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# Proposed Zoning Plan for the Great Barrier Reef Marine Park - AMSA Submission

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## SUBMISSION

by the

**AUSTRALIAN MARINE SCIENCES  
ASSOCIATION INC**

on the

**PROPOSED ZONING PLAN for the GREAT  
BARRIER REEF MARINE PARK  
AUGUST 2003**

### **A. Support for Basing the Plan on the Representative Areas Program**

The Australian Marine Sciences Association (AMSA) has strongly supported the Representative Areas Program, which has drawn upon the best scientific evidence available. Further, we support the protection of at least 20% of each bioregion. AMSA commends the Great Barrier Reef Marine Park Authority for taking this innovative approach in the development of the currently proposed plan. The approach is in line with clauses 4.4 and 4.5 of AMSA's position statement (document included with this submission), which deal specifically with 'no-take' areas.

Indeed, AMSA has been a long-term supporter of the overall approach that is continuing to be taken in regard to planning and management of the Great Barrier Reef Marine Park. The Park's sound management regime over recent decades has helped enhance both the level and quality of the science conducted in association with the Park.

AMSA would also like to draw attention to the following clauses in our position paper:

- clause 5.1 - that 'MPAs may benefit human communities and marine environments in other ways. They may *inter alia* improve scientific understanding of marine ecosystems';
- clauses 5.2 to 5.4 - which emphasise the value in having no-take reserves to assist in the maintenance of fished stocks and in the need for location-specific research to ensure the effectiveness of such reserves for specific fisheries; and
- clause 6.2 - which deals with the need for well-designed scientific monitoring programs in management of marine protected areas.

AMSA's submission, which follows, has been prepared by its National Council. It deals with the more strategic issues underlying the proposed Reef zoning as they apply to the conduct and application of science. AMSA is mindful of the fact that the Authority may now only alter the Plan in regard to matters raised in the submissions it obtains.

### **B. Issues concerning the Provisions for Zones**

#### **Issue 1: Conduct of Research in the Buffer and Marine National Park Zones - Too Restrictive**

AMSA applauds the greater coverage by green zones (MNP and Buffer) and respects the essentially

'no-take' objective of those zones. However, it sees the present no-take provisions as they apply to the conduct of research in those zones as being a significant impediment to the conduct of research within the Great Barrier Reef Marine Park, especially now that the green zones are so extensive. The extractive research that would be allowable under the plan is limited to research that is relevant to, and a priority for, the management of the Marine Park or cannot reasonably be conducted elsewhere.

The Representative Areas Program was largely based on data and published studies from extractive research. When originally conducted, the research was seldom directly linked to 'management'. Thus, the potential value to the big picture is often not fully appreciated. In the revised zoning plan, the Authority must ensure that such discovery research can continue unimpeded in the Park. Strong scientific involvement is essential for implementation of the Plan and ongoing adaptive management. The well-publicised, serendipitous findings regarding synchronous coral spawning emphasises this point.

Further, any allowable extractive research will now require a permit. AMSA sees no problem with the Plan requiring extractive research in green zones to be subject to permit provided that the Authority is able to bear the load of dealing with applications for research permits, without imposing undue delays in processing the applications. However, AMSA notes that the Authority's policy in recent years has been one of moving away from making research subject to permit because of the very need to reduce its heavy permit-processing workloads. This dichotomy needs to be addressed.

One option that AMSA offers is that extractive research in the green zones be allowable **if the carrying out of that research in a green zone is scientifically appropriate or if it is not practicable to conduct that research elsewhere, for reasons such as safety, opportunity, research design, expense etc.** The present wording does not allow such considerations to be taken into account.

There should be greater latitude offered for the following reasons.

- a) There will always be interesting natural occurrences deserving study and the green zones (because they will be so extensive and offer a controlled experimental environment) may be the preferred places for such study.
- b) The matter of safety is important. While there may be sites outside green zones where particular work may be carried out, these sites may not offer researchers as much protection from weather, tides, currents etc as would a site in a green zone.
- c) Much research work is collaborative and much is undertaken to take advantage of opportunities arising from other programs (such as ship time), which may qualify for operation in the green zones.
- d) Certain research is broad-scale and may produce best results if conducted according to a tight research design. Such design may require, say, sampling according to a geometrically-fixed spatial grid. Preferred sampling sites may

have to fall within green zones. While it could be argued that the grid could be adjusted to place the sampling elsewhere, the quality of the findings of the work may suffer as a consequence.

- e) While it may be possible to carry out the research elsewhere, this may incur additional expense. Research budgets at the best of times are limited and researchers are invariably called upon to do much with little funds. Marine research can be very expensive and opportunities have to be taken to do the work at least expense, otherwise the work would not be done at all. Quality student research would be most severely affected.

### ***Issue 2: Subsequent Restriction by Regulation - Changes to Provisions without Full Public Consultation***

There is one subtle but very significant change to existing zoning plans that AMSA is particularly concerned about. Several provisions, especially those within the 'Dictionary' will be amendable by Regulation in order to further restrict use and entry. Regulations do not attract the same level of public scrutiny (as per a mandatory statutory process) as has this proposed Zoning Plan. A number of the provisions have a direct bearing on the conduct of research.

Regulations are subject to passage by Parliament but rarely do proposed regulations become aired in the public arena.

AMSA would like the Plan to include a requirement that for certain matters as referred to above, where there is an intention to propose a regulation altering the meaning of the terms in the 'Dictionary' in order to further restrict use and entry, the Authority be required to seek public comment on the proposal, much as it is still required to do under some of the existing zoning plans for proposals for special management areas etc. It is regrettable that this public comment opportunity is no longer being provided for in, for example, the recent plan for the Far Northern Section.

### ***Issue 3: Accredited Educational or Research Institution - Authority only to Accredite***

Much of the research and education carried out in the Marine Park is done under the auspices of a Commonwealth, State or Territory department or authority. The proposed Plan provides for greater flexibility in the operation of educational and research programs, through special recognition of programs conducted by accredited educational or research institutions. This is a commendable move but AMSA has questions about the intended process of accreditation. It would seem reasonable to have the Great Barrier Reef Marine Park Authority as the accrediting agency, as it is the body having overall responsibility for the Marine Park. However, that level of control is not intended. In effect under the Plan, it would appear that any government agency responsible for research or education could accredit itself in regard to the carrying out of its program. AMSA would like to see responsibility for accreditation rest with the Authority. Of course, this may be a delegatable power and offices in bodies such as the Queensland National Parks and Wildlife Service

may gain the power to accredit in order to facilitate complementary operations with Queensland.

### ***Issue 4: Research within Institutional Programs to be Privileged – an Inequity***

Except for where regulations may be made to enable other bona-fide researchers to access the Park without permit, the plan would limit the carrying out of research without permit (for particular types of research in particular zones) to research 'being a component of an educational program or a research program conducted by an accredited educational or research institution'.

AMSA would prefer that any bona-fide researcher is not unreasonably restricted from access, whether that person is operating through an institution, through a company or business or as an individual. Admittedly, most research in the Park is carried out under the auspices of research or educational institutions, but AMSA can see no reason for excluding non-institutional researchers, other than for administrative control. It asks the Authority to reconsider the matter.

### ***Issue 5: Conduct of Research in the Commonwealth Islands Zone - Limits too Strict***

The restrictions on the conduct of research in the Commonwealth Islands Zone are very strict, being more so than for the green zones and approximating those for the Preservation Zone. Should any Commonwealth Island so zoned deserve Preservation Zone status, it should be zoned as such. The Commonwealth Islands in the Marine Park provide opportunities for researchers to study maritime situations that fall under the Commonwealth's management regime. AMSA would like to see the provisions for research in the Zone match those for the green zones (where limited impact research (non-extractive) is to be allowed without permit).

## **C. Issues concerning the Distribution of Zones and Areas**

### ***Issue 6: Off-Shelf Zoning - Potential Hindrance to Marine Science***

Within the Great Barrier Reef Marine Park are two distinct marine environments that represent quite different territories for the marine scientist: the Great Barrier Reef and waters inshore (on the continental shelf) and the oceanic area in the Coral Sea. They comprise approximately 66% and 34% of the Park respectively. Different types of science, with different methodologies, are employed in the two territories for various reasons.

The conduct of research in the Marine National Park Zone (and in the Buffer Zone, which for all but trolling is akin to the Marine National Park Zone, i.e. 'no-take') is more restricted than in the Conservation Park, Habitat Protection and General Use Zones.

The Marine National Park Zone, with the relatively tiny Buffer Zone, occupy about 33% of the Park but its distribution in the shelf and off-shelf areas is quite different: 28% vs 42%. AMSA is not seeking reduction in the area of MNP/Buffer off-shelf but would like the Authority to introduce a measure that would make the carrying out of research in the green zones off-shelf less onerous. One strategy that is in use in this

plan (for the Far Northern) and has been used before is to create for the MNP and Buffer Zones, an off-shelf sub-zone for which the necessary concessions for research can be made.

It should be noted that much of the science conducted in deep waters is collaborative international work, often of a physical, chemical or geological nature, taking in a study area far larger than the Park. Even the extractive activity associated with biological science conducted off-shelf is significantly limited by practicalities. Also in this context, it should be pointed out that the Marine Park extends into the atmosphere and the sea bed. All these factors support the case for sub-zoning to provide less onerous requirements for research.

#### ***Issue 7: Scientific Research Zone - Coverage Generally Adequate***

AMSA supports the presence of Scientific Research Zone around all of the major research stations within the Park area. It notes that the Zone would apply:

- to part of the Lizard Island reefs (and over the three nearby reefs),
- over Yonge Reef, to part of Green Island and Orpheus Island reefs,
- to the coast adjacent to the Australian Institute of Marine Science,
- over One Tree Island reef, and
- to part of Heron Island reef.

AMSA is aware of the suggestions of the Lizard Island Research Station and the One Tree Island Research Station for changes in the boundaries of their respective Scientific Research Zones and fully supports these suggestions.

#### ***Issue 8: Buffer Zone - Misnomer***

A final issue in regard to zonings is alluded to above. The Buffer Zone no longer has a 'buffer' purpose and generally it has not been applied in the manner followed in earlier Plans, as a buffer around some 'no-take' areas to allow limited 'taking'. The name of the Zone needs to be changed to one aligned to its function.

### **D. General Matters: Ecosystem-Based Management and Accommodation of Change**

Much of the operation of the Great Barrier Reef Marine Park Act concerns itself with the development of zoning (and management) plans and with Park management under those plans. These plans have been useful, through managing human use, in facilitating conservation of the Great Barrier Reef, and in stimulating processes of inquiry. However, Reef conservation requires a much broader approach. Efforts by the Authority in attending to impacts of fishing and threats to water quality are steps in the right direction. Marine ecosystems, their natural constituents, and some of the major impacts, do not have regard to artificial boundaries. The Great Barrier Reef, and indeed the Great Barrier Reef Province, are large natural areas, which require looking at as a whole. Science contributes significantly to that understanding, but often that science may not have the Marine Park in its focus. It will be through this greater understanding that ecosystem-based management will become more practicable. The

Authority has to be certain that its final Plan, which will have Park-wide application, will be workable, i.e. to enable science, in its broader sense, to progress albeit in a deliberate and responsible way.

Further to the above, the AMSA notes that marine ecosystems are not static and unfortunately human communities in some parts of the world must deal with the consequences of major changes in, for example, coastal physiography, availability of marine resources, and oceanic weather systems. Indications are that in the foreseeable future, rates of change may increase. The Authority needs to remain alert to the possible occurrences of large-scale natural change and be ready to adapt its plans accordingly. Science, of course, has a major role to play in that regard.