

MPRA FRAMEWORK FOR THE PLANNING OF THE PROPOSED WALPOLE-NORNALUP INLETS MARINE CONSERVATION RESERVE

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MARINE & COASTAL COMMUNITY NETWORK
CITY WEST LOTTERIES HOUSE
WEST PERTH WA 6005
TEL: (08) 9420 7206 FAX: (08) 9486 8718
Email: mconwa@ozemail.com.au

**AN OVERVIEW OF THE PROCESS TO ESTABLISH A
MARINE CONSERVATION RESERVE IN THE WALPOLE-NORNALUP INLETS**

Major Steps:

- 1. Collate and assess relevant ecological and social information on the region.**
- 2. Initiate community consultations and identify key issues with respect to the proposed marine conservation reserve.**
- 3. A Focus Group of community, stakeholder and Government agency representatives is formed.**
- 4. The Focus Group assists the Department of Conservation and Land Management to develop, on behalf of the MPRA, a draft Indicative Management Plan for the proposed marine conservation reserve with broad-based input from the community.**
- 5. The MPRA review the draft Indicative Management Plan and provide advice to the Minister for the Environment and Heritage.**
- 6. The Minister for the Environment and Heritage seeks approval of the Minister for State Development and the Minister for Agriculture, Forestry and Fisheries to release the draft Indicative Management Plan for public comment.**
- 7. The Minister for the Environment and Heritage releases the draft Indicative Management Plan for public comment for three months.**
- 8. Public submissions are reviewed by the MPRA.**
- 9. The draft Indicative Management Plan is modified (if appropriate) and finalised.**
- 10. The MPRA provides advice to the Minister for the Environment and Heritage.**
- 11. The Minister for the Environment and Heritage seeks statutory approvals of the Minister for State Development and Minister for Agriculture, Forestry and Fisheries for the Management Plan and approvals to establish the new reserve as recommended in the planning process.**
- 12. Cabinet consideration of the reserve proposal and resources for management.**
- 13. The marine conservation reserve is established, the management plan is approved and the new reserve is gazetted.**

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1. Introduction

The Focus Group for the proposed Walpole-Nornalup Inlets marine conservation reserve has been formed to facilitate the development of a draft Indicative Management Plan for this area. The Focus Group has an important 'public interest' role in facilitating broad community input into the planning and establishment process for the proposed reserve. It must consider all community interests and ensure the reserve reflects community aspirations for future conservation and management of the area. In this document, *community* includes the general public, both local and statewide, industry and all special interest groups (e.g. fishing and tourism). The Focus Group will assist the Department of Conservation and Land Management (CALM) in making recommendations to the Marine Parks and Reserves Authority (MPRA) on the reserve proposal, including proposed management strategies for the area. These recommendations will be in the form of a draft Indicative Management Plan that will ultimately be released formally for public comment.

Although the Walpole-Nornalup Inlets were intended to be included within the Walpole-Nornalup National Park when it was declared in 1972, this could not be achieved under legislation of the time. In 1994, the Marine Parks and Reserves Selection Working Group recommended that "*declaration of the Walpole and Nornalup Inlets and the tidal parts of the Deep, Frankland and Walpole Rivers as a marine park be implemented as a matter of high priority, and its management integrated with that of the surrounding national park.*"

This framework document has been produced to provide relevant information and broad guidance to the Focus Group in its consideration of the proposal and identify important issues that should be considered in the planning and management of a marine conservation reserve. The framework will assist the Focus Group to achieve a balanced and practical outcome in a realistic time frame.

2. Background

At a national level, the conservation of marine biodiversity, maintenance of ecological processes and the sustainable use of marine resources are addressed by the Intergovernmental Agreement on the Environment. This agreement is implemented through actions developed under national strategies such as the *National Strategy for Ecologically Sustainable Development*, the *National Strategy for the Conservation of Australia's Biological Diversity*, *Australia's Oceans Policy* and the *Strategic Plan of Action for the National Representative System of Marine Protected Areas*.

The proposed Walpole-Nornalup Inlets marine conservation reserve will, if established, become part of the National Representative System of Marine Protected Areas (NRSMPA). The NRSMPA is being developed in cooperation by Commonwealth, State and Territory governments with the aim of conserving, protecting and managing the marine environment. The primary goal of the NRSMPA is to establish and manage a comprehensive, adequate and representative system of marine protected areas to contribute to the long-term ecological viability of marine and estuarine systems, to maintain ecological processes and systems and to protect Australia's biological diversity at all levels. The development of an NRSMPA further fulfills Australia's international responsibilities and obligations as a signatory to the Convention on Biological Diversity, to provide a means of meeting obligations under the Convention on Migratory Species (Bonn Convention) and to satisfy responsibilities under bilateral agreements for migratory birds with Japan and China. In addition, it supports the World Conservation Union's (IUCN) World Commission of Protected Areas program of promoting the establishment and management of a global representative system of marine protected areas (<http://www.iucn.org/themes/wcpa/>).

Consistent with the national program, the Western Australian Government is implementing a state-wide system of multiple-use marine conservation reserves, with two primary objectives:

- To preserve representative, as well as special, ecosystems in the marine environment; and
- To put a formal management framework in place to ensure that the various uses of marine conservation reserves are managed in an equitable, integrated and sustainable manner.

The statewide system of marine conservation reserves is being developed to be consistent with the principles of *comprehensiveness*, *adequacy* and *representativeness*. These are defined as:

Comprehensiveness

The reserve system will include the full range of ecosystems recognised at an appropriate scale within and across each marine bioregion.

Adequacy

The reserve system will have the required level of reservation to ensure the ecological viability and integrity of populations, species and communities.

Representativeness

Those marine areas that are selected for inclusion in marine conservation reserves should reasonably reflect the biotic diversity of the marine ecosystems from which they derive.

Legislation and Government policy provides the flexibility to allow for a range of recreational and commercial uses in marine conservation reserves whilst ensuring the maintenance of conservation values. The implementation of this system will broadly follow the framework recommended by the Marine Parks and Reserves Selection Working Group report entitled *A Representative Marine Conservation Reserve System for Western Australia* that was released in 1994. Reserves that are declared under the *Conservation and Land Management Act 1984* (CALM Act) will form part of the NRSMPA.

3. Roles of the MPRA, CALM and the Focus Group as they relate to the establishment of marine conservation reserves

A number of organisations, institutions and individuals play roles in the establishment of marine conservation reserves. These are described below:

Marine Parks and Reserves Authority

The MPRA is a statutory body that was established in 1997 under the CALM Act. Marine conservation reserves (i.e. *marine nature reserves*, *marine parks* and *marine management areas*) are vested (i.e. entrusted) to the MPRA and the Authority is required to audit CALM's implementation of management plans once the reserves are established. The MPRA is responsible for overseeing the preparation of management plans for marine conservation reserves and, in the case of the Walpole-Nornalup Inlets area, will consider the recommendations of the Focus Group before making a recommendation to Government.

The MPRA's functions, among others, are to:

- oversee the development of marine conservation reserve policy and management plans, and their implementation;
- provide leadership and direction to the Focus Groups through:
 - framework papers;
 - regular feedback to groups and committees during the process; and
 - providing a MPRA member as an observer at group and committee meetings;
- review the Indicative Management Plan and provide advice to the Minister through a CALM Act section 14 report on the proposal for reservation.

The Department of Conservation and Land Management

CALM is responsible for the establishment, planning and management of marine conservation reserves. It also has statutory responsibility for protecting flora and fauna throughout the State. With respect to proposals for marine conservation reserves, CALM's role is to:

- promote and facilitate the development of management arrangements that will ensure the conservation of estuarine and marine biodiversity, and the management of human activities within an integrated, sustainable and equitable framework;
- provide executive support for the Focus Group;
- provide the technical background for the Focus Group in terms of the area's conservation and social values, and management considerations;
- coordinate the public participation program;
- facilitate appropriate input from Government agencies;
- facilitate out of session Focus Group liaison and negotiations; and
- facilitate the necessary approvals for the publication of a Notice of Intent (NOI).

Focus Group

The Focus Group, which comprises local community, stakeholder and government agency representatives, has been established to assist CALM in developing, on behalf of the MPRA, recommendations on the establishment and management of the proposed marine conservation reserve in the form of a draft Indicative Management Plan. These recommendations will be considered by the MPRA and the Minister for the Environment and Heritage. The Focus Group has a pivotal role in ensuring that the views of the local community and institutional stakeholders are considered in the planning process, and that a balanced proposal is developed.

The Focus Group will:

- assist the Department in the planning of a marine conservation reserve;
- provide advice on proposed reserve type, boundaries and reserve class;
- take account of community aspirations for the future of management of the area; and
- provide community input into the development of a draft Indicative Management Plan through broad consultation.

Individual Focus Group Members

Focus Group members have an important and sometimes difficult 'public interest' role. Given the broad range of community interests, there is need for members to take a broad community view of issues rather than a narrow personal or sectoral view. Members should use their knowledge and expertise to take a considered position of the issues and actively promote balanced outcomes. The outcomes of this process should be in the community's long-term interest and members should work constructively towards this goal.

The responsibilities of individual members include:

- seeking and considering the views of the broader community in Focus Group deliberations;
- contributing in a positive manner to the development of management options;
- ensuring they are fully informed of community opinion; and
- working collaboratively with other Focus Group members towards consensus decisions on areas of conflict.

4. Values of the Study Area

The conservation of marine biodiversity and the management of human uses are the major objectives of marine conservation reserves. These generic terms need to be defined operationally to be useful in a management context. This is achieved by identifying the key ecological and social values of the study area and then setting management objectives in relation to these values.

Ecological values are the intrinsic physical, chemical, geological and biological characteristics of an area. The key ecological values are identified according to their biodiversity significance and their importance in maintaining the structure and function of the ecosystem. The identified ecological values include:

- Species and communities that have special conservation status;
- key species endemic to the area;
- key structural components of the ecosystem;
- exploited species and communities (e.g. targeted fish populations); and
- key physical-chemical components of the ecosystem (e.g. water and sediment quality and geomorphology).

Social values are the major cultural, aesthetic, recreational and economic uses of the area. Social values may be either 'passive' (e.g. wilderness or seascape values that are not a threat to ecological values) or 'active' (e.g. fishing or tourism which have the potential to threaten ecological values). 'Passive' social values are treated, for conservation planning purposes, as quasi-ecological values because these 'uses' do not impact on the natural environment in the same way as the 'active' social values do. By contrast the 'active' social values are those activities that have potential to impact on the ecological values.

5. The Planning Process

The planning process for a proposed marine conservation reserve consists of a number of steps. The first and most important phase of the planning process is the development of a draft Indicative Management Plan for the proposed marine conservation reserve by the Focus Group and the Department, based on consultation with community and institutional stakeholders, and State and local government organizations (Figure 1). The MPRA may also provide advice to the Focus Group during development of the Indicative Management Plan. The draft Indicative Management Plan is then considered by the MPRA who subsequently provides advice to the Minister for the Environment and Heritage on the plan in the form of a Section 14 report. Following Ministerial consideration of the Section 14 report and the plan, the Minister publishes a Notice of Intent (NOI) to reserve the area and calls for public submissions on the Indicative Management Plan over a three month public comment period. Following the public submission period, the MPRA considers the public submissions and makes recommendations to Government on appropriate revisions to the draft Indicative Management Plan. Government then considers the revised Indicative Management Plan and, if this is approved, the marine conservation reserve is created.

A key factor in the planning process is effective communication between the Focus Group and the broader community. Focus Group outputs are communicated to the broader community, who in turn can make submissions to the Focus Group, either as individuals or through organisations.

The MPRA will be kept informed of progress made by the Focus Group throughout the process, both by having a representative present as an observer and by receiving the minutes and outcomes of meetings. In this way, the MPRA keeps abreast of key issues and can provide feedback to the Focus Group on the proposal.

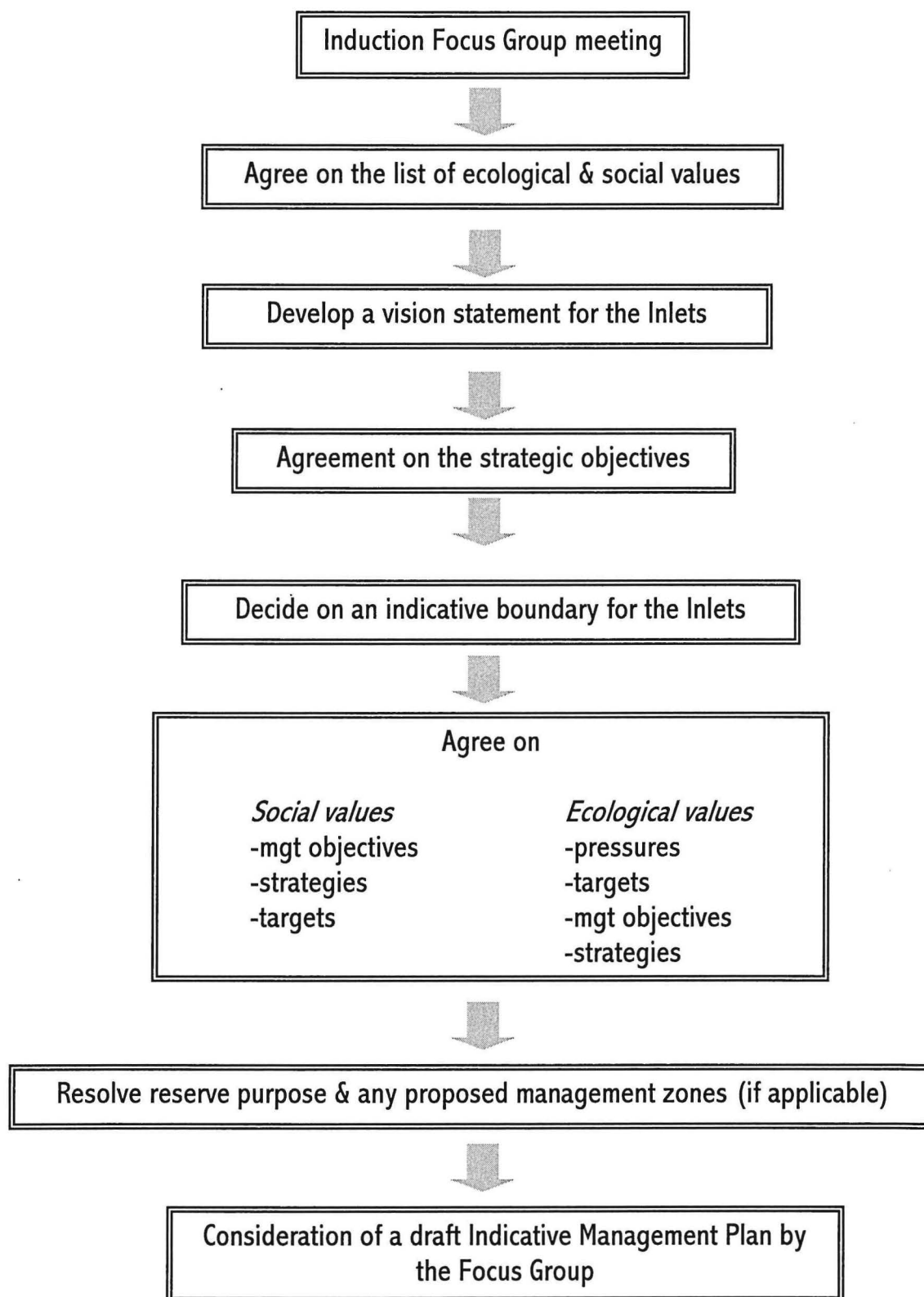
6. Developing the Marine Conservation Reserve Proposal

The Indicative Management Plan forms the basis of the marine conservation reserve proposal to Government. It is a statutory requirement under the CALM Act and provides a prescription for management of the marine conservation reserve for a minimum period of ten years. The Indicative Management Plan includes the reserve purpose, class and boundaries. Key ecological and social values of the area are described and the major pressures on the area are identified. A vision statement is then defined, followed by the development of strategic objectives for the proposed reserve. The plan then describes the management objectives and finally the specific strategies or mechanisms by which these objectives, and ultimately the vision, are to be achieved (see Figure 1 for general outline; details are found in sections 6.1 & 6.2 below). In this way, the planning process takes a strategic approach with the specific management strategies an outcome of the objectives. In addition, the Indicative Management Plan contains key performance indicators against which management of the marine conservation reserve is audited. Auditing is carried out by CALM and the MPRA. This auditing function of the plan provides feedback on the effectiveness of management and indicates where management regimes may need further consideration.

A draft Indicative Management Plan is the major output of the Focus Group. The formal requirements of the CALM Act are then to be met, including the release of the indicative management plan for a period of three months to allow an opportunity for the public to provide comment on the proposal and to assess the level of community support.

In considering the planning approach, the Indicative Management Plan should contain objectives and strategies that are realistic, achievable and measurable. These should be developed on the basis of a risk assessment approach. This means that available resources and management effort will be directed towards managing those human activities that most threaten the key ecological values of this ecosystem.

Figure 1: General outline of the steps in developing an Indicative Management Plan



6.1 Reserve Purpose, Class and Boundaries

The determination of the reserve purpose, class and boundaries is a very important aspect of the advice of the Focus Group to the Department and the MPRA. The reserve purpose, class and boundaries that are recommended should be appropriate for the area given the mix of conservation values and social uses, and the type of management envisaged for the area. The purpose should also allow sufficient flexibility for management to respond to future changes in use or threats to the conservation values.

Purpose

There are three categories of marine conservation reserve available under the CALM Act. These are **marine nature reserve**, **marine park** and **marine management area**. The type of reserve recommended will depend on the ecological and social values of the area, and the vision for the area's future. In determining the most appropriate reserve category, committee members should consider the statutory purpose of each category under the CALM Act as outlined below. In addition to this, the MPRA have developed a policy with respect to the application of the marine management area reserve category. This policy provides important guidelines with respect to the recommendation of marine reserve categories.

Marine Nature Reserve

The purpose of a marine nature reserve shall be for:

- the conservation or restoration of the natural environment;
- the protection, care and study of indigenous flora and fauna; and
- the preservation of any feature of archaeological, historic or scientific interest.

Marine Park

The reservation of a marine park shall be for the purpose of allowing only that level of recreational and commercial activity which is consistent with the proper conservation and restoration of the natural environment, the protection of indigenous flora and fauna and the preservation of any feature of archaeological, historic or scientific interest. In marine parks, four statutory management zones can be created, these being sanctuary, recreation, general use and special purpose zones.

Marine Management Area

The reservation of a marine management area shall be for the purpose of managing and protecting the marine environment so that it may be used for conservation, recreational, scientific and commercial purposes where "commercial purposes" include-

- (a) aquaculture, commercial fishing and pearling activity;
- (b) mining, within the meaning of the *Mining Act (1978)*;
- (c) seismic surveys and exploratory drilling for petroleum; and
- (d) production of petroleum and associated activities.

Reserve Class

Marine conservation reserves can be gazetted as "A Class" or "not-A Class" under the CALM Act. The classification does not affect the management of the reserve but it does affect its legal status or tenure (i.e. determines the process that is required to amend the boundaries and purpose of a reserve once established). The purpose and boundaries of a marine conservation reserve classified as A Class can only be amended with the support of both Houses of Parliament. A reserve classified as 'not-A Class' can, subject to the concurrence of the Minister for Agriculture, Forestry and Fisheries, and the Minister for State Development, be cancelled or the reserve boundaries altered to reduce the area of the reserve, by order of the Governor.

All existing CALM Act marine conservation reserves in Western Australia are A Class reserves. The classification of most future marine conservation reserves in Western Australia is likely to be as A Class reserves.

Boundaries of the Proposed Reserve

In considering proposed boundaries, it is important to evaluate the conservation significance, and the nature and level of human use of the area in relation to the objectives of the marine conservation reserve system. Specific consideration should be given to areas that:

- contribute to the maintenance of essential ecological processes (e.g. source of larvae for downstream areas and major areas of primary production);
- contribute to ecological integrity (i.e. the degree to which the area, either by itself or in association with other protected areas, encompasses a complete ecosystem);
- preserve genetic diversity (i.e. is diverse or abundant in species terms);
- include all major marine habitats;
- contain habitat for rare or endangered species;
- contain nursery areas;
- contain feeding or breeding areas;
- contain rare or unique habitat for any species;
- are relatively unaltered (or natural) or have not been subjected to significant human-induced change; and
- are important for scientific research and monitoring.

In general, areas of high conservation value (using the above criteria) should be included irrespective of the level of human use. Areas of relatively low conservation value that are primarily used for commercial purposes, particularly industrial activities, generally would not be included in a proposed marine conservation reserve, as the environmental management of these areas are usually adequately addressed under the *Environmental Protection Act (1986)*. Areas of relatively low conservation value and low human pressure should be included if there are practical management reasons for this (e.g. simplifying boundaries) or where their inclusion provides better representation of a particular habitat (Figure 2).

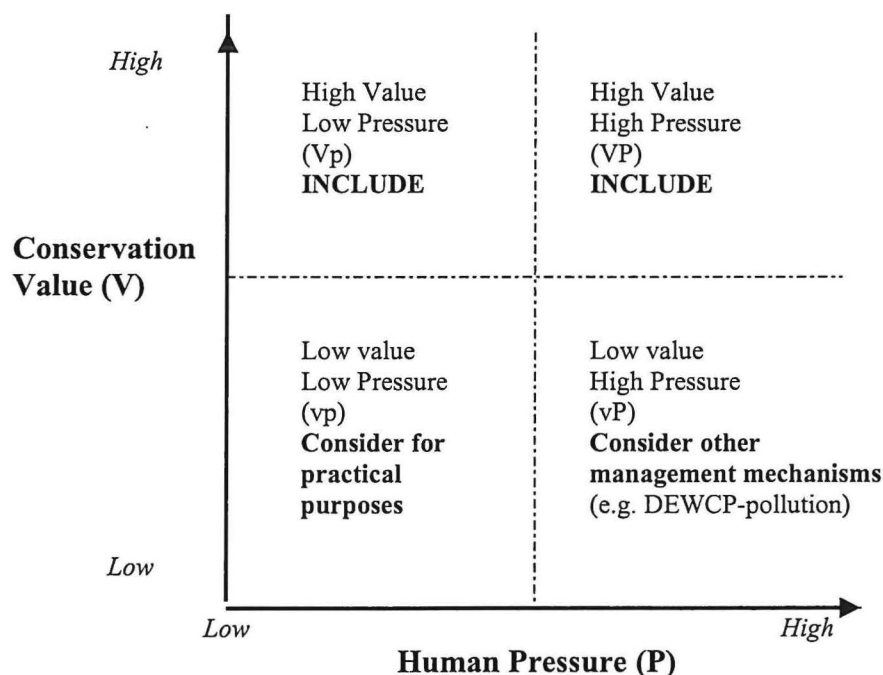


Figure 2: A generalised guide to determining boundaries of a marine conservation reserve.

Practical Management Considerations

It is important that any boundaries recommended by the Focus Group are practical from both a management and user perspective.

From a management perspective, boundaries should be as simple as possible. For example, it is preferable to have one reserve than a number of smaller reserves. This is because boundaries are likely to (depending on the management plan) represent a change in the types of activities that can occur in the reserve and the manager must define and communicate this boundary to the user, and then ensure compliance. As such, the greater the number of boundaries the greater the effort required to manage and enforce the area.

From a user perspective, simple boundaries are easier to determine if they are 'over the line or not'. The use of physical features for boundaries is a useful method as this makes it easier to communicate to the public and easier for them to determine their position in relation to boundaries on the water. The use of straight lines is preferred. The use of arcs or distances from a certain point makes it more difficult for users to determine if they are in or out of an area. Where straight lines are used, east-west or north-south lines are preferred, as this makes it easier for boat owners with GPS to determine their location in relation to the boundary. Artificial markers can also be used to identify boundaries.

6.2 The Indicative Management Plan

The format of the Indicative Management Plan is based on the best practice principles outlined in the report entitled *Best Practice in Performance Reporting in Natural Resource Management* (ANZECC, 1997). Effectively, once the Focus Group has identified the most appropriate class and boundaries for the reserve, the next steps are to:

- develop a vision for the proposed reserve
- identify key values
- develop the objectives, management strategies, and targets for the area.

The zoning scheme will be developed after these aspects of the plan are agreed upon. Combined, the objectives, management strategies, and targets should aim to provide for the maintenance of the conservation values and, as far as is practical, the maintenance of existing human uses of the area within an integrated, equitable and ecologically sustainable framework. These are described below, and reflect an outcome-based 'best practice' approach from which the effectiveness of management can be better assessed. This model is also broadly consistent with the performance assessment framework being developed in the *Strategic Plan of Action for the National Representative System of Marine Protected Areas: A guide for action by Australian Governments* (ANZECC TFMPA, 1999). It has been adopted by the MPRA to facilitate better conservation and management outcomes and a more objective and effective approach to auditing CALM's management plans.

Vision

The vision for the proposed marine conservation reserve is a short statement that describes the desired status of the region in the future which is to be either maintained or worked towards.

Values

The ecological and social values are those important characteristics of the area that are to be maintained.

Strategic objectives of marine conservation reserves

The strategic objectives of the reserve are the objectives that must be reached to achieve the vision. These objectives can only be achieved in conjunction with the application of other mandated statutory and non-statutory management measures within and external to the reserve. Thus the management of the marine reserve must be seen as part of a complementary suite of management practices that include fisheries management, marine wildlife management, pollution control, environmental impact

assessment and maritime transport and safety measures. All contribute in varying degrees to achieving the strategic objectives of the reserve.

Management Objectives

Management objectives identify **what** the primary aims of management are and reflect the statutory responsibilities of the CALM Act. Objectives are developed for all of the ecological and social values of the reserve. Where significant pressure on an ecological value has been identified, the management objective addresses that specific pressure. When there is not an obvious existing pressure or threat, the management objective provides broader direction to management in relation to protecting the value from the most likely future threats.

Management Strategies

Management strategies provide specific direction on **how** the management objective/s for each value might be achieved. These strategies typically reflect one of seven generic management strategies:

- Development and maintenance of an appropriate administrative framework;
- Education and interpretation;
- Public participation;
- Surveillance and enforcement;
- Research;
- Monitoring; and
- Direct management intervention.

These strategies also form part of the performance assessment of reserve management by the MPRA, particularly during the initial years of reserve establishment.

Performance Measures

Performance measures are **indicators of management effectiveness** in achieving objectives and targets. They should be quantitative, representative and, where possible, simple and cost-effective. Performance measures for indirect (e.g. nutrient enrichment impacts on macroalgae) and direct (e.g. fishing impacts on fish biodiversity) impacts should focus on surrogate (e.g. changes in phytoplankton biomass and species composition) and direct (e.g. changes in fish biomass) measures of the value respectively.

Management Targets

Management targets represent the **end points of management**. Targets should be measurable, time bound and expressed spatially. Ecological targets will be set as either the 'natural state' or some acceptable departure from the 'natural state'. The long-term target provides a specific benchmark to assess the success or otherwise of management action within the life of the management plan. The short-term target provides a benchmark for management to achieve within a specified time period and, in most cases, is a step to achieving the long-term target. Targets are developed for all ecological and social values. The targets for social values that are activity based (e.g. recreational fishing, commercial fishing, tourism, and water sports) are process based and are generally stated as "*Implementation of management strategies within agreed timeframes*". This ensures that strategies for the social values are implemented in accordance with the management objectives.

Key Performance Indicators

Key performance indicators (KPIs) are a **measure of the overall effectiveness** of management in relation to the strategic objectives of the reserves. KPIs relate specifically to the management targets for key ecological and social values and reflect the highest conservation (from biodiversity and ecosystem integrity perspectives) and management (social) priorities of the MPRA, CALM and the community. KPIs are a key element of the MPRA audit process.

In summary, the Indicative Management Plan, as the key output of the Focus Group planning process, provides a set of recommendations to guide the establishment and management of the proposed reserve for a period of 10 years. It is a strategic document rooted in a shared vision for the area. Through the establishment of targets and performance indicators, management effectiveness can be audited, accountability ensured, and the area's ecological and social values conserved.

References:

ANZECC. 1997. *Best Practice in Performance Reporting in Natural Resource Management*. Australia and New Zealand Environment and Conservation Council.

ANZECC TFMPA. 1999. *Strategic Plan of Action for the National Representative System of Marine Protected Areas: A guide for action by Australian Governments*. Australia and New Zealand Environment and Conservation Council.