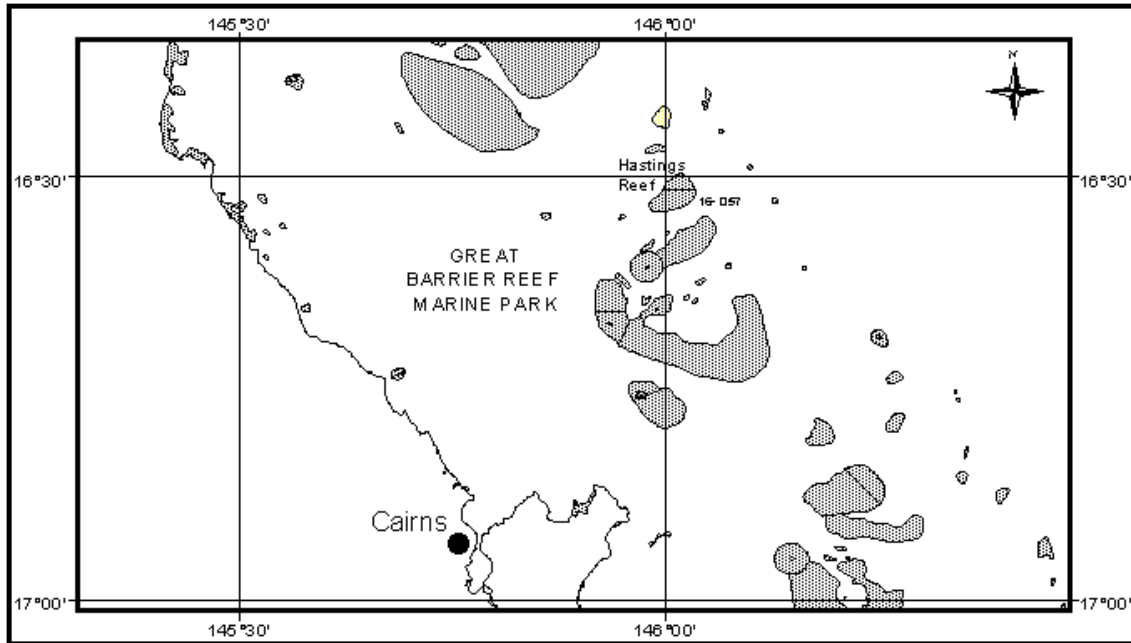


Figure 1: Location of Hastings Reef in the Offshore Cairns Sector

4. Values

4.1 Coral

This reef has been broadscale surveyed from 1986 to 1998 as part of the Australian Institute of Marine Science Long-term Monitoring Program. Over this time coral cover has shown little change remaining at moderate levels. Hastings Reef has been impacted by crown of thorn starfish outbreaks and coral bleaching. Relatively speaking, the greatest coral cover is found at the north-eastern and north-western ends of the reef, the sites most intensively used by tourism operators.

4.2 Seagrass

There have been no official seagrass surveys conducted at Hastings Reef. No seagrass was found during QPWS site surveys.

4.3 Fish spawning

Fish spawning aggregation sites have been identified at Hastings Reef Locality 1. Further research and monitoring will be undertaken to establish the significance of these sites.

4.4 Commercial

Commercial collecting of marine species is not permitted within this Locality. The Queensland Commercial Fishermens Organisation and roving tourism operators identified a preferred reef anchorage at this Locality.

4.5 Recreation

Hastings Reef Locality 1 lies within reach of recreational day-trippers leaving from Cairns. The south-eastern end is heavily used by commercial operators and recreational user access is currently restricted to an area further east where coral cover has historically been lower. Permitted recreational activities are restricted to boating and diving.

4.6 Tourism

Hastings Reef Locality 1 is a popular destination for tourist operations with a total of 67,719 tourists visiting the locality during 1998/99. Five tourism operators hold permits to visit the Locality daily, 28 hold roving permits, 89 operators hold permits to visit daily without anchoring and a further 79 permits are held by the Cairns Professional Game Fishing Association. Attachment A shows all facilities found during field surveys at Hastings Reef Locality 1 and 2).

There are 13 permitted moorings within Hastings Reef Locality 1.

4.7 Cultural

Hastings reef is part of the traditional sea country of the Gungandji and Yirrgandji Aboriginal people.

4.8 Research and monitoring

Hastings Reef is part of AIM's Long Term Monitoring Program and was last surveyed in 1999. QPWS research officers are also conducting a high use site monitoring project on a number of reefs in the GBRMP, including Hastings Reef.

One research permit remains current for Hastings Reef (G99/281).

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 site planning.

“An existing marine tourism operator with access to other Locations expressed a desire to apply for mooring at popular sites such as Hastings Reef” (submission #147).

“An existing operator with mooring access to Hastings Reef stressed that this site was a necessary part of [their] growth and expansion plans” (submission #1119).

“Another comment expressed the need for all new moorings, including those at Hastings Reef, to be owned and maintained by associations as this was the only way to ensure use by multiple companies and hence maximise benefits to the public” (submission #138).

“Concern was also expressed about the exclusion of the public from Hastings 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 13 permitted mooring systems at Hastings Reef Locality 1. Four permitted moorings are currently not installed. The Cairns Area Plan identifies Hastings Reef Locality 1 as a contingency site for a pontoon dislocated from another Location due to damage caused by an acute natural event.

The Cairns Area Plan specifies Reef Anchorages at Hastings reef Locality 1 and 2 but not the total number of allowed moorings at Hastings Reef Locality 1. Consideration of public access will be required when identifying the appropriate number of private moorings. Preferred anchoring areas were identified by the public as part of the 1995 Mooring and Anchoring Plans consultation phase.

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 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 comprising Hastings Reef Locality 1 are within the Great Barrier Reef Marine Park and are zoned as National Park under the Zoning Plan. Activities allowed 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 Hastings Reef Locality 1 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 new 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 Hastings Reef Locality 1

- Hastings Reef Locality 1 is identified as an intensive use location. There are no group size limits for this reef.
- There are 2 designated Reef Anchorages within the Locality. 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.
- Currently there are 13 permitted moorings within the Locality. The CAPOM identifies the need for site planning at Hastings Reef Locality 1 to determine the maximum number of allowed moorings. Anchoring is restricted within a 50 metre radius of permitted moorings to reduce anchor damage and to encourage tourism operators to exercise responsibility for managing use of the moorings.

8. Site planning strategies (refer to figures 2 and 3)

8.1 Reef Anchorages

A site assessment confirmed that the existing Reef Anchorage at Hastings Reef Locality 1 corresponds with areas of low coral cover and largely sandy substrate, therefore minimising potential impacts on coral communities.

Interested parties at Site Planning meeting agreed on maintaining the existing designated Reef Anchorages. The existing Reef Anchorages will therefore be retained as per Schedule 8, CAPOM. A considerable number of bommies exist in these Reef Anchorages and mariners will need to be alerted to this fact. Following site assessment QPWS has recommended site 2 and site 4 on Figure 3 and 4 as preferred Reef Anchorages. These areas should be considered when next amending the CAPOM.

8.2 Public moorings

There are two Reef Anchorages providing for public access to this Locality. However, the coral quality is limited in these areas and recreational users that visit the Locality have few options to conduct coral viewing. The area above private mooring 441, between the two Reef Anchorages in the north-east section of the Locality, has good aesthetic characteristics and should be investigated for potential placement of a public mooring.

8.3 Private moorings

Given the already high commercial use and physical constraints of the south-western corner of Hastings Reef Locality 1, Site 1 and Site 2 were found to be suitable for the placement of a maximum of one mooring system at each site. Operators will need to decide on the suitability of these areas for the conduct of a tourism program.

Furthermore, it became apparent during Site Planning meetings that there was considerable interest by tourism operators for additional moorings on the south-western end of the Locality for use during northerly winds. It was agreed that an additional 2 moorings would be able to be placed in this area. Site assessments as part of the mooring permit approval process will need to decide on suitable mooring systems for these sites.

9. References

- GBRMPA 1998, *Cairns Area Plan of Management*, Great Barrier Reef Marine Park Authority, Townsville.
- GBRMPA 1997, *Submissions to the Cairns Area Plan of Management*, Great Barrier Reef Marine Park Authority, Townsville (unpublished).
- 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.

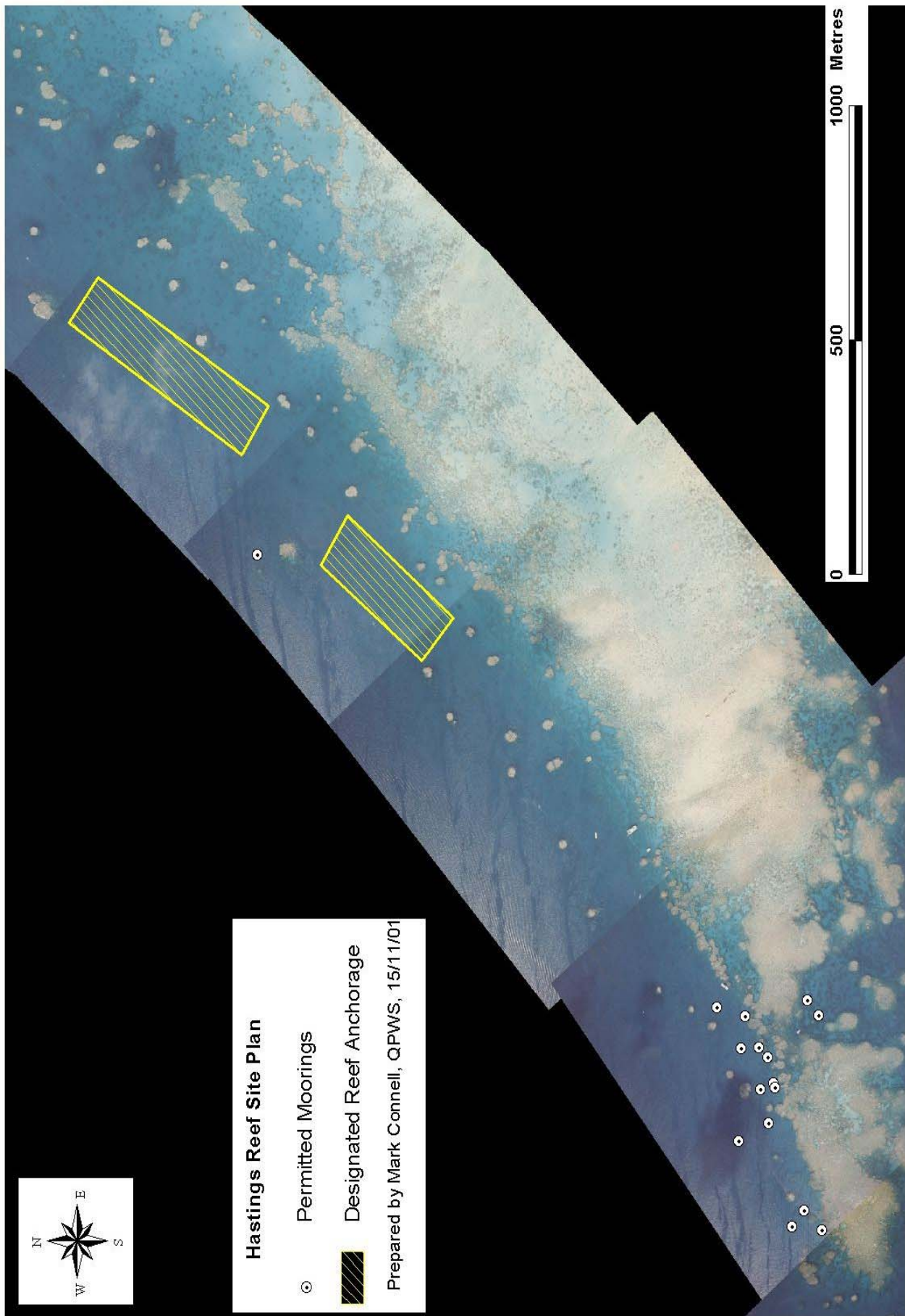


Figure 2: Hastings Reef Locality 1

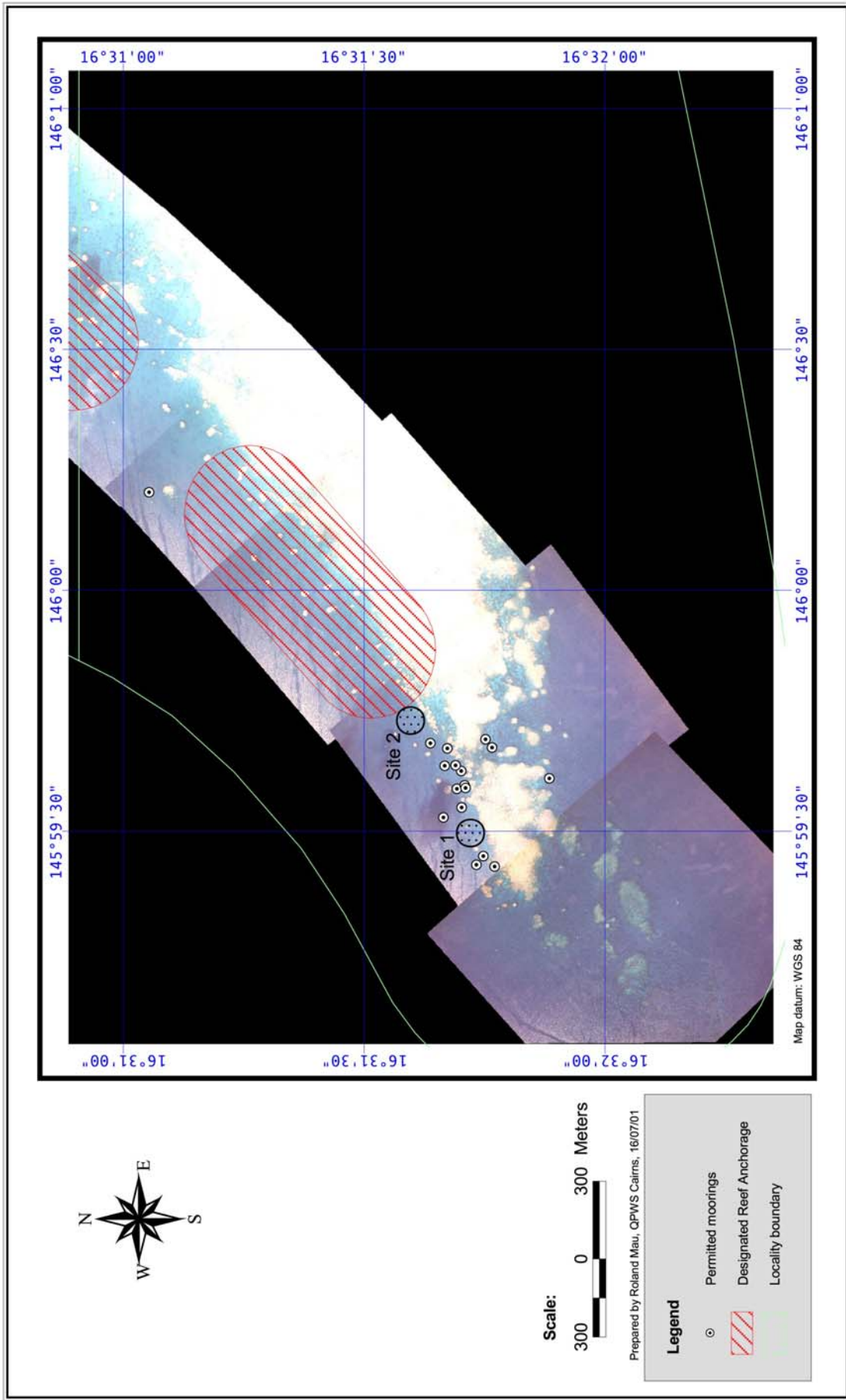


Figure 2: Hastings Reef Locality 1 Site Plan