

Background Paper for the Management of Moorings within Marine Conservation Reserves of Western Australia that supports the Draft Mooring Policy

The aim of this background paper is to:

- provide the mechanisms to develop a mooring policy that minimises the detrimental impacts to the marine biodiversity and amenity values;
- provide equitable, safe usage and access that reduces the risk of potential liability and management costs for the Department of Conservation and Land Management (CALM); and
- provide a framework with reasonable flexibility to accommodate present and future patterns of all marine conservation reserves of Western Australia.

Introduction

CALM currently manages in excess of 1 145 940 ha of Western Australian waters, of which 132 000 ha are marine nature reserves managed for the purpose of conservation of marine and terrestrial flora and fauna and their habitats and for approved recreation. The remaining 1 013 940 ha are marine parks managed primarily for the purpose of conservation and recreation. Most reserves are located in high use areas such as Swan Estuary, Shoalwater Islands, Marmion, Shark Bay and Ningaloo marine parks. The largest number of moorings exist in Shoalwater Islands Marine Park (~140) with another 100 in proposed extensions to the Park. The other parks have a smaller number of moorings but these moorings create significant management problems relating to the protection of sensitive habitats (eg Ningaloo and Rowley Shoals) and equity issues (eg Monkey Mia and Coral Bay).

As the number of marine conservation reserves increase and the visitation to these reserves increases, CALM managers are looking for guidance on how to best manage day to day issues associated with minimising possible anchor damage and the management and control of moorings.

Moorings can, where appropriately designed and sited, play an important role in protecting areas of high conservation values (eg. coral reef and seagrass) by minimising the need for anchoring thereby reducing anchor damage. Moorings also facilitate better access to locations of interest (eg. dive sites) and provide a level of security in regards to safety for vessels. Due to the range of biophysical characteristics and use patterns from reserve to reserve, there is a need for a policy which provides a number of management options to provide managers with the ability to apply an appropriate approach given the unique characteristics of the area in question.

In order to obtain advice and opinions regarding mooring and anchoring management, a joint workshop was held by CALM and the Department of Transport in 1996. Relevant persons from within CALM and from other organisations attended this workshop. Subsequent to the workshop, two meetings were convened to further consider legislative options for the management of mooring and anchoring within WA marine conservation reserves and the process of mooring site allocation. Transport has also provided further legislative advice in October 1999 on this issue.

Legislation

Department of Transport

The mooring of vessels in Western Australian waters is regulated, where and when necessary, by the Department of Transport (DoT) under provisions of the *W A Marine Act 1982* and the *Shipping and Pilotage Act 1967 and Regulations*.

DoT legislation and responsibilities primarily address issues that relate to vessel safety only. They are not responsible for issues unless it becomes a navigational hazard to other vessels. Likewise CALM currently does not have the ability to manage moorings within marine conservation reserves.

Where an area of water has been proclaimed under the *Shipping and Pilotage Act 1967* as a Mooring Control Area (MCA), the *Shipping and Pilotage (Mooring Control Areas) Regulations 1987* apply to all vessels and moorings therein. These regulations permit the DoT (or a nominated controlling authority) to charge mooring fees and set conditions on standards and marking of moorings, routine servicing and other such matters.

Mooring Control Areas can be gazetted under the *Shipping and Pilotage Act* for the purpose of public safety and access and administered by the DoT with the *Shipping and Pilotage (Mooring Control Area) Regulations 1987* and the *Mooring Regulations 1998*. The *Shipping and Pilotage Act* could therefore be used to declare all marine conservation reserves as mooring control areas for the purpose of public safety and access, environmental and amenity protection plus equity of access. CALM could administer such areas in conjunction with DoT.

DoT also has the ability to delegate the management responsibility of mooring control areas to other agencies, in accordance with the *Shipping and Pilotage Act*. This transferral of responsibility would provide CALM (as the "controlling authority") with the ability to licence and therefore charge fees for moorings, which would recover some of the costs associated with managing moorings.

The recent legislative advice from DoT, confirmed the opinion that utilising the *Shipping and Pilotage (Mooring Control Areas) Regulations 1987* provides the mechanism for CALM as the "controlling authority" to manage moorings within marine conservation reserves, if gazetted as mooring control areas.

The alternative for CALM would be to develop specific mooring regulations to manage moorings within marine conservation reserves. However this alternative may be timely and cumbersome and it may be more appropriate for CALM to review the adequacy of the *Shipping and Pilotage (Mooring Control Areas) Regulations 1987* after a period of use and following the eminent changes to the Marine Act.

The gazettal of mooring control areas must be published as notices to mariners.

In regards to the safety issues relating to moorings the DoT has the responsibility for the following:

- the provision of marine safety services - setting, implementing and enforcing compliance monitoring and emergency services;
- marine safety standards - design, construction and installation, minimum standards for structural integrity, stability and seaworthiness;
- the provision and maintenance of navigational aids; and

Department of Conservation and Land Management

Existing legislation that exists that relates, or potentially could relate, to moorings management is the *National Parks Authority Regulations (NPA)* and the CALM Act and Regulations.

National Parks Authority Regulations (NPA) (Regulation 19) provides that moorings or anchoring are not permitted within the reserves without the approval of the Authority and only at a place set apart by the Authority for the mooring and anchoring of boats. However as these regulations refer to lands vested in the NPNCA there is question as to whether the *NPA Regulations* also apply to areas other than National Parks ie other reserves that are vested in the Marine Parks and Reserves Authority (MPRA). Prior to the transfer of vesting from the NPNCA to the MPRA in August 1997, the Crown Solicitors Office (CSO) advised CALM that there might be instances of 'obscurity' in applying the NPA regulations beyond national parks. The CSO view was that it would be better to pursue new regulations to reflect the various reserve classifications under the CALM Act. Irrespective of this question, the NPA regulations are very limited and are totally inadequate to deal with current and future management issues regarding moorings within marine conservation reserves.

Section 101 (1) of the CALM Act provides for the Executive Director to grant a licence in writing to any person to enter and use any land to which this Division applies.

Regulation 17 (1) states:

"A licence may be granted or renewed subject to such conditions and restrictions as the Executive Director thinks fit, including conditions and restrictions as to —

© the payment of any charge in relation to the use of land to which this Part applies and the services and facilities of the Department.

Although the CALM Act and Regulations provide the Executive Director with the ability to licence moorings and charge a fee, they do not provide the mechanism to prevent moorings from being established or provide for penalties if they are established without approval.

The Rottnest Island Regulations, the Moorings Regulations 1998 (DoT) and the Shipping and Pilotage Regulations all comprehensively cover the variety of areas and issues necessary to effectively manage moorings. In comparison neither the CALM Act and Regulations, or the National Park Authority Regulations provide sufficient coverage to effectively implement a moorings management system. As such it is necessary to either gazette new regulations under the CALM Act or to facilitate coverage under other existing legislation. Given the urgency of obtaining legislative coverage and the uncertain timeframes of completing the draft CALM Act Integrated Regulations it is recommended that CALM seek to obtain powers under the Shipping and Pilotage Act to implement the moorings policy in the short to medium term. The Department of Transport supports this approach to provide the necessary legal powers to effectively implement the policy.

In the longer term, the effectiveness of the Shipping and Pilotage Regulations should be reviewed to the view of gazetting specific regulations under the CALM Act if necessary to manage moorings.

Recommendations

- i. *Liaise with DoT to declare and gazette all marine conservation reserves (current and proposed) as "mooring control areas" under the Shipping and Pilotage Act 1967, with CALM being declared as the "controlling authority". This would allow the responsibility of public safety to*

reserves. (Project Officer)

- ii. *Utilise the existing Shipping and Pilotage (Mooring Control Areas) Regulation 1987 allowing CALM to implement a licence scheme, charge fees and undertake other management measures. (Districts)*
- iii. *Develop administrative guidelines for the management of moorings to complement current commercial operators licensing. (Project Officer)*
- iv. *Review the suitability of the Shipping and Pilotage (Mooring Control Areas) Regulation 1987 after a predetermined period to determine the adequacy of these regulations for the ongoing management of moorings within marine conservation reserves. If necessary gazette specific regulations under the CALM Act to facilitate effective management of moorings.*

Environmental Issues

Anchoring and inappropriate mooring apparatus has the potential to cause significant damage to sensitive marine habitats such as coral reefs and seagrass meadows. This can be partly dealt with by educating the boating community to avoid anchoring in sensitive areas of seabed.

Environmental damage caused by indiscriminate anchoring can be minimised by encouraging the establishment of appropriately designed and sited moorings within marine conservation reserves.

The establishment of moorings within marine conservation reserves has been *ad hoc* in regard to siting, design and installation due to the lack of management guidelines and legislative ability to adequately manage moorings.

The preferred location of the established mooring areas reflects both logistical considerations of the boat operators and physical protection from adverse conditions. In marine conservation reserves most areas of concentrated moorings are within sheltered lagoons and embayments and close to centres of intense tourist and recreational boating activity. Examples include Coral Bay in the Ningaloo Marine Park, Monkey Mia in the Shark Bay Marine Park, the lagoon of Clerke Reef in the Rowley Shoals Marine Park and at Safety Bay in the Shoalwater Islands Marine Park. As a result, the marine communities that occur in these sheltered areas, such as coral reef communities in the tropics and the seagrass meadows in temperate waters, are most vulnerable to mooring damage. Environmental damage may also occur at popular dive sites and is likely to diminish diver enjoyment and thus affecting the amenity values of the site.

Coral Communities

The fragility of many corals and the dependence of many reef organisms on the presence of living coral make lagoonal coral reef communities very vulnerable to indiscriminate mooring and anchoring activities. The extent and ecological significance of this damage relates to the type of mooring apparatus used by operators and the intensity of this activity over time.

The lagoonal coral reef community at Coral Bay, Ningaloo Marine Park, includes large stands of fragile staghorn and plate corals. The high boat usage in this area has resulted in some mooring damage to the more fragile *Acropora* corals adjacent to the Coral Bay townsite. Increased public awareness may reduce some of the impacts but public education alone is unlikely to adequately protect nearshore reef communities which are a major recreational and commercial asset of the Ningaloo Marine Park.

use of coral bommies as 'dead weight moorings' by wrapping chain around them, or any mooring design where chains rub or move through coral are examples of how coral can be damaged. Therefore mooring designs with minimal impact that are suitable for installation in coral communities will be required.

Seagrass Meadows

Seagrasses perform many ecological functions that are central to the function of the temperate coastal ecosystems of which they are a part. The main ecological functions of seagrasses include the provision of food, habitat and protection for diverse marine fauna and fish, the accumulation of calcium carbonate sediment, the stabilisation of sediments and baffling the effects of waves and currents.

The important ecological roles of seagrass in maintaining the overall ecological integrity of coastal marine ecosystems require a conservative and cautious approach to be taken to minimise the impacts of activities.

Studies have documented that inappropriate design and locations of mooring systems have significant long-term impacts on seagrass communities. Local examples where significant damage to seagrass meadows has occurred include Mangles Bay, near Rockingham and at Thompson Bay, Rottnest Island.

Recommendations

- i. *Determine areas where moorings could be permitted for each marine conservation reserve. (District/management planning process)*
- ii. *Determine specifications/criteria for environmentally acceptable moorings. (MCB/Project Officer)*

Equity Issues

There are a number of important equity issues relating to the allocation of moorings which must be considered. There is potential for corruption if appropriate systems are not developed prior to the allocation of moorings.

The Independent Commission Against Corruption (IACC) were required to investigate the allegation that bribes were being paid to public officials (Waterways Authority of the NSW Maritime Service Board) to install boat moorings illegally. The main purpose of the corruption prevention project was to identify opportunities for corrupt conduct, and recommend changes to reduce those opportunities. Similar accusations have been made in the past in regard to the allocation of mooring sites within the Rottnest Island Reserve. As a result the Rottnest Island Authority have amended the R.I. Regulations and administrative procedures to remove discretionary powers and therefore make the system of allocation fair, open and accountable.

In both of these examples it was necessary to address the administrative and management systems. Inadequate records, unsatisfactory controls, uncertain policies and procedures, and excessive discretion for managers all help to create opportunities of corruption.

Where mooring sites are difficult to obtain there is potential opportunities for corruption. Issues that need to be addressed in dealing with allocation of sites include the equity of the allocation system eg waiting lists, the fees associated with moorings (whether they are comparable to alternative facilities), buy back or relinquishment and the on sale of a mooring. The recommendations from this report also have

The most appropriate approach (allocation of moorings - private vs public) or mix of approaches to mooring installation and operation will vary depending on a number of factors. These factors include:

- whether there are any safety issues regarding the location and number of moorings (DoT);
- whether there are any environmental concerns regarding the location and number of moorings (CALM);
- the desired intensity and style of use for the location (aesthetic values - community consultation, if possible);
- the proportion of non-commercial users requiring access to the location;
- the likelihood of other users being effectively excluded from a location through the installation of private moorings;
- the intended length of stay on the mooring;
- methods of allocating moorings if demand should exceed supply (eg Expressions of Interest, Ballots, Waiting Lists etc).

The allocation of moorings will be dependent upon the use, which can be divided into the following categories:

- Recreational permanent users — eg private house boats;
- Recreational temporal users — eg travellers/holiday makers, dive sites;
- Commercial permanent users — eg. tour operators and commercial fishing vessels that utilise a mooring all year round;
- Commercial temporal users — eg dive sites.

Broadly moorings can be provided via the establishment of public moorings or through providing approval for the installation of private moorings. These could be:

- i. those installed by a commercial operator; or
- ii. a recreational user (permanent users); or
- iii. a cooperative approach — those moorings installed by a cooperative whether they are commercial or recreational users.

Recommendations

- i. *Determine current mooring and anchoring patterns (areas of usage, eg bays; number and type of users, eg all year round or seasonal users) within marine conservation reserves. (District)*
- ii. *Determine the costs associated with CALM installing and managing public moorings. (District)*
- iii. *Determine areas of high mooring and anchoring usage where demand is likely to exceed supply. (District)*
- iv. *Liaise with the community to determine appropriate sites (eg dive sites) for either a co-operative approach (if feasible) or whether CALM needs to install moorings. (District/management planning process)*
- v. *Determine a mooring plan for each marine conservation reserve which specifies no moorings areas, limited moorings areas, possible dive sites, etc. (District/management planning process)*
- vi. *Ensure the recommendation from the IACC Report are identified and addressed to minimise the potential (perceived or otherwise) for corruption. (Project Officer)*

Amenity Values

Determining the amenity values of the marine conservation reserves can assist in the preparation and development of mooring area plans. By discussing and determining the amenity values of the community for the specific marine conservation reserves, areas of high and low significance can be identified.

Recommendations

- i. Determine community amenity values for marine conservation reserves, through appropriate public consultation processes. (District/management planning process)*
- ii. Develop mechanisms for the consultation process to determine areas that have high amenity values. This may be incorporated into the planning process when the community advisory committees are formed for the future marine conservation reserve systems and the review of current management plans. (Project Officer)*

Potential liability

The issue of public potential liability has been the focus of much management concern. Although CALM's liabilities have not been specifically clarified with respect to managing moorings, it is likely (based on legal advice to other management agencies) that the Fair Trading Act 1987 (WA) and the Occupier's Liability Act 1985 will apply. Therefore there is an existing potential risk of liability for the Department, for loss of property or life due to the failure of a mooring on a marine conservation reserve. In this case CALM is considered the "occupier", and has a responsibility to ensure that persons entering the property will not suffer injury or damage. The licensing of moorings is an effective strategy in transferring the majority of this risk to the mooring licensee. In this situation CALM's still has areas of potential risk however these are clearly identified and therefore allows for specific strategies to be implemented to manage this risk. In summary it is not possible to avoid the potential risk of liability completely. However it is possible to significantly reduce the risk of potential liability by critically assessing the potential areas of risk and then establishing practices that minimise this risk. These practices should then be complemented by adequate insurance.

The Department is likely to encounter an increase in user of marine conservation reserves with an associated increase in the demand for moorings. As CALM has a clear management role in conserving these reserves and moorings have the potential of detrimentally impacting the values of these reserves, it is necessary to manage all users equitably and ensure that the impact from moorings is minimised.

Due to the potential risk of liability associated with moorings, there are strategies that would need to be established in order to minimise the potential risk of liability. These include:

- avoiding, where possible, CALM ownership and responsibility for the maintenance of moorings;
- the incorporation, where possible, of terms and conditions containing exclusion clauses and indemnities (both private and public moorings);
- the shifting of responsibility for the installation and maintenance of the moorings to an independent mooring contractor (public moorings) and, in the case of private moorings, the licensee and the licensee's mooring contractor.

These strategies can be dealt with as a part of the licensing system for mooring management.

Recommendation

- i. *Develop a two tiered system (licence and rental) to address equity. The two tiered system would allow for private (including cooperative) and public moorings. (Project Officer)*
- ii. *Minimise the risk of potential liability, including an indemnity and terms and conditions appropriate for managing moorings. (Project Officer)*

Management Issues

Regional and district management issues include:

- Lack of policy direction relating to the management of moorings;
- An absence of specific regulations to manage moorings;
- Uncertainty associated with the provision of communal moorings at locations where high levels of visitation and *ad hoc* anchoring of vessels eg. dive sites;
- Removal of disused and replacement of inappropriate moorings;
- Perceived congestion;
- Management of use and placement of moorings is difficult;
- Standard specifications for moorings;
- Length of stays;
- Beach moorings;
- Equity of ownership issues;
- Aquaculture proposals (the proposed mooring policy would not bind aquaculture or petroleum exploration as this would be dealt with under a different process);
- Materials used, design and installation procedures;
- Potential legal liability on CALM;
- Safety aspects; and
- High cost of installing and maintaining moorings.

Recommendations

- i. Develop administrative procedures for licensing moorings(Project Officer);*
- ii. Moorings revenue to be utilised to offset management costs associated with the additional administrative and management costs.(District)*