GBRMPA 333.9164 GRE

GREAT BARRIER REEF MARINE PARK MACKAY/CAPRICORN SECTION AND QUEENSLAND MACKAY/CAPRICORN MARINE PARK

Basis for Zoning





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Purpose of This Booklet

This booklet details the processes undertaken in the development of the Mackay/Capricorn Section Zoning Plan which came into effect on 1 August, 1988. It is intended to provide day-to-day management staff with an explanation of the background resource information and the major criteria upon which zoning decisions were made.

Day-to-day management staff are encouraged to use the contents of this booklet to explain both the overall zoning process and the rationale for the zoning of specific locations to users of the Marine Park. The booklet is not intended for public distribution and copies should not be given out without the prior permission of the Chairman of the Authority.

The concept and format of this booklet are based on the booklet "Basis for Zoning the Great Barrier Reef Marine Park - Central Section" prepared by Dr. Zena Dinesen of the Queensland Department of the Environment and Conservation (Q.DEC). Thanks are also due to Peter Lawson of Q.DEC for providing details on the zoning of the Queensland Mackay/Capricorn Marine Park and to those staff of GBRMPA and Q.DEC who took part in the compilation of the Mackay/Capricorn Section Zoning Plan.

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John Baldwin Planning and Management

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1. <u>Introduction</u>

The Great Barrier Reef Marine Park is a multiple use park which allows for all reasonable uses to be carried out provided they are consistent with the long-term conservation of the Great Barrier Reef. Activities which are prohibited throughout the Marine Park are littering; operations for recovery of oil and other minerals (except for approved research purposes); spearfishing with underwater breathing apparatus; and the taking of large specimens of certain specified species such as potato cod. The Authority believes that any use of the Reef or associated areas should not threaten its existing essential ecological characteristics and processes. This belief has led the Authority to adopt the following primary goal:

> To provide for the protection, wise use, understanding and enjoyment of the Great Barrier Reef in perpetuity through the development and care of the Great Barrier Reef Marine Park.

The formal statement of the Goal and Aims of the Authority is presented at Appendix 2.

In accordance with the Authority's stated Goal and Aims, planning and management of the Great Barrier Reef Marine Park are carried out subject to Zoning Plans which are drawn up in accordance with the Great Barrier Reef Marine Park Act (1975):

This booklet includes an account of how zoning Plans are prepared for the Great Barrier Reef Marine Park and Queensland marine park areas; an overview of the management implications arising from the Mackay/Capricorn Section Zoning Plan; and a detailed location-by-location analysis of the zoning of the Section with emphasis on those areas afforded more protective zoning and the consequent management implications and monitoring requirements for those particular locations. 1.1 Background to the Mackay/Capricorn Section

The Mackay/Capricorn Section was formed on 24 September 1987, with the amalgamation of the, then, Capricorn and Capricornia Sections. The amalgamation was designed to facilitate efficient management of the southern part of the Marine Park. Much deliberation went into the naming of the Section with the final result giving a regional identity while avoiding problems of parochialism that such nomenclature often attracts.

The Mackay/Capricorn Section extends from the Sir James Smith Island Group and the Pompey Reefs in the North, south to Baffle Creek near Bundaberg. The northern boundary of the Mackay/Capricorn Section reflects the administrative boundary between the Northern and Central Regions of the Queensland Department of the Environment and Conservation (formerly the Queensland National Parks and Wildlife Service). The Section encompasses an area of 149,000 square kilometres, or 43% of the total area of the Marine Park.

Adjacent to the Mackay/Capricorn Section a number of areas have been declared as management areas of the Queensland Mackay/Capricorn Marine Park under Queensland legislation. The locations of these areas are presented in Appendix 3.

2. <u>The Zoning Process</u>

Zoning Plans are developed by the Great Barrier Reef Marine Park Authority (GBRMPA) to regulate usage of the marine park, in order to protect the environment and its resources, and to separate incompatible human activities. In preparing a zoning plan, the Authority is required through the Great Barrier Reef Marine Park Act to have regard to specific matters. These are:

- (a) the conservation of the Great Barrier Reef;
- (b) the regulation of the use of the Marine Park so as to protect the Great Barrier Reef while allowing the reasonable use of the Great Barrier Reef Region;

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- (c) the regulation of activities that exploit the resources of the Great Barrier Reef Region so as to minimize the effect of those activities on the Great Barrier Reef;
- (d) the reservation of some areas of the Great Barrier Reef for its appreciation and enjoyment by the public; and
- (e) the preservation of some areas of the Great Barrier Reef in its natural state undisturbed by man except for the purposes of scientific research.

In addition to the above, Planning staff are guided by a series of zoning guidelines. These are presented in Appendix 4. It is important to note that in zoning an area of such diverse physical and biological nature supporting a multitude of uses not all criteria can be strictly adhered to in all cases, indeed some of the guidelines may be mutually contradictory. Hence a number of the criteria are prefixed by the phrase "As far as practicable".

Through the use of zones, levels of protection within the Mackay/ Capricorn Section are graded.. They range from very little restriction of activity (which is the case throughout much of the Great Barrier Reef Marine Park) through more protected areas of marine national park, to a small number of areas where almost no human activities are permitted and public entry is normally prohibited. In addition, the Zoning Plan allows for Designated Areas within zones to cater for specific purposes such as shipping, defence, and replenishment of resource stocks. Special Management Areas such as Reef Appreciation Areas and Reef Research Areas may be declared subsequently, with appropriate public input, in response to environmental needs or changing patterns of use. Within the overall zoning system, further regulation of certain activities and "fine tuning" of management are achieved through the use of permits, which are required for specified activities in some or all zones.

Further, site or issue-specific management can be effected through the development of individual management plans. The recently introduced Lady Musgrave Management Plan is an example.

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It should be noted that although managers have a wide scope in. the development of these plans, the plan must be consistent with the zoning of the site. For example, a site management plan for a General Use "B" Reef could specify areas of "no fishing" but a plan for a Marine National Park "B" Reef could not <u>allow</u> fishing. In other words, management plans cannot "ease" the levels of restriction set by the zoning plan.

Some aspects of management including details of administrative processes and lists of declared species, are further defined in Regulations (made under the Great Barrier Reef Marine Park Act) which are necessary to give effect to zoning plans.

The zones used in zoning the Mackay/Capricorn Section (and used also in previously zoned Sections of the Great Barrier Reef Marine Park) are formally defined in Part Two of the Mackay/ Capricorn Section Zoning Plan. The principal objectives of these zones and restrictions applying within each type of zone are summarised as follows:

- 1) General Use 'A' Zone (GU'A')
- Objective: To provide opportunities for reasonable general-use consistent with the conservation of, the Great Barrier Reef Marine Park.

Least restrictive of the zones, this provides for all reasonable uses, including shipping and trawling. Prohibited activities include littering, mining other than for research, oil drilling and spearfishing with underwater breathing apparatus.

2) General Use 'B' Zone (GU'B')

Objective: To provide for the conservation of the Great Barrier Reef Marine Park while providing opportunities for reasonable general-use in areas that are free from trawling and generally free from shipping.

Provides for reasonable use, including most commercial and recreational activities. Trawling and general shipping (except

in a designated Shipping Area) are prohibited as well as those activities not allowed in General Use 'A Zone.

3) Marine National Park 'A' Zone (MNP'A')

Objective: To provide for the protection of areas of the Great Barrier Reef Marine Park while allowing opportunities for their appreciation and enjoyment by the public, including the limited removal of natural resources. Provides for appreciation and recreational use, including limited line fishing. Fishing is restricted to one line with one hook per person, (when trolling for pelagic species more than one line may be used). Spearfishing and collecting, other than for Research, are prohibited, as well as those activities not allowed in General Use 'B' Zone.

4) Marine National Park 'B' Zone (MNP'B')

Objective: To provide for the protection of areas of the Great Barrier Reef Marine park while allowing opportunities for their appreciation and enjoyment by the public, free from activities that remove natural resources.

Provides for appreciation and enjoyment of areas in their relatively undisturbed state. It is a 'look but **don't take'** zone analogous to a terrestrial National Park. Fishing and **all** other activities which remove natural resources are prohibited other than collecting for Research that cannot be undertaken elsewhere.

5) Scientific Research Zone (SRZ)

Objective: To provide for the protection of the Great Barrier Reef Marine Park while allowing opportunities for authorised research to be carried out free from disturbance from other human activities.

Set aside exclusively for scientific research with a permit. Entry and use for other reasons is prohibited.

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6) Preservation Zone (PZ)

Objective: To provide for the preservation of areas of the Great Barrier Reef Marine Park in their natural state undisturbed by human activities.

Provides for the preservation of areas in an undisturbed state. All entry is prohibited, except in an emergency, or for permitted' scientific research which cannot be conducted elsewhere. The "Activities Guide" at Appendix 5 summarises which activities are allowed in each zone, and whether a permit is required.

In its simplest form, the compilation of a Zoning Plan comprises:



THE ZONING PROGRAM

The various stages in the development of a zoning plan are intended to ensure that all interested individuals and organisations can readily obtain and study the relevant information, and so make informed and constructive representations to the Authority.

2.1 Public Participation

Public participation is the cornerstone of the Authority's zoning process. It is important that the public interest in the Marine Park generated by the development of the Mackay/Capricorn Section Zoning Plan is fostered during subsequent years leading to the next zoning review.

2.1.1 Initial Zoning Plan Preparation

During the first Public Participation Program ("Notice of Intent to Prepare a Zoning Plan" or NIPZP), the public are invited to provide information on uses and resource characteristics on the Section, and to make suggestions regarding zoning and management. In addition to formal written notifications in the press, other media publicity, including television advertisements and displays at key venues, are used to encourage public involvement in the zoning. Great Barrier Reef Marine Park Authority staff also address meetings of user groups, such as fishing, shell collecting, and diving clubs, and consult with major users.

To assist with zoning of the Mackay/Capricorn Section, and particularly with public contributions to the zoning process, the Great Barrier Reef Marine Park Authority published a booklet called The Southern Sections Information Summary. This document summarised, with reference to a series of maps, the data available at the time on the various resources and uses of the Section and associated islands and adjacent mainland.

In preparing the Draft Zoning Plan, the Great Barrier Reef Marine Park Authority took into account the information and suggestions contained in the representations received from the public during the NIPZP period. GBRMPA also utilised information it had sought on specific issues, (such as distribution of rare species and their habitat, principal destinations of tourist vessels), and conducted field inspections where necessary. In addition, GBRMPA considered the recommendations provided by Commonwealth and Queensland Governments. More information on the input of Government Departments is given below.

2.1.2 The Draft Zoning Plan

Once the Draft Zoning Plan had been formally approved by the Authority (i.e. the "Three Person Authority"), a second Public Participation Program was conducted, again with substantial publicity and contact with user group organisations. In seeking public comment on the Draft Zoning Plan for the Mackay/Capricorn Section, the Great Barrier Reef Marine Park Authority issued the Southern Sections (Capricorn and Capricornia Sections) Zoning Plan for Public Review plus an accompanying document entitled Zoning the Southern Sections. This explanatory booklet outlined the zoning process and briefly indicated the zoning rationale especially for the more protective zoning. It included basic analysis of the representations, and provided updated maps summarising natural resource and usage data. Zoning the Southern Sections is a very useful reference for day-to-day management staff, particularly the sections dealing with guidelines for the preparation of the Zoning Plan, and the resource maps (although a few now require further amendment).

Once public comments on the Draft Zoning Plan had been received and analysed and the recommendations of the respective Commonwealth and Queensland Inter-Departmental Committees duly considered, amendments were made to the Zoning Plan, as appropriate. A report was then submitted to the responsible Commonwealth Minister (the Minister for the Arts, Sport, the Environment, Tourism and Territories (ASETT)). This report plus the revised Zoning Plan were also submitted to the Great Barrier Reef Ministerial Council, consisting of two Commonwealth and two Queensland Government Ministers, for Council's information.

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As the Minister did not require any amendments to the Zoning Plan, it was then tabled before both Houses of the Federal Parliament. Following 15 sitting days during which no motions were passed to disallow it, the Zoning Plan came into effect on 1 August, 1988, as specified by the Minister.

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2.2 Government Involvement

The process of consultation during the development of the Mackay/ Capricorn Zoning Plan did not stop with the involvement of the public. At various stages in the development of the Plan, Authority staff met with representatives of both Commonwealth and Queensland Government Departments and agencies. The purpose of these discussions was to provide an opportunity for the needs and concerns of those Departments and agencies to be brought to the attention of the Authority in relation to zoning. For example, it provided an opportunity for the comments and concerns of fisheries management agencies to be addressed as an adjunct to information already received from individual fishermen and the QCFO during periods of public'participation.

In addition, discussions with the Queensland Government Departments and agencies (the Queensland Inter-Departmental Working Group) provided a forum for co-ordination of planning of the Queensland Mackay/Capricorn Marine Park with the Commonwealth Mackay/Capricorn Section Zoning Plan. The Queensland Inter-Departmental Working Group provided the avenue for official, written submissions to the Great Barrier Reef Marine Park Authority by Queensland Government Departments and agencies. This ensured that a single co-ordinated Queensland Government view was presented to the Authority and avoided the possibility of individual departments with differing perspectives offering incompatible advice. Thus the Queensland Government response represented, in certain cases, a compromise of the various departmental recommendations, and management staff should be aware that in certain instances the suggestions proposed by the then Queensland National Parks and Wildlife Service representatives could not be adopted for the co-ordinated Queensland Government view.

In addition, informal exchange to provide further background on specific issues took place between the Great Barrier Reef Marine Park Authority and various departments and authorities. In the case of the then Queensland National Parks and Wildlife Service, the Regional representative on the Queensland Inter-Departmental Working Group was also on the Authority's Planning Team for the Mackay/Capricorn Section. The purpose was to assist in zoning plan development by providing a day-to-day management perspective, and information on natural resources and usage available from Service staff already working in the area, This liaison also aimed to facilitate the transfer of information concerning the zoning back to Service staff.

The involvement of a Regional Service representative in Queensland Inter-Departmental Working Group discussions and in GBRMPA Planning Section meetings was successful and worthwhile, both in terms of providing Service input into the Zoning Plan development, and in terms of transferring zoning information back to Service personnel.

2.3 Zoning Queensland Marine Park Areas

Queensland's Marine Parks Act (1982-1988) provides for areas which are "tidal lands and tidal waters" of Queensland to be declared as marine parks. In the case of the Great Barrier Reef Region, this State legislation allows extension of complementary management and protection to estuaries, inshore waters and intertidal areas. In the Mackay/Capricorn Section, zoning of Commonwealth and Queensland marine parks was undertaken concurrently. The then Queensland National Parks and Wildlife Service had the responsibility for declaration and zoning of the State marine parks.

The landward boundary of the Queensland Mackay/Capricorn Marine Park on the mainland is generally the high water mark, **except** in some cases where it follows highest astronomical tide (see notes on 1:250,000 zoning maps). On Queensland islands the boundary follows the line of highest astronomical tide. Day-to-day management staff must be aware that the seaward boundaries of Oueensland marine parks are the subject of differing State and Commonwealth definitions of low water interpretations. mark are not identical, nor are their interpretations of the extent of the "tidal lands and tidal waters" under Queensland's jurisdiction (whether in inshore areas, or around offshore coral Thus there are separate areas of Queensland and cays). Commonwealth responsibility as well as areas of "overlapping claims of responsibility". But while the State and Commonwealth Marine Parks Acts and legislation are not identical, the Zoning Plans are complementary. The net result is that areas outside the Great Barrier Reef Marine Park are suitably protected through the Queensland Marine Park zoning; and the complementary zoning ensures that adjacent areas of "overlapping claims" where jurisdiction may be debatable can be appropriately managed, while problems relating to the location of the low water mark can be minimised. (GBRMPA is committed to strong enforcement action for serious or repeated infringements wherever they may occur and believes that prosecutions should be pursued under the appropriate legislation regardless of the location of such infringements relative to low water mark.)

The 1:250,000 scale zoning map series that accompanies the Mackay/Capricorn Section Zoning Plan has been compiled to show the maximum landward extent of either the Commonwealth or Queensland Marine Park. This has been done for the benefit of users such as fishermen who do not need to know details of jurisdictional boundaries. Rather, they need to know where they can or cannot undertake their activities. However, it is still important for management staff to appreciate the demarcation of jurisdiction around islands and, importantly, along the mainland coast. Accordingly it may be useful for staff to annotate their 1:250,000 maps to show the landward extent of the Great Barrier Reef Marine Park. This will particularly assist staff in discussions with potential tourism developers whose projects may encompass both the Commonwealth and Queensland Marine Parks.

3. <u>Major Zoning Issues</u>

The development of the Mackay/Capricorn Section Zoning Plan highlighted several issues that were either site specific or

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peculiar to that zoning process. It is a function of managing a multi-use system that decisions that are made will reflect a balance between the interests of the various groups involved and the overriding need for conservation. Efficient management will necessitate finding the solution that, as far as practicable, provides the most appropriate result. Such an approach was used throughout the zoning of the Mackay/Capricorn Section and particularly for the following major issues.

3.1 Zoning the Swain Reefs

It was clear, early in the zoning process, that the Swain Reefs offered a different set of zoning problems to other areas of the Section. Unlike other areas, the Swains support a limited number of uses: commercial line fishing, recreational use (fishing and diving) from charter boats and commercial trawling. In addition the number of vessels using the Swains is limited and areas of usage can be reasonably readily defined. Commercial line fishermen generally use the northern and western reefs, charter boat operators predominately use the southern Swains and trawling occurs in the area between the western Swains and the 'Tee-Line' to Storm Cay region. Representations and discussions with fishermen and charter boat operators identified the following major issues:

- i) access to fishable anchorages by charter boat operators; and

Changes to the draft zoning plan were undertaken following extensive consultation with charter boat operators and reflect an obligation to conserve the environmental qualities of the Swains whilst reducing impact on users of the area. Consequently, the specific changes were as follows.

 Alteration of the location of both blocks of the MNP'B Zone was undertaken to reduce the number of important anchorages closed to fishing. In particular the so called 'arrival' and 'departure' anchorages at the southern end of the Swains (e.g. Reefs 21-465 and 21-466) are now available for fishing. The new zoning also enhances the attractiveness of the area for dive tourism by providing a substantial number of reefs free from the effects of fishing.

2) Areas of current and potential use for trawling have been provided for in the western Swains. Extensive consultation occurred with fisheries agencies and the QCFO following a Queensland Department of Primary Industries exploratory trawl expedition to the area. As a result, some potentially productive areas have been zoned General Use 'A' Zone whilst others have been set aside free from trawling. In addition, an area of extensive <u>Turbinaria</u> coral beds at the southern end of the 'Hardline' has been protected.

The final zoning of the Swains reflects a balance between the need for long term conservation of the area and the need to provide for current and future use. It is a good example of 'planning ahead of **problems'** in the Marine Park.

3.2 Split zoning

Experience in day-to-day management of the Capricornia Section indicated that on heavily used areas a system of split zoning (ie multiple zoning of a single reefal entity) may have conservation, interpretive and enforcement value. The following arguments can be used to support this concept.

- (i) Split zoning, although contrary to previous GBRMPA zoning guidelines, has been employed previously, e.g. Lizard Island, and exists in the eyes of the public wherever a . Reef Appreciation Area (RAA) exists.
- (ii) Split zoning should only be applied to heavily used areas to accommodate potentially conflicting activities.
- (iii) The Capricornia Section RAA's were perceived to be too complex in shape and too small in area to be effective from a management and biological perspective. The review of the draft zoning plan saw the RAA's given a degree of permanency by being cemented in the zoning plan as MNP'B' with which they share common provisions.

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The concept for split zoning, in the case of Capricornia cays, generally entails a zone boundary running North-South usually through the mid point of the cay to the east of which would be MNP'B' and to the west an appropriate zone that allows at least some activity which involves the removal of marine resources.

In the Capricornia Section this zoning strategy has been applied to **Tryon**, Northwest, Masthead and **Heron/Wistari** Reefs. Lady Musgrave and Lady **Elliott** Island Reefs have had a modified form of split-zoning applied to suit their particular needs.

Split zoning offers a number of advantages for management of an area.

- . It makes provision for accommodation of otherwise conflicting activities at the same general location.
- It allows a greater area of a single reef to be zoned as 'look but don't take' than under RAA designation procedures.
- Simplified boundary descriptions arising from most applications of split zoning provide for ease of interpretation to the public of the zoning of the area.

On the other hand, split zoning does raise some issues that should be noted.

If the RAA that is replaced was 'site specific' (e.g. a particular dive location or fish feeding station) and not just a general locality, then the (probably) larger MNP'B' zone that replaces it could divert interpretive focus away from that specific site.

• Split zoning usually results in an increase in conservation type zoning (i.e. MNP'B'). Split zoning proposals must carefully consider and account for the need to provide for all reasonable uses of the area.

 Ideally, split zoning should result in simplified boundary descriptions. Catering for all reasonable uses of the area may entail deviation from the apparently simplest available description.

The above arguments were taken into consideration when compiling the split zoning proposal for Capricornia. Authority staff visited the areas proposed for split zoning and spoke to major users of those areas (resort and day visitor operators) in order to canvass opinion on these proposals. Whereas the concept of providing for a small area adjacent to the camping islands for nature appreciation was supported, the location of that zone (in the draft Zoning Plan) to cover the entire lee of the islands was opposed on the grounds that it was reasonable that users have access to a calm, **fishable** anchorage adjacent to the island. The final zoning plan accommodates this desire by providing for both extractive and non-extractive experiences at the camping islands independent of prevailing wind conditions.

3.3 Reef Edge Definition

The Mackay/Capricorn Section Zoning Plan incorporates a rewording of the definition of the term 'reef edge'. This was done for three reasons:

- To conform to definitions used in the Central, Far Northern and Cairns Sections, thereby providing a consistency of definition for managers and the public;
- 2) To enable the definition to apply to all reefs, not just those 'exposed at Mean Low Water Spring Tide'; and
- 3) To enable the *definition* to apply to all parts of a reef. The new definition recognises the integral relationship of bommie fields and the reef slope with the main body of the reef.

It is important for day-to-day management staff to understand that the reefs of Capricornia with their reasonably well defined 'crests' are not necessarily typical of the reefs of the Mackay/Capricorn Section. Note also that under the "old" interpretation of the reef edge definition a significant part of the third lagoon of One Tree Island fell outside the Scientific Research Zone, being more than 1 kilometre from the "drying reef crest" at the margin of the second lagoon. Efficiency of management should be reflected in simplicity of the rules. As such, a reef edge definition for some reefs and another definition for other reefs (such as Capricornia) would be both inefficient and confusing. The onus is now on both GBRMPA and Service staff to ensure the public **is** conversant with **the** new definition.

4. Management Implications

The implementation of the Mackay/Capricorn Section Zoning Plan has obvious implications for management. These range from deployment of staff and capital resources through the Section to the need for further management planning to give effect to the management needs identified through the Zoning Plan.

It **is** not intended that this document deal with acquisition or deployment of staff or equipment within the Section. These matters are to **be/have** been addressed in other forums. Suffice to say that to a large degree both the **use** of the Section and the Zoning Plan itself will dictate needs in that area.

Many of the overall implications arising from the Mackay/ Capricorn Section Zoning Plan are those arising also in other previously zoned Sections of the Great Barrier Reef Marine Park. These include:

- that effective management of a large-scale, multiple-use marine park requires substantial interpretation and extension effort;
- the need for more information on the natural resources, **usage** patterns and acceptable limits in terms of human impact;

- problems associated with enforcing many aspects of the Zoning Plan and Regulations, for example locating Zone boundaries in the field, or the difficulty of detecting trawling breaches in zones where trawling is not permitted when breaches are most likely to occur at night;
- the constraints of conducting effective surface patrols, and even aerial surveillance, especially in the more remote parts of the marine park.

The implementation of any new management system requires extensive public education of both its content and intent. In the case of the Mackay/Capricorn Section Zoning Plan, this has an added twist in that it will involve not only an education of Marine Park users who previously have had minimal exposure to Zoning Plans (i.e. the 'Capricorn users), but also a reeducation of the users of the old Capricornia section. Efficiencies must be attained by the education of key groups (e.g. clubs and associations) as well as targetting individuals in the field where appropriate.

It is very important for both Marine Park managers and users to understand that the Zoning Plan was compiled using the best usage data available to the Authority at the time. It is, and always has been, recognised that the best available data are often imperfect data. It is a priority task for managers, both in GBRMPA and the Service, to work towards a process of maintaining and building upon the base of physical, biological and, importantly, usage data now to hand. For example, the zoning of reefs in the Swains, the 'Tee Line' and the 'Hard Line^r Groups is dependent on a thorough knowledge of the location and usage of anchorages. The acquisition of a complete inventory of major **anchorages** of the Section and their attributes is an important ongoing task.

Although the public contact priority in the Marine Park has always been interpretation and education, there is an obvious need for enforcement action where necessary. Enforcement procedures should reflect any changes brought about by new provisions in the Zoning Plan. In addition, the Zoning Plan may introduce new areas where enforcement action could be needed. These should be identified and incorporated in surface and aerial patrol schedules.

Another priority task for the management of the section is to look at further management planning exercises in the Section. There will be two areas:

- 1) Site specific management needs in some locations. Recently a site management plan has been developed jointly by GBRMPA and Service staff for Lady Musgrave Island and reef. Other locations at which specific management planning may be required include North West Island, Lady Elliott Island, Heron/Wistari Reefs and some of the continental islands off Mackay. As with Lady Musgrave Island, these plans, where required, will be jointly developed by the Authority and the Service and will focus on providing management prescriptions to address actual issues at the site.
- 2) A system of strategic planning across the whole Marine Park to augment zoning plans and to provide management that can cope with, or hopefully plan for, changes in patterns of use of the Park. Central to this is the need for planning for likely developments in the reef-based tourism and mariculture industries. Details of the processes of strategic planning are being developed and are being applied to the rezoning of the Cairns Section.

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APPENDIX 1

MACKAY/CAPRICORN

LOCATION ZONING DETAILS

Glossary of Terms:

GU"A"	General Use "A" Zone	
GU"B"	General Use "B" Zone	
MNP"A"	Marine National Park "A" Zone	
MNP"B"	Marine National Park "B" Zone	
PPP	Public Participation Program - associated with the development of the Zoning plan.	
Q.DPI	Queensland Department of Primary Industries	
Q.FMA	Queensland Fish Management Authority	
Reef 20-374 (etc)	The reef numbering system used on the 1:250,000 scale Zoning Map Series.	
Representative Habitat Type This refers to examples of reefal (and soft bottom) co'mmunities depicted in Maps 1 and 2 of the Information Summary and the booklet "Zoning the Southern Sections' published by GBRMPA during the development of the Zoning Plan.		

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LOCATION: Pompey Reef (20-352) and Chauvel Reef (20-308)

ZONING: GU^t**B**^r and Replenishment Area

Principal Natural Features:

- midshelf reefs

Principal Usage:

- recreational fishing (charter boat) one of several key reefs ex-Mackay
- commercial line fishing
- commercial trawling

Principal Reasons for Final Zoning:

- GU'B' provides for protection of reefal areas from trawling
- Replenishment Area status provides opportunity to cope with possible increases in line fishing pressure on known fishing reefs from vessels departing from Mackay.

Reason for Change from Draft Zoning (if applicable):

NIL

Principal Management Implications:

- need more usage data
- future closure will require public education on the need for, and objectives of, Replenishment Aleas.

Priority Monitoring Requirements:

 monitor fishing levels and assess resource stocks prior to, during and after any proposed closure.
 assess anchorage capability LOCATION: 'The Hardline^r Reefs 20-380 to 20-378 including Rip Cay Reef, 20-374 and 20-377

ZONING: MNP'B' with Preservation Zone (20-377)

Principal Natural Features:

- outer shelf, 'Hardline' reefs
- possibly used as an anchorage

principal Usage:

- comm'ercial line **fishing**

Principal Reasons for Final Zoning:

- representative habitat type set aside free from extractive activity
- MNP'B' 'buffer' surrounding Preservation Zone

Reason for Change from Draft Zoning (if applicable):

- Originally GU"B"
- Draft Zoning Plan placed MNP'B'/Preservation zoning over reefs to immediate north (including 'Cockatoo Reef)
- Public representations and user group meetings highlighted important anchorages at Cockatoo Reef -Rip Cay area suggested as an alternative

Principal Management Implications:

- Need more usage data, especially anchorage data Aerial surveillance **of** protective zoning

Priority Monitoring Requirements:

Monitor usage levels particularly by other than **fishing** vessels to establish whether other uses of the area other than **fishing** occur

Reefs 21-130 to 21-138 LOCATION:

MNP'B' ZONING:

Principal Natural Features:

- southern midshelf planar reefs

Principal Usage:

- commercial line fishing
- recreational line fishing (charter boats)
 recreational diving (charter boats)

Principal Reasons for Final Zoning:

Representative habitat type set aside free from extractive activity

Reason for change from Draft Zoning (if applicable):

- Draft zoning plan included 'Storm Cay' reef
- PPP identified Storm Cay as an important fishing anchorage
- MNP'B' Zone moved East to allow fishing at Storm Cay anchorage

Principal Management Implications:

- Need more usage data, especially anchorage usage
 Aerial surveillance of protective zoning

Priority Monitoring Requirements:

- NIL

LOCATION: The 'Tee Line Reefs 21-157 to 21-165

ZONING: MNP'B'

Principal Natural Features:

- outer shelf 'Tee Line' reefs - southern end of Section

principal Usage:

- some commercial line fishing
- some recreational fishing and diving (charter)

Principal Reasons for Final Zoning:

- Representative habitat type set aside free from extractive activity

Reason for Change from Draft Zoning (if applicable):

- Originally GU'B'
- QFMA advice on suitability of this **as** MNP'B' site in **'Tee** Line-

Principal Management Implications:

- More usage data needed
- Aerial surveillance of protective zoning

Priority Monitoring Requirements:

- Conduct basic usage monitoring

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LOCATION: Riptide Cay Reef
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ZONING: MNP'B' and Seasonal Closure Area

Principal Natural Features:

- Planar reef with sand cay
- Cay supports important seabird rookery

Principal Usage:

- Little used, some commercial line fishing

Principal Reasons for Final Zoning:

- Complementary reef zoning to protective status of **cay**
- Provide necessary protection to seabird rookery

Reason for Change from Draft Zoning (if applicable)

NIL

Principal Management Implications:

- Aerial surveillance of protective zoning
- Seabird data to be obtained/maintained
- Possible invocation of Seasonal Closure Area

Priority Monitoring Requirements:

- Monitor seabird rookery for possible seasonal closure

ZONING: MNP'B' with Preservation Zone (21-219 and 21-222)

Principal Natural Features:

- Outer shelf reefs

Principal Usage:

- Commercial line fishing
- Recreational line fishing (charter)
- Recreational diving (charter)

Principal Reasons for Final Zoning:

- Representative habitat type set aside free from extractive activity
- MNP'B' Zone 'buffer' to Preservation Zone

Reason for Change from Draft Zoning (if applicable):

- Originally partially GU'B'
- Draft Zoning Plan contained block of MNP'B'/
- Preservation Zoning to East of this group of reefs
 PPP response identified important fishing anchorages in MNP'B' Zone in Draft Zoning Plan
- Change in location accommodated user needs while maintaining conservation values

Principal Management Implications:

- Aerial surveillance of protective zoning
- More usage data needed

- Obtain basic usage data
- Obtain data on anchorages

LOCATION: Reef 21-206 (Distant Cay)

ZONING: MNP'B' and Seasonal Closure Area

Principal Natural Features:

- Cay almost certainly supports a **seabird** rookery

Principal Usage:

- Possible commercial line fishing
- Possible recreational line fishing (charter)
- Possible recreational diving (charter)

Principal Reasons for Final Zoning:

- Complementary reef zoning to protective status of cay
- Provide necessary protection to seabird rookery

Reason for Change from Draft Zoning (if applicable):

- Was included in larger MNP'B' block
- Zone status of this site is unchanged other than designation as Seasonal Closure Area

Principal Management Implications:

- Aerial surveillance of protective zoning
- Seabird data to be obtained/maintained
- Possible invocation of Seasonal Closure Area

Priority Monitoring Requirements:

- Monitor seabird rookery for possible seasonal closure

LOCATION: Elusive Reef

ZONING: MNP'B'

Principal Natural Features:

Isolated crescentic reef in the outer (east) Swain reefs grouping

Principal Usage:

- Possible commercial line fishing
- Possible recreational line fishing (charter)
- Recreational diving (charter)

principal Reasons for Final Zoning:

- Representative habitat type set aside free from extractive activity
 Promotion of 'look but don't touch' recreational
- experiences

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Reason for Change from Draft Zoning (if applicable):

- Originally was GU"8"
- Suggested as alternative to adjacent, similar reefs in north eastern part of the main Swains group

Principal Management Implications:

- Aerial surveillance of protective zoning

Priority Monitoring Requirements:

- Monitor usage types and levels

ZONING: MNP'B'

Principal Natural Features:

- Lagoonal, crescentic and patch reef examples in the outer (east) Swain reefs grouping

Principal Usage:

- Commercial line fishing
- Recreational line fishing (charter)
- Recreational scuba diving (charter)

Principal Reasons for Final Zoning:

- Representative habitat type set aside free from extractive activity
- Proposed by charter boat operators as an alternative to Northern Swains MNP'B' in Draft Zoning Plan

Reason for Change from Draft Zoning (if applicable):

- Maintain protection of representative habitat type without unduly interfering in current usage of the area
- Eastern Swains reefs required 'representative protection^r following relocation of larger MNP'B' block to the west

Principal Management Implications:

- Aerial surveillance of protective zoning

Priority Monitoring Requirements:

- Monitor usage types and levels

- LOCATION: Reefs 21-497 and 21-495 (Thomas Cay and Bacchi Cay)
- ZONING: GU'B', MNP'B' and Seasonal Closure Area

principal Natural Features:

- Patch reefs with vegetated sand cays
- Major **seabird** rookeries

principal Usage:

- Commercial line fishing
- Recreational line fishing (charter)
- Recreational scuba diving (charter)

Principal Reasons for Final Zoning:

- Seasonal closure for protection of nesting seabirds
- Complementary protective marine zoning to emphasise conservation status of the cay and surrounding waters

Reason for Change from Draft Zoning (if applicable):

- MNP'B' Zone and Seasonal Closure Area applied only to those areas of 21-497 and 21-495 immediately adjacent (~ 500 metres) to the cays. Shoal areas to the **east** and west commonly used as an anchorage and recreational fishing site are zoned **GU'B'**.

Principal Management Implications:

- Aerial surveillance of protective zoning
- Possible human interference with nesting seabirds

- Monitor usage types and levels
- Monitor nesting-seabird populations to ascertain degree (if any) of human interference and resultant possible need-for seasonal closure

ZONING: MNP'B' and Preservation Zone (21-529 and 21-507) and Seasonal Closure Area (21-519 [Bylund Cay], 21-518 [Price Cay] and 21-511 [Frigate Cay])

Principal Natural Features:

- Suite of reefs covering three groupings of Swain reefs [inner protected, outer (east), outer (west)] including examples of lagoonal (21-507), crescentic (21-529) and submerged (21-528) reefs

Principal Usage:

- Possible commercial trawling
- Commercial line fishing
- Recreational line fishing (charter)
- Recreational scuba diving (charter)
- Possible recreational yachting

Principal Reasons for Final Zoning:

- Protection of representative sample of three distinct habitat types free from extractive activity
- Seasonal Closure of recognised **seabird** rookeries

Reason for Change from Draft Zoning (if applicable);

 Draft Zoning Plan located MNP'B' 'block' in east-west alignment. This covered a number of important 'fishing' anchorages including anchorages initially visited in most charters. The realignment of the 'block' retained the conservation requirements without unduly interfering with fishing activity at important anchorages

Principal Management Implications:

- Aerial surveillance of protective zoning
- Possible human interference with nesting seabirds
- Explanation of principles and practices of zoning in this area to charter boat operators

- Monitor usage types and levels with particular reference to identifying and monitoring anchorage usage
- Monitor nesting **seabird** populations to ascertain degree (if any) of human interference and resultant possible need for seasonal closure

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Gannett Cay Reef LOCATION:

ZONING: MNP'B' and Seasonal Closure Area

principal Natural Features:

- Planar reef with sand 'cay
- Important seabird rookery

Principal Usage:

- Possible commercial line fishing
- Recreational line fishing (charter)
 Recreational scuba diving (charter)
- Automatic weather station

Principal Reasons for Final Zoning:

- Seasonal Closure for protection of nesting seabirds
- Complementary protective marine zoning to emphasise conservation status of the cay and surrounding waters

Reason for Change from Draft Zoning (if applicable)

NIL

Principal Management Implications:

- Aerial surveillance of protective zoning
- Possible human interference with nesting seabirds
- Need for access to weather station for maintenance

- Monitor usage types and levels Monitor nesting **seabird** populations to ascertain degree (if any) of human interference and resultant possible need for seasonal closure

GU'B' and GU'A' ZONING:

Principal Natural Features:

Inter-reefal waters containing a number of crescentic, planar and patch reefs

Principal Usage:

- Commercial trawling Commercial line fishing
- Recreational line fishing (charter)

Principal Reasons for Final Zoning:

- To provide for trawling in: (a) areas of proven commercial viability; and(b) areas of potential for commercial viability (a)
- GU'B' Zone to north of Riptide Cay specifically protects Turbinaria coral beds

Reason for Change from Draft Zoning (if applicable):

- Originally was GU'B'
- Representations from the Q.CFO and QFMA based on field research by Q.DPI identified areas of proven commercial viability plus areas of potential in the Swains and to the west of the Hardline. Conservation zoning of inter-reefal waters (including the reservation of some trawlable area in the GU'B' Zone) has been maintained while allowing for both the maintenance of existing trawl grounds and the limited exploration of new areas

Principal Management Implications:

- Aerial surveillance of trawlable areas with emphasis on identifying patterns of use Explanation of principles and practices of zoning in
- this area to commercial fishermen

Priority Monitoring Requirements:

Aerial monitoring of trawling activity, where, when, seasonal patterns, etc.

LOCATION: Bell Cay Reef

ZONING: MNP'B'

principal Natural Features:

- Planar reef with vegetated sand cay -
- Important frigate bird rookery
- Important anchorage

Principal Usage:

- Commercial trawling
 Commercial trolling
 Commercial line fishing

Principal Reasons for Final Zoning:

Complementary zoning reflecting the conservation status of the cay as an important nesting site for frigate birds

Reason for Change from Draft Zoning (if applicable):

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- Originally Preservation Zone
- Bell Cay reef is an important access anchorage to the Swain and **Pompey** reefs. MNP'B' Zone provides protection of the site without interfering in the anchorage

Principal management Implications:

- Aerial surveillance of protective zoning
- Possible human interference with nesting seabirds

- Monitor usage types and levels
- Monitor human use of cay, particularly during frigate bird nesting season
LOCATION: The waters around the Smith Island Group

ZONING: GU'B'

Principal Natural Features:

- Continental Island group National Park status on most islands
- Well developed fringing reef

principal Usage:

- widespread recreational use -
- Commercial trawling Commercial trolling -
- Commercial line fishing

Principal Reasons for Final Zoning:

- Provide areas of no trawling adjacent to national park
- islands (complementary zoning)Provide inshore areas free from effects of trawling

Reason for Change from draft Zoning (if applicable):

- Originally GU'B' area was more extensive Boundary changes north of Brampton Island and south of Silversmith Island to provide for access to **trawling** _ grounds

Principal Management Implications:

- Aerial surveillance of trawling boundaries

Priority Monitoring Requirements:

The waters around the Newry Island Group LOCATION:

ZONING: GU'B'

principal Natural Features:

Important seagrass and dugong habitat

Principal Usage:

- Commercial crabbing and netting
- Tourism

Principal Reasons for Final Zoning:

Protection of known seagrass habitat from effects of trawling

Reason for Change from Draft Zoning (if applicable):

- -
- originally was GU'A' Seagrass beds identified from Q.DPI survey after release of Draft Zoning Plan

Principal Management Implications:

- Aerial surveillance of trawling boundaries

Priority Monitoring Requirements:

-Monitoring of status of seagrasses and dugong

- The waters around Brampton Island and Carlisle LOCATION: Island
- GU'B', MNP'A' and MNP'B' ZONING:

Principal Natural Features:

- High continental islands -
- Island National Parks
- Developed **fringing** reefs

Principal Usage:

- Tourism (resort on Brampton)
- Recreational usage including fishing
- Commercial netting

Principal Reasons for Final Zoning:

To provide zoning that is both complementary to the attributes of the area and to provide for activities associated with the resort

Reason for Change from Draft Zoning (if applicable):

- $\texttt{MNP}^{\scriptscriptstyle \perp}\texttt{A}$ Zone aligned with Queensland spearfishing closed areas
- MNP'B' Zone on fringing reef used for coral viewing
 Commercial netting permitted in selected areas now zoned GU'B'

Principal Management Implications:

Installation of signage in 'split zones-_

LOCATION: The waters around Scawfell Island

ZONING: GU'B' and MNP'B'

principal Natural Features:

- High continental island' with National Park
- Popular safe anchorage
- Well developed fringing reef

principal Usage:

- Recreational boating, fishing, diving

Principal Reasons for Final Zoning:

- Protection of representative sample of fringing reef
 (MNP'B')
- Provision for fishing at anchorage (GU'B')

Reason for Change from Draft **Zoning** (if applicable):

- Status of fringing reef as a good example of fringing reefs associated with continental islands only determined after release of Draft Zoning Plan

Principal Management Implications:

 Possibility of illegal fishing in MNP'B' Zone from boats using anchorage

- Monitor usage patterns around island
- Monitor usage of the anchorage possible anchor damage

ZONING: MNP^IA'

Principal Natural Features:

- Well developed fringing reef

- Island National Park

Principal Usage:

- Recreational and commercial fishing
- Snorkelling and diving

Principal Reasons for Final Zoning:

Provide for protection of fringing reef from collecting while still allowing limited fishing

Reason for Change from Draft Zoning (if applicable):

- Originally MNP'B'/GU'B' as representative sample of developed fringing reef
- Subsequently Scawfell Island reef identified as a better example

Principal Management Implications:

- Enforcement of collecting/spearfishing constraints

Priority Monitoring Requirements:

- Monitor usage patterns

LOCATION: Bushy Island Reef

MNP'B' ZONING:

principal Natural Features:

- Important bird rookery Good example of northern inner reef with cay
- Northern extent of <u>Pisonia grandis</u>
 Unusual reefal features giving 'atoll' effect

Principal Usage:

- Tourism including seaplane access
- Recreational diving, collecting and fishing

Principal Reasons for Final Zoning:

- Protection to important natural features of the site
- Complementary protective marine zoning to emphasise conservation status of the cay and surrounding waters

Reason for Change from Draft Zoning (if applicable):

NIL

Principal Management Implications:

- Enforcement of protective zoning
- Management of current tourist facilities/programs

Priority Monitoring Requirements:

- Effects of aircraft operations on fauna of the area

C P	Natural Features: Seagrass beds and dugong habitat	Usage: Recreational fishing Commercial fishing including netting, crabbing, trawling	Reasons for Final Zoning: Protection of seagrass beds GU'B' supported by commercial fishing industry	ı afforde peds by Q an	Management Implications: Enforcement of trawling closure	Priority Monitoring Requirements: - Monitor extent of seagrass and dugong populations
LOCATION: ZONING:	Principal -	Principal -	Principal	١	Principal -	Priority ^M

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- LOCATION: The waters around the Guardfish Cluster (Curlew Island)
- ZONING: GU'B'

principal Natural Features:

- Island National Parks
- Suite of shoals, reefs and small islands

principal Usage:

- Recreational use including fishing
- Some commercial net fishing and trolling

Principal Reasons for Final Zoning:

- Affords complementary protection to island National parks and example of inshore islands and shoals free from effects of trawling

Reason for Change from Draft Zoning (if applicable):

- Representations from recreational fishermen concerned over MNP'B' zoning of Guardfish Cluster resulted in re-allocation of MNP'B' to Bedwell Island Group

Principal Nanagement Implications:

NIL

Priority Monitoring Requirements:

- The waters around the Bedwell Island Group LOCATION: (**Poynter** Island)
- MNP'B' ZONING:

Principal Natural Features:

- Continental islands
- fringing reefssubmerged shoals

Principal Usage:

- Some commercial fishing (trolling, netting)
- Some recreational fishing

Principal Reasons for Final Zoning:

Protective zoning afforded to representative of inshore southern continental island fringing reefs and shoals

Reason for Change from Draft Zoning (if applicable):

Re-allocation of MNP'B' from Guardfish Cluster following public representations

Principal Management Implications:

- Enforcement of protective zoning

Priority Monitoring Requirements:

- LOCATION: The waters around West Hill Island and in adjacent creek
- ZONING: GU'B'

principal Natural Features:

- Some seagrass beds
- Island and adjacent area is a National Park

principal Usage:

- Limited recreational use
- Limited commercial use (netting, crabbing)

Principal Reasons for Final Zoning:

- Complementary zoning to island and mainland National Park
- Protection of seagrass beds

Reason for Change from Draft Zoning (if applicable):

NIL

Principal Management Implications:

NIL

Priority Monitoring Requirements:

ZONING: GU'B'

Principal Natural Features:

- Important rookery for endemic Flatback Turtle

Principal Usage:

- Little commercial or recreational usage

Principal Reasons for Final Zoning:

- Protection to Flatback turtle rookery

Reason for Change from Draft Zoning (if applicable):

Principal Management Implications:

NIL

Priority Monitoring Requirements:

location; The waters around Wild Duck Island

ZONING: GU'B'

principal Natural Features:

- Important Flatback turtle rookery

Principal Usage:

- Tourism (small scale resort)
- Commercial netting and crabbing

Principal Reasons for Final Zoning:

- Protection of Flatback turtle rookery

Reason for Change from Draft Zoning (if applicable):

NIL

Principal Management Implications:

- Management of turtle populations in conjunction with resort redevelopment

Priority Monitoring Requirements:

 Monitor success of turtle rookery given impending resort redevelopment LOCATION: Broad Sound

ZONING: GU'A' and Prescribed Area (dogs permitted) at Clairview Beach Queensland Mackay/Capricorn Marine Park only

Principal Natural Features:

 Broad saline coastal flats with fringing mangroves characterize the Sound. Intertidal areas are extensive because of the high tidal range and are mostly_muddy. Areas are 210_km² salt flat/salt marsh, 120 km² mangroves and 117 km² intertidal flats. Dugong have been observed here, and in high densities near Clairview.

Principal Usage:

- Fished mainly by commercial fishermen. There is relatively little recreational fishing
- A Fish Habitat Reserve covers most of the area
- Beef cattle graze most of the coastal areas

Principal Reasons for Final Zoning:

- Extensive estuarine wetlands and intertidal flats

Reason for Change from Draft Zoning (if applicable):

NIL

Principal Management Implications:

- The boundary extends to Highest Astronomical Tide between Clairview Bluff and Charon Point, The marine park boundary excludes alienated land. Alienated land can be interpreted to mean land held in fee simple only or to include land with some degree of alienation e,g. Pastoral Holding. For the time being management is not to be concerned with Pastoral Holdings.
- General surveillance

Priority Monitoring Requirements:

NIL

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The waters around Long Island and Quail Island LOCATION:

ZONING: GU'B'

principal Natural Features:

- Extensive seagrass and mangrove systems

principle Usage:

- Commercial crabbing and netting -
- Some commercial beam trawling

Principal Reasons for Final Zoning:

- Protection of mangrove and seagrass systems
 Protection of dugong populations
- Reason for Change from Draft Zoning (if applicable): NIL

Principal Management Implications:

- Enforcement of trawling closures

Priority Monitoring Requirements:

- Monitor seagrass beds and dugong numbers

ZONING: GU'A' and Seasonal Closure Area

Principal Natural Features:

- Important pelican rookery

Principal Usage:

- Some commercial trawling and netting

Principal Reasons for Final Zoning:

 Protection of pelican rookery - nesting pelicans are very susceptible to disturbance

Reason for Change from Draft Zoning (if applicable):

NIL

Principal Management Implications:

- Enforcement of seasonal closure when applicable

- Human usage patterns in nesting season
- Pelican nesting

The waters around Townshend Island and Leicester LOCATION: Island

GU'B' and MNP'B' ZONING:

principal Natural Features:

- Continental islands
- Dugong habitat
- -Extensive mangrove and seagrass systems

principal Usage:

- Commercial netting and crabbing
- Department of Defence training area

Principal Reasons for Final Zoning:

- Protection of seagrass and mangrove systems
 Protection of dugong habitat

Reason for Change from Draft Zoning (if applicable):

- Q.DPI seagrass survey identified Canoe Passage as a
- very important seagrass area
- No information available at that time to suggest MNP'B' zoning would specifically affect individual fishermen

Principal Management Implications:

- Enforcement of MNP'B' Zone

- Human usage patterns
- Dugong population
- Seagrass beds

LOCATION: Shoalwater Bay

GU'B' ZONING:

Principal Natural Features:

Extensive mangrove, seagrass and estuarine systems

Principal Usage:

- Commercial trawling, crabbing and netting Adjacent Department of Defence training area

Principal Reasons for Final Zoning:

Protection of important estuarine, wetland system including protection of crocodile, turtle and dugong habitat

Reason for Change from Draft Zoning (if applicable):

Realignment of northern extent of GU'B' boundary to provide for trawling in some areas of the bay

Principal Management Implications:

- Maintenance of conservation status of the area

- Illegal netting activity
- Dugong populations
- Seagrass beds

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LOCATION: Island Head Creek

ZONING: GU'A' and Defence Area Queensland Mackay/Capricorn Marine Park only

principal Natural Features:

- Seagrass beds, mangrove estuary surrounded by relatively undisturbed land (Commonwealth Defence Area)
- High density of dugongs

principal Usage:

- Commercial fishing and crabbing. Recreational fishing and boating. Safe anchorage and a **popular** stop-over point for cruising yachtsmen
- Within a Defence Area. Access restrictions apply during periods of military training.

Principal Reasons for Final Zoning:

- A relatively undisturbed estuary with a range of water based activities including boating, commercial and recreational fishing
- Reason for Change from Draft Zoning (if applicable):

NIL

Principal Management Implications:

- Remote area used for military training from time to time. Advance notice is given by the military to **restrict** access during training activities. General surveillance

Priority Monitoring Requirements:

LOCATION: Corio Bay/Fishing Creek

ZONING: GU'A' Queensland Mackay/Capricorn Marine Park only

Principal Natural Features:

- A relatively undisturbed mangrove estuary. Conservation values are well documented.

Principal Usage:

- Used extensively for recreational and commercial fishing
- A Fish Habitat Reserve covers the bay

Principal Reasons for Final Zoning:

- A relatively undisturbed mangrove estuary close to a major resort and to Yeppoon
- Adjacent to Byfield National Park

Reason for Change from Draft Zoning (if applicable):

NIL

Principal Management Implications:

- A major resort development (Capricorn Iwasaki) lies to the south
- A need for education and interpretation in estuarine ecosystems
- A boardwalk through mangroves is proposed
- Surveillance of fishing activities

Priority Monitoring Requirements:

LOCATION :	The waters of the Keppel Island Group
ZONING:	MNP'B' (Middle Island, Halfway Island and Egg Rock)
	MNP'A' (North Keppel Island and Great Keppel Island) GU'B' and GU'A'

principal Natural Features:

- Continental islands with well developed fringing reefs

principal Usage:

- Extensive tourism and recreational use fishing, collecting, diving, etc.
- Extensive commercial fishing collecting, trawling, trolling, netting

Principal Reasons for Final Zoning:

Final zoning provides a mix of zones that, in turn, allows for a range of commercial and recreational experiences to be obtained, whilst providing for conservation of the area

Reason for Change from Draft Zoning (if applicable):

- Re-allocation of MNP'B' from Bald Rock to East side of Halfway Island to provide for conservation of fringing reef but allowing commercial and recreational fishing to occur. East side of Halfway Island advised as most, appropriate for conservation of fringing reef Re-allocation of MNP'A' Zone to Fisherman's Beach to provide for both resort activities and commercial
- netting
- Review of GU'B' boundary to provide area to test trawlgear (cod ends open) west of Humpy Island

Principal Management Implications:

- Maintenance of conservation priorities while allowing extensive range of uses
- Use conflicts may arise
- Moorings may be required

- Human usage patterns
- Anchor damage assess need for moorings

ZONING: GU'A' - Keppel Bay Preservation Zone - Peak Island

Principal Natural Features:

- Keppel Bay dugong
 - Peak Island a prime example of an inshore fringing reef
 - the largest flatback turtle rookery in the Great Barrier Reef (300-500 females nesting annually)

principal Usage:

- Commercial and recreational fishing

Principal Reasons for Final Zoning:

- An important area for commercial and recreational fishing in relatively sheltered waters at the mouth o: the Fitzroy River
- Peak Island a representative inshore fringing reef and associated biota

Reason for Change from Draft Zoning (if applicable):

- No change for Keppel Bay
- Intertidal area around Peak Island/Horseshoe Rocks was included in Queensland marine park to facilitate management and place a complete transect from high water mark to subtidal preas in the Preservation Zone

Principal Management Implications:

- Peak Island - the licencee for the oyster banks OB 1171 (part), OB1179 and OB 1127 is N. Lorraway who is to continue his operation as an existing nonconforming use. The general public will need to be made aware that the permission for use and entry applies to the oyster licencee only except for special circumstances e.g. safety, emergencies

- Keppel Bay none
- Peak Island flatback turtle nesting

LOCATION: The Narrows

ZONING: Conservation and Mineral Resource Zone Queensland Mackay/Capricorn Marine Park only

principal Natural Features:

One of only four estuarine passage landscapes unique to Queensland. Comprises 74 km of mangroves, 58 km of salt flats, seagrass.beds. High conservation value because of fish nursery areas, dugong habitat and transition zone between tropical and subtropical mansroves. Graham Creek is a waterway with high scenic values. Southern most limit of Bruguiera exaristata. Seagrass beds. Dugong in northern part of The Narrows.

Principal Usage:

- A valuable commercial and recreational fishery for barramundi, salmon, mullet and mud crabs.

Principal Reasons for Final Zoning:

- Oil shale resources (Stuart and Rundle) of national importance lie adjacent to and in part underlie The Narrows. It will be some years before the resource is utilised.

Reason for Change from Draft Zoning (if applicable):

 In draft was General Use 'B' Zone. Mines Department would not support inclusion in the marine park unless exploration and mining was allowed as an 'as of right' use. There is no such zone in the Great Barrier Reef Marine Park system. Thus a new zone specific to The Narrows, which lies outside the Great Barrier Reef Marine Park, was created. Exploration and mining of minerals is still subject to conditions required by the Director, Queensland National Parks and Wildlife Service for the protection of the marine park. Trawling is not permitted. Small areas overlying the oil shale resource were deleted from the marine park.

Principal Management Implications:

- General surveillance
- Publicity is to be given to the provision for mining in initial and on-going literature. A management consultative committee is to be established.

Priority Monitoring Requirements:

- LOCATION: Colosseum Inlet/Seven Mile Creek
- ZONING: GU'A' Queensland Mackay/Capricorn Marine Park only

Principal Natural Features:

- A major estuarine system with substantial **areas** of mangroves; largely undisturbed
- High densities of dugong

Principal Usage:

- Important for recreational fishing and crabbing.
- Commercial fishing and crabbing also occurs - Fish Habitat Reserves and Wetland Reserves cover most of this area

Principal Reasons for Final Zoning:

- A relatively undisturbed estuarine system **supporting a** significant recreational and commercial fishery

Reason for Change from Draft Zoning (if applicable):

- No change

Principal Management Implications:

- Tannum Sands is a popular recreational **area for** Gladstone residents. There is extensive **recreational** fishing and some commercial fishing

Priority Monitoring Requirements:

LOCATION: Rodds Bay (east)

ZONING: GU'B' Queensland Mackay/Capricorn Marine Park only

Principal Natural Features:

- Relatively undisturbed estuarine system with extensive
- areas of mangroves
- High densities of dugong
- Seagrass beds

Principal Usage:

- Recreational fishing
- A Fish Habitat Reserve (Rodds Harbour) extends into this area

Principal Reasons for Final Zoning:

- A relatively undisturbed part of an estuary with extensive areas of mangroves
- Adjacent to a national park proposal on Rodds Peninsula
- Protection of Seagrass beds

Reason for Change from Draft Zoning (if applicable):

- Was General Use 'A'. Given a higher protective status (to trawling) because of the extensive mangroves and associated sub-tidal seabed

Principal management Implications:

- Surveillance of fishing operations
- Current beam trawl licenses preclude operating in this area
- Most of the area is now closed to all netting operations

Priority Monitoring Requirements:

LOCATION: Bustard Bay

ZONING: GU'A' Queensland Mackay/Capricorn Marine Park only

Principal Natural Features:

 Eleven mangrove species in Eurimbula Creek, 12 mangrove species in Round Hill Creek. Fringing seagrass beds in Round Hill Creek. Patches of salt marsh and claypan in estuaries. Local occurrences in Round Hill Creek of golden mangrove fern and Lumnitzera racemosa

Principal Usage:

- Mud crab fishery and mullet, whiting and bream fisheries. Round Hill Creek provides excellent shelter and anchorage
- Fish Habitat Reserves cover Pancake, Middle, Jenny Lind Creeks, Eurimbula Creek and part of Round Hill Creek. A Wetland Reserve covers part of Round Hill Creek near Seventeen Seventy

Principal Reasons for Final Zoning:

 Relatively undisturbed mangrove estuaries near developing township of Seventeen Seventy and Agnes Waters

Reason for Change from Draft Zoning (if applicable):

- No change

Principal Management Implications:

- Increasing use associated with development of Seventeen Seventy and Agnes Waters
- General surveillance

Priority Monitoring Requirements:

NIL



MNP'B' and MNP'A' ZONING:

Principal Natural Features:

- Well developed reefal systemPermanent sand cay of historical interest .

Principal Usage:

- Tourism (resort)
- General recreation (fishing and diving) Charter vessels _
- _
- Research

Principal Reasons for Final Zoning:

To provide for opportunities for a range of activities 'to be undertaken whilst maintaining the conservation values of the area

Reason for Change from Draft Zoning (if applicable):

Realignment of the MNP'B' boundary to the south of Heron Island to provide opportunity for "permitted" collecting associated with the Heron Island Research Station

Principal Management Implications:

- Installation of 'split zoning' signage
- Possible conflict of uses

- Human usage patterns **Effects** of interaction of tourism, conservation and research

- LOCATION: North West Island Reef, Tryon Island Reef, Masthead Island Reef and Lady Musgrave Island Reef.
- ZONING: MNP'B' and GU'B'

Principal Natural Features:

- Vegetated sand cays

Principal Usage:

- Recreational use . camping
 - . fishing
 - diving
 - . reef walking

Principal Reasons for Final Zoning:

- To provide opportunities for 'extractive' and 'nonextractive' recreational experiences at the camping islands while maintaining the conservation values of the area

Reason for Change from Draft Zoning (if applicable):

- Final zoning plan provides:
 - fishable/collectable area in the lee of the
 islands; and
 - areas for 'non-extractive' recreation on both the northern and southern reef flats (except Lady Musgrave Island)

Principal Management Implications:

- Installation of 'split zoning' signage
- Possible need for site-specific management planning

Priority Monitoring Requirements:

- Human usage patterns

ZONING: GU'8' and Replenishment Area

Principal Natural Features:

Principal Usage:

- General recreational (fishing, diving) and commercial (fishing) use

Principal Reasons for Final Zoning:

- To provide opportunity, if required, for limited closure to allow for replenishment of natural resources

Reason for Change from Draft Zoning (if applicable):

- Irving and Polmaise Reefs chosen **as** Replenishment Areas to give a group of two heavily fished reefs from which one at any one time may be closed

Principal Management Implications:

- Public education on the need for and objectives of Replenishment Areas

Priority Monitoring Requirements:

 Monitor and assess resource stocks prior to, during and after any proposed closure

LOCATION:	Lady Elliott Island Reef
: SONING	MNP'A' and MNP'B'
Principal -	Natural Features: Southernmost reef in the GBR Region Associated coral cay of historical significance
Principal - -	Usage: Tourism (island resort) Limited recreation and commercial fishing Anchorage
Principal -	easons for Final Zoning: To provide for experiences associaໃຈໃຍ with ໃກຂ resort an ^D for the anchorøge whilst maiດ ^ດ ∃iດiດg the conservation valwes of the site
Reason for -	r Change from Draft Zoning (if applicable): MNP'B' Zone extends only to 100 metres from reef edge to allow for fishing at anchorage and trolling
Principal -	Management Implications: Installation of 'split zoning' signage Possible need for site-specific manage ot planning
Priority M -	Priority Monitoring Requirements: - Human usage patterns - Assess need for specific management planning

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APPENDIX 2

GREAT BARRIER REEF MARINE PARK AUTHORITY

GOAL AND AIMS

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GOAL AND AIMS

1. AUTHORITY GOAL

To provide for the protection, wise **use**, understanding and enjoyment of the Great Barrier Reef in perpetuity through the care and development of the Great Barrier Reef Marine Park,

2. AUTHORITY AIMS

These aims are subordinate to the primary goal and must be read in conjunction with it and with each other.

- . To protect the natural qualities of the Reef, whilst providing for rezscnable use of the Reef's resources:
- . To involve the community meaningfully in the care and development of the Marine Park.
 - To achieve competence and fairness in the care and development of the Marine Park through the conduct of research, and the deliberate acquisition, **use** and dissemination of relevant information from research 'and other sources.
- To minimise regulation of, and interference in, human activities, consistent with meeting the goal and other aims of the Authority.
- . To achieve management of the Marine Park primarily through the community's understanding and acceptance of the provisions of zoning, regulations and management practices.
 - To minimise costs of caring for and developing the Marine Park consistent with meeting the goal and other aims of the Authority.
 - To provide for economic development consistent with meeting the goal and other aims of the Authority,
 - To adapt the Marine **Park** and the operations of the Authority to changing circumstances.

Adopted MPA 90, October 1986 (amended MPA 91, November 1986)

APPENDIX 3

QUEENSLAND MACKAY/CAPRICORN MARINE PARK

MANAGEMENT AREAS

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ZONING MAPS

- Figure 1: Cumberland Islands Management Area
- Figure 2: Broad Sound Management Area
- Figure 3: Keppel Bay Management Area
- Figure 4: Rodds Bay Management Area
- Figure 5: Capricorn-Bunker Management Area
- Figure 6: Outer Islands Management Area








MACKAY / CAPRICORN MARINE PARK

CAPRICORN - BUNKER MANAGEMENT AREA



FIGURE 5



DESIGNATED AREA MAPS

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Figure 7:	Defence Areas
Figure 8:	Seasonal Closure Areas
Fjgure 9:	Replenishment Areas







APPENDIX 4

GREAT BARRIER REEF MARINE PARK AUTHORITY GUIDELINES FOR THE PREPARATION OF THE MACKAY/CAPRICORN SECTION ZONING PLAN

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General, Legislative and Management Requirements

- 1. The Zoning Plan should be as simple as possible.
- 2. As far as practicable(AFAP) the plan should minimise the regulation of, and interference in, human activities, consistent with meeting the goal of : providing for protection, wise use, appreciation and enjoyment of the Great Barrier Reef in perpetuity.
- 3. AFAP the plan should maintain consistency with existing zoning plans in terms of zone types and provisions.
- 4. AFAP the plan should maintain consistency with zoning plans drawn up under Queensland Marine Parks legislation.
- 5. AFAP the pattern of zones within the Sections should avoid any sudden transition from highly protected areas to areas of relatively little protection. The concept of buffering should be applied such that highly protected areas are generally adjacent to, or surrounded by, zones which provide for moderate protection.
- 6. AFAP, unless levels of localised activity suggest otherwise, single zonings should surround areas with a discrete geographic description e.g. an island or reef.
- 7. Zone boundary widths should be consistent around reefs and islands and where possible should be described by geographical features (based on line of sight to aid identification in the field.).
- Sequential zoning along a coastline should be avoided unless there is very little clear differentiation e.g. whole bay.

SPECIFIC REQUIREMENTS

Shipping

- 1. The plan should provide for the movement of shipping _ along recognised or proposed routes.
- 2. The plan must not impede the access of international, interstate or intrastate shipping to shipping routes or to existing ports.on the coast of Queensland. Nor should it impede access to potential ports.

Defence Areas

1. The plan must recognise the requirements of the . Department of Defence, particularly with regard to gazetted defence areas.

Conservation of Significant Habitat

1. AFAP areas of world, regional or local significance for wildlife conservation (involving for example, dugong,

whales, turtles, crocodiles) should be given appropriate protective zoning.

- 2. AFAP where significant breeding or nursery sites can be identified, particularly for species subjected to harvesting, these should be provided with appropriate Seasonal Closure or Marine National Park or Preservation zoning.
- 3. AFAP representative samples of characferistic habitat types should be included in either MNP'B' pr Preservation zones.
- 4. AFAP in reefal areas protective zoning should be applied to reef/shoal complexes (ie to incorporate a wide range of habitat types within one unit).
- 5. Reefs and other areas adjacent to coastal settlements and/or popular departure points are often the focus of fishing and related activities. As far as possible a group of Replenishment Areas (areas closed for set periods to enable fish and other exploited resources to regenerate) should be declared within the same general area.

National Parks, Reserves and Historic Ship Wrecks

 AFAP zoning of reefs and waters adjacent to existing National Parks, and fisheries reserves and Historic Shipwrecks should complement the objectives of those reserves,

Anchorages

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- 1. AFAP major anchorage sites should be in General Use zones so as to allow most of the activities associated with overnight or longer anchoring of vessels to continue. Where an anchorage is zoned in a manner that restricts those activities AFAP opportunity to carry out those activities should be provided for at an adjacent anchorage.
- 2. AFAP the zoning for anchorages should not result in the multiple zoning of a single island/reefal unit simply because an anchorage is present.
- 3. AFAP the Plan should retain access for small boats to important all-weather anchorages. However, access to all zones during emergency conditions must be allowed for.

Scientific Research

1. Provision should be made for conduct of scientific, research throughout the Sections. However, areas should only be zoned exclusively for scientific research where existing and probable future research programs indicate that those areas afe likely to be used for that purpose on a frequent and regular basis. In other cases declaration of areas for special management for scientific purposes should meet the needs of the scientific community.

Spearfishing

1. AFAP zoning should complement current spearfishing restrictions as set out in the Queensland Fisheries Regulations.

Commercial and Recreational Activities

- 1. As a general rule:
 - areas of significance for non-extractive activities should AFAP be given Marine National Park .zoning; and

areas of significance for reasonable extractive activities should AFAP be given General Use zoning.

2. When a reef or area is zoned in a way which excludes a particular activity, provisions should be made, in as many cases as possible, for access to alternative areas.

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APPENDIX 5

GREAT BARRIER REEF MARINE PARK AUTHORITY MACKAY/CAPRICORN SECTION ACTIVITIES GUIDE

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	Zone	Yes	Permit	Limited	Permit	Yes	Yes	Yes	Yes	Yes	Permit	Yes	Permit	Permit	Yes		
v	General Use '8' Zone	Yes	Permit	Limited	Permit	Yes	Yes	Yes	Yes	Yes	Permit	Yes	Permit	Permit	No		
	Marine National Park 'A' Zone	Yes	Permit	Na	No	No	Limited	Yes	Limited	Yes	Permit	No	Permit	Permit	No		
	Marine National Park B Zone 1	NOT NOT	Permit		H ZON	Not	No.	Yes	Not		Permit	No.	Permit	No.			
	Sclenillic Research	No					Nove	HON ST		Permit		A CAR	A CONTRACTOR	No.	20		
	Preservation Zone	No	No	No	No	No	No	No	No	Permit	Permit	No	No	No	No		
	Seasonal Closure Areas	No	No	No	No	Na	Na	No	Na	Permit	Permit	No	No	No	No		
	Emergencies: Acc	ess to	o alļ zo	nes is a	llowe	d in e	merger	ncies			•0	only v	when ir	n opera	lion	•	