

**MARINE RESERVE IMPLEMENTATION:
SOUTH WEST**

**AN ANALYSIS OF ISSUES
RELATING TO THE
PROPOSED GEOGRAPHE BAY/LEEWIN-
NATURALISTE/HARDY INLET
MARINE CONSERVATION RESERVE**

REPORT: MRI/LNE/GBC-60/2002

A collaborative project between the Department of Conservation and Land Management
Marine Conservation Branch and Blackwood District

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EXECUTIVE SUMMARY

The Western Australian Government is committed to full and open consultation before areas are declared as marine conservation reserves and there is a statutory requirement for public participation in the planning process. An issue analysis is generally undertaken at the commencement of the public participation process (PPP) to undertake and analyse discussions between Department of Conservation and Land Management (CALM) staff and representatives from the wide range of interest and user groups within the community. The information obtained from the discussions is used to: assess community attitudes towards marine conservation reserves; estimate levels of knowledge and understanding of marine conservation concepts and the planning process within the community; document community hopes and aspirations; identify the issues and concerns with respect to marine conservation reserves within the community; and determine relationships and alliances among relevant interest groups.

An issue analysis for the proposed Geographe Bay-Capes-Hardy Inlet marine conservation reserve was undertaken between September and December 2001. Face-to-face and telephone discussions were conducted with 108 people from a wide range of interest and user groups. The results of these discussions can be summarised as follows:

- Views on the vision for the proposed reserve varied but perhaps the most broadly supported vision was one in which the natural resources are sustainably managed and available for enjoyment and use.
- The majority of people (69%) had a receptive attitude towards the marine reserve proposal and there is no need to implement strategies to specifically address negative attitudes within the community. Most groups were reasonably comfortable with the planning process once it had been outlined how the general community could get involved through a community advisory committee and sector reference groups. Previous information/education activities (approximately two years earlier) by CALM appear to have been very beneficial. Among cautious individuals, there was a desire to “see the plan”. As understanding of the planning process increases, these cautious views may be transformed into a positive view through participation. Indigenous people were cautious as they were unsure of the implications of the marine reserve planning process on their ongoing land claim process.
- Knowledge levels vary across topics and among groups but were generally poor with less than 50% of respondents having adequate knowledge of marine conservation and planning concepts. The concept of sustainability appeared to be well understood while the values of the proposed area and the concept of integrated management were poorly understood. Commercial fishers were the most knowledgeable about marine conservation and planning concepts while local residents were the least knowledgeable major among the groups.
- Concerns were relatively limited and centred on declining fish stocks (80%), the need for sufficient no-take zones within the marine reserve (30%) and the need for fair allocations between commercial and recreational fishers (25%). Beyond these three key issues, the majority of concerns relating to the environment, resource and policing for the reserve, the planning process and outcomes were identified by fewer than 5% of respondents.
- Respondents expressed a certain level of cynicism, distrust and suspicion with respect to the process of establishing a marine conservation reserve. A clear process will be essential with effective communication links between the community advisory committee and the broader community. Clear criteria for decision-making will also be important.
- Relationships between and among sector groups varied. Fishers were relatively independent while conservation groups seem to collaborate. There was a general distrust of “outsiders” including industry bodies, and a desire for strong collaboration between government departments.
- The information obtained from the issues analysis will now be used to plan for effective information and education programs to raise knowledge in key concepts and values. The results will inform the planning process by identifying areas of concern that need to be addressed and relationships that need to be developed to facilitate an effective planning process that has broad community support.

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1. INTRODUCTION

The Western Australian Government is committed to the conservation of the marine environment and the sustainable use of the state's natural resources. A major component of the State's marine conservation strategy is the establishment of a statewide system of marine conservation reserves.

Most Western Australian marine conservation reserves cater for a range of recreational and commercial activities. They reflect a balanced approach by preserving representative and special ecosystems, while providing a management framework to ensure that human usage is managed in a sustainable, equitable and integrated manner.

In 1994, the Marine Parks and Reserves Selection Working Group published a report entitled *A Representative Marine Reserve System for Western Australia*. This report identified about 70 areas around the West Australian coast as being worthy of further consideration for reserve status under the *Conservation and Land Management Act 1984*. This report included the Geographe Bay-Capes-Hardy Inlet area and in 1997 the Minister for Environment and Heritage announced that this was a priority candidate area for reservation (Fig. 1). Following this announcement, a resource assessment was

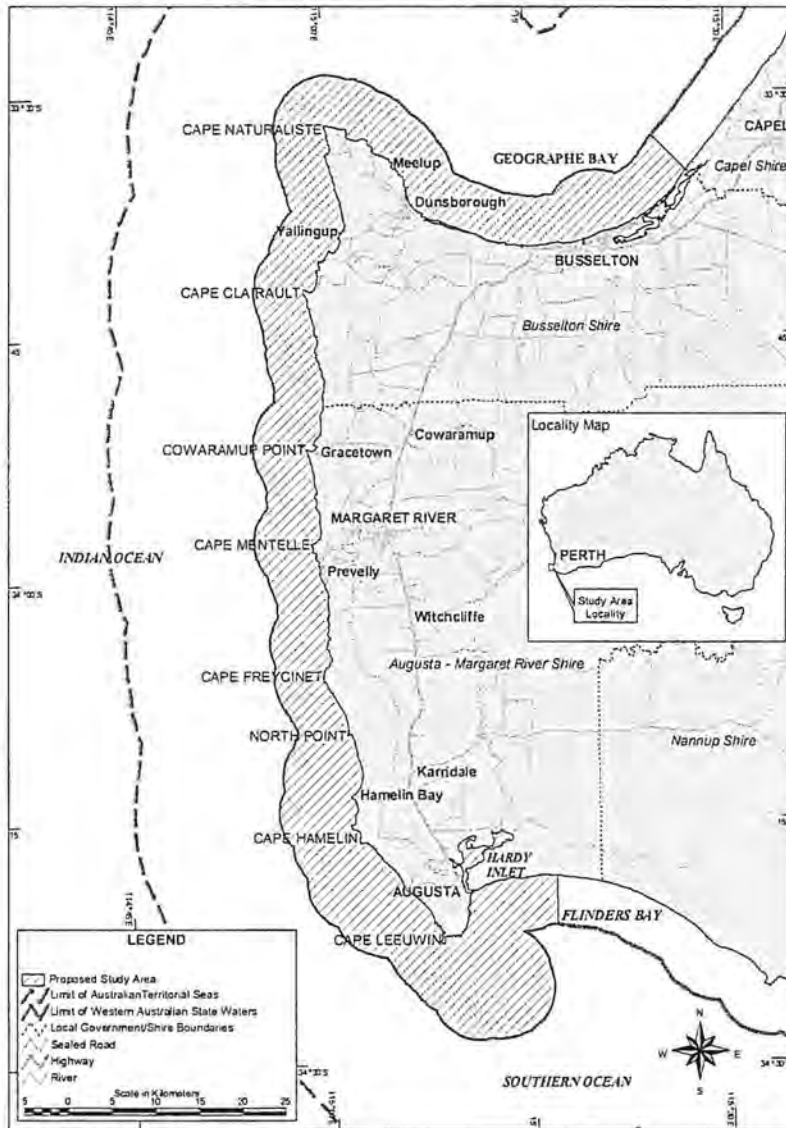


Fig. 1: The proposed Geographe Bay-Capes-Hardy Inlet Marine Conservation Reserve: as identified in the Report from the Marine Parks and Reserve Working Group as worthy of consideration for reserve status.

undertaken to assess the area's ecological and social values by documenting the marine resources and commercial and recreational uses in the area. Additionally, community consultations began, including the data gathering for this Issue Analysis.

The Western Australian Government is committed to full and open consultation before areas are declared as marine conservation reserves and there is a statutory requirement for public participation in the planning process. The goal of the public participation program (PPP) in the planning and management of Western Australian marine conservation reserves is to develop community ownership, acceptance, stewardship and understanding of marine conservation reserves. The objective of the PPP is to encourage and facilitate effective public involvement in the planning process and in day-to-day management of the reserve once it is established.

An overview of the stages and strategies associated with the PPP in marine reserve planning and management is provided in the document *Western Australian Marine Conservation Reserves Public Participation Draft Operational Procedures* and is summarised in Table 1.

Table 1: Summary of public participation process for Western Australian marine conservation reserves

Planning Phase	PPP Task
1. Initial public consultation	<ul style="list-style-type: none"> • Establish community contacts data base • Provide information about the reserve concept and planning process to key individuals, organisations and groups • Undertake issue analysis • Prepare public consultation plan (based on results of the issue analysis)
2. Pre – notice of intent to declare reserve	<ul style="list-style-type: none"> • Facilitate establishment of community advisory committee and sector reference groups • Develop and distribute information and educational material • Facilitate broad community input into the reserve planning process
3. Post – notice of intent to declare reserve	<ul style="list-style-type: none"> • Produce and distribute the draft management plan plus summaries and explanatory information • Facilitate the preparation of public submissions • Prepare a report summarising public submissions
4. Gazetted marine conservation reserve	<ul style="list-style-type: none"> • Establish community management advisory committee • Facilitate the establishment of friends group • Support on-going community extension program

Phase 1 of the PPP includes an Issue Analysis, which is the subject of this report. The term 'issue analysis' is used to describe the task of undertaking and analysing discussions between Department of Conservation and Land Management (CALM) staff and representatives from the wide range of interest and user groups within the community. The objective of the issue analysis is to develop a community profile by:

- **Identifying community visions and aspirations in relation to marine conservation and management;**
- **Assessing community attitudes towards the marine reserve proposal** – Before members of the community can have effective input into the reserve planning process they need to be receptive to the general aims of the proposal. People who are not receptive will generally not consider other points of view or accept new information

readily. Encouraging and promoting positive attitudes is therefore an essential step towards facilitating effective public input into the planning process;

- **Estimating levels of knowledge and understanding of the marine reserve concept, planning process and roles of both Government and the community** – People who do not have an adequate understanding of the marine reserve concept and planning process are unlikely to be able to participate effectively in the planning process;
- **Identifying issues of concern to stakeholder and interest groups** – An identification of key issues will facilitate the planning process by providing a focus for education and negotiation; and
- **Identifying relationships between and within sectors of the community** – Tensions among groups with conflicting goals in relation to the marine reserve proposal need to be addressed during the planning process to facilitate a resolution that is satisfactory to all parties.

A comprehensive issue analysis provides the basis for communication and liaison planning with each of the interest and stakeholder groups. The issues identified also provide a focus for detailed consideration during the reserve planning process.

2. METHODS

To determine the community profile, discussions were conducted with key community representatives from relevant user and interest groups both locally and within the peak bodies and statewide interest groups based in the Perth metropolitan area. Discussions were conducted during November and December of 2001. Contact was made primarily by telephone and a small number of discussions were conducted face to face. Interviewing staff used an open questioning technique (i.e. requiring more than a yes / no response) and active listening to identify issues, concerns and alliances and assess attitude, levels of knowledge and understanding of marine conservation reserve concepts. Assessments were recorded on the standard forms (see Appendix I), which were filled in during the telephone discussion or immediately after face-to-face discussions.

An assessment was made during each interview to determine the level of knowledge and understanding displayed by the interviewee. The following knowledge areas and marine management concepts were broadly assessed:

- the range of values of the proposed marine conservation reserve;
- representativeness;
- sustainability;
- multiple-use;
- zoning;
- no-take zones;
- integrated management;
- the reserve planning process; and
- the roles of Government and the community in the planning process

To maintain the flow of the discussion and avoid it appearing like an interrogation, it was not always appropriate to assess knowledge and understanding of all of the above concepts in every interview. A detailed definition of adequate levels of knowledge and understanding is available in Issue Analysis: notes for participating staff (Appendix II).

Respondent concerns and issues were recorded on the standard form in Appendix I and later grouped under the following headings: environmental degradation, planning outcomes, planning process and resource issues. Community aspirations, sector alliances and conflicts were similarly identified and grouped together where appropriate.

Individuals interviewed typically represented more than one user or interest group. For example, local recreational fishers were frequently also residents and ratepayers, and/or a member of a recreational diving club. To address this overlap, the responses from each individual were used once to determine the overall community profile, and then the results were included in each of the sector groups to which that individual belonged when determining separate profiles for each community sector. Placing individuals in other sectors was sometimes subjective as this information was not specifically requested on the standard interview sheet and judgements had to be made as to whether, for example, a person is a reasonably regular recreational fisherman or not.

Inferences about sector knowledge and concerns based on this survey should be made cautiously. Respondents were not chosen randomly and thus may introduce some bias. For instance, it may be that those individuals with the most concerns were the most willing to discuss them. Additionally, some of the sectors were represented by low numbers of respondents. However, efforts were made to include representatives from a range of sectors thus the information in this survey likely reflects the community as a whole, providing a snapshot of knowledge and concerns.

3. RESULTS AND DISCUSSION

3.1. PROFILE OF RESPONDENTS

A total of 108 people were sampled in 80 interviews (some interviews involved more than one person). The number of interviews undertaken and people sampled within each community sector are summarised in Table 2. A reasonable number of interviews were conducted for most sectors. However, vacation visitors were markedly undersampled. The press were well represented given the small size of this sector.

Table 2: Numbers of interviews conducted and people sampled within each community sector with interests in the Geographe Bay-Capes-Hardy Inlet area marine reserve proposal

USER GROUP	No. of actual interviews	No. of individual people who identified with a user group ¹
COMMUNITY MEMBERS		
Local residents and rate payers	49	58
Aboriginal communities	5	12
Vacation visitors	1	1
RECREATIONAL ACTIVITY GROUPS		
Boating	15	18
Diving	7	10
Surface water sports	9	9
Fishing	28	28
INTEREST GROUPS		
Conservationists	17	28
INDUSTRY GROUPS		
Fishing	15	21
Tourism	21	27
Press	4	4
TOTAL	171	216

¹ Some individuals associated with more than one group.

Approximately 86% of people interviewed represented more than one user group (Fig. 2). The major contributing sector to this pattern was the “multi-use” local residents who comprise 54% of the interviewees.

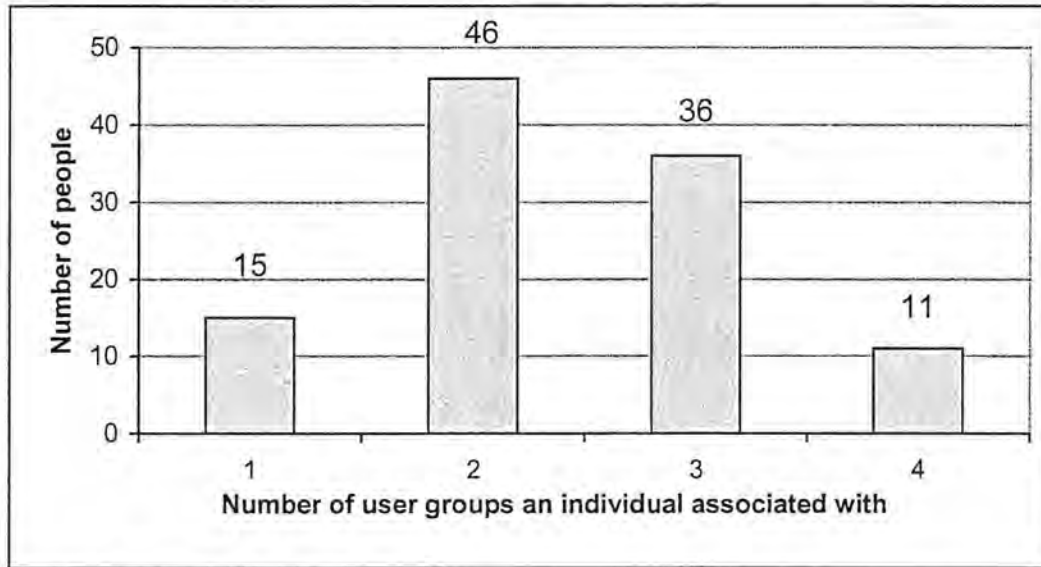


Fig. 2: The frequency distribution of sector representation among 108 people interviewed

3.2. VISIONS FOR THE PROPOSED MARINE CONSERVATION RESERVE

Some respondents commented on their vision for the marine environment in the south west. Community vision for the proposed reserve varied but perhaps the most broadly supported vision was one in which the natural resources are sustainably managed and available for enjoyment and use.

3.3. ATTITUDES TO THE PROPOSED MARINE CONSERVATION RESERVE

Attitudes to the proposed Geographe Bay-Capes-Hardy Inlet marine conservation reserve were scored as “receptive”, “cautious” or “negative” at the beginning of each interview. The majority of those interviewed were receptive to the proposal for the marine conservation reserve with less than 5% negative (Fig. 3).

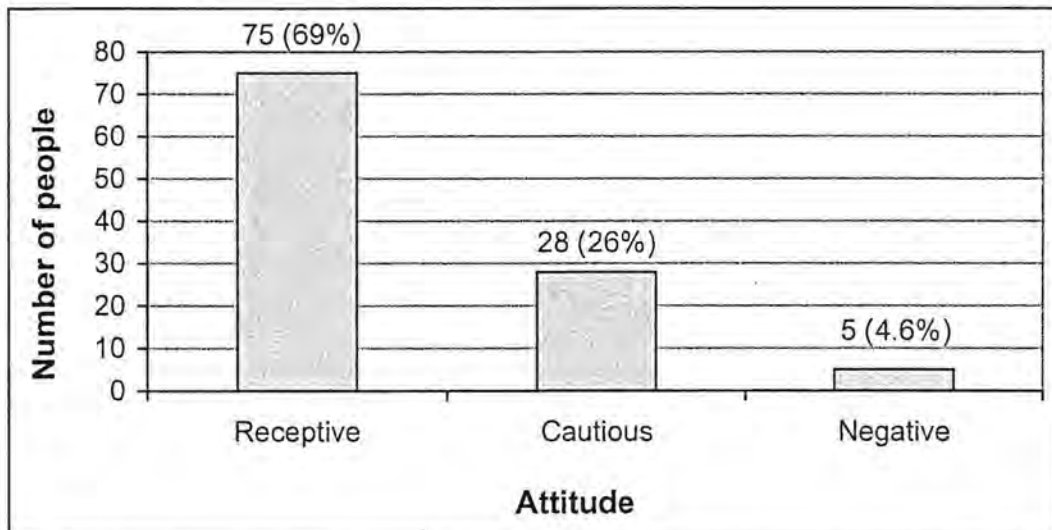


Fig. 3: The numbers and percentages of people that were ‘receptive’, ‘cautious’ or ‘negative’ to the marine reserve proposal

Reasons underlying the 4% of people with negative attitudes towards the reserve included:

- There is no need to change the current level of management as limited access to the west coast and weather prevents fishing there regularly;
- The process will create more licenses / encumbrances on livelihood;
- A generally pessimistic outlook on the future;
- A generally anti-government and anti-management outlook;
- Concern about limited enforcement after all planning is complete.

Within specific sectors, the attitudes generally followed the pattern seen in the group as a whole with most people supportive, some cautious and a few negative (Table 3). Key exceptions were the aboriginal sector in which the majority of respondents were cautious and the boating and commercial fishing sectors where almost as many individuals were cautious as they were receptive (Table 3).

Table 3: Number and percentage of respondents indicating receptive, cautious and negative attitudes to the proposal for a marine conservation reserve at Geographe Bay-Capes-Hardy Inlet.

USER GROUP	RECEPTIVE	CAUTIOUS	NEGATIVE	TOTAL
COMMUNITY MEMBERS				
Local residents	42 (72.4%)	12 (20.7%)	4 (6.9%)	58
Indigenous Communities	3 (25%)	9 (75%)	0 (0%)	12
Vacation visitors	1 (100%)	0 (0%)	0 (0%)	1
RECREATIONAL ACTIVITY				
Boating	10 (55.6%)	8 (44.4%)	0 (0%)	18
Diving	7 (70%)	1 (10%)	2 (20%)	10
Surface water sports	7 (77.8%)	2 (22.2%)	0 (0%)	9
Fishing	22 (78.6%)	5 (17.9%)	1 (3.6%)	28
INTEREST				
Conservationists	26 (92.9%)	2 (7.1%)	0 (0%)	28
INDUSTRY				
Fishing	9 (42.9%)	8 (38.1%)	4 (19.0%)	21
Tourism	22 (81.5%)	3 (11.1%)	2 (7.4%)	27
PRESS	4 (100%)	0 (100%)	0 (100%)	4

The negative attitudes in the recreational diving sector reflected fears that spear fishing will be totally banned if the marine reserve is gazetted. Both of these individuals also mistrusted bureaucratic processes. Two negative attitudes were recorded within the commercial fishing group. They believed that their livelihoods would be reduced and expressed a lack of faith in the fairness and openness of the community consultation process. They were also concerned that the numbers of commercial fishers are relatively low and may not get a fair hearing. The individuals with negative attitudes in the tourism sector believed that business will be adversely affected by increases in fees and charges. One of these people had been in business for a long time and their attitude reflects their experiences at Ningaloo Marine Park and Marmion Marine Park. All of these individuals were local residents and accounted for the negative attitudes in the local residence sector. Their views tended to be firmly held and thus may be difficult to change.

Cautious responses generally reflected fear of the unknown. In particular, respondents with cautious attitudes wanted to see a 'draft map' of where the no-take zones were likely to be. Half of the commercial fishing group had a cautious attitude as they distrust the marine conservation planning process. Indigenous communities were cautious due to unknown effects on their native title claims and because they see themselves as a small interest group in the consultation process.

There is no doubt that the local community is ready to commence discussions on the marine reserve proposal. Several marine reserve presentations given in the area before this survey were remembered by many of those interviewed. These presentations seemed to generate preliminary discussion and the time spent on the presentations seems to have been well worthwhile.

3.4. LEVELS OF KNOWLEDGE AND UNDERSTANDING

Community levels of knowledge and understanding varied among concepts in the Capes area (Fig 4). For example, the concept of “sustainability” was well understood while “integrated management” was poorly understood. Only 33% of the community had an adequate² understanding of the values of the proposed reserve at Geographe Bay-Capes-Hardy Inlet. Levels of understanding for park planning concepts such as zoning, representivity and no-take, and the actual planning process were adequate.

An interesting comparison can be made between the rankings of concepts in terms of what was understood in Dampier (*An Analysis of Issues Relating to the Proposed Dampier Archipelago/Cape Preston Marine Conservation Reserve*) versus the Capes region. Figure 4 shows that *sustainability* was the most understood marine reserve concept for both communities (83%:Capes, 77%:Dampier), whilst for all other concepts there was a markedly different level of understanding from each community. Table 4 highlights the ranking of each concept at the different communities from the most understood to the least understood.

The respondents from the Capes region understood marine reserve concepts and the planning process but understood the values of the local marine area less (33%). This was compared to the Dampier community who understood the values of the local marine area much better (73%) than they understood marine reserve concepts such as multiple use, zoning, representativeness, integrated management, no-take and the planning process.

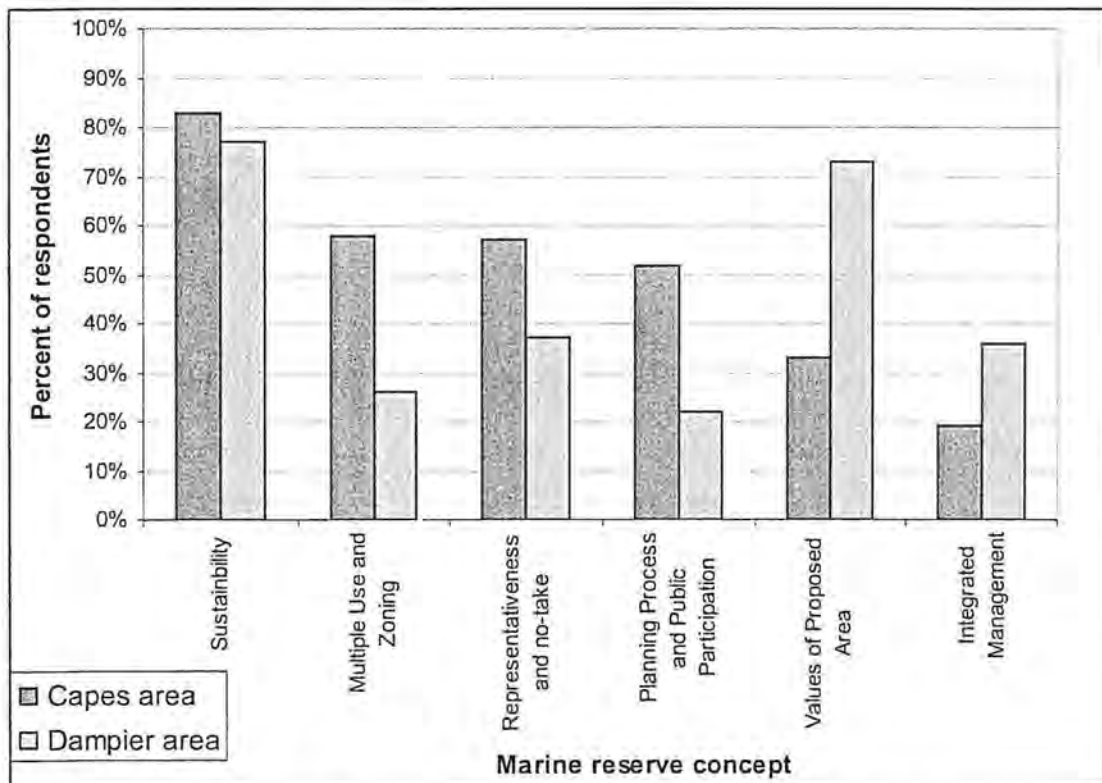



Fig. 4: Comparison between Capes issues analysis and Dampier issues analysis of the percentage of respondents with adequate knowledge of marine reserve concepts.

² Subjectively assessed by interviewer, minimum level of adequacy defined in Appendix II under section 'level of knowledge'.

Table 4: Ranking of the Capes and Dampier respondents level of understanding about marine reserve concepts from highest level of understanding to lowest level.

<p>Concept respondents understood most about</p>  <p>Concept the respondents understood least about</p>	Capes	Dampier
	Sustainability	Sustainability
	Marine reserve multiple use & zoning	Values of proposed area
	Representativeness & no-take	Representativeness & no-take
	Planning process & public participation	Integrated management
	Values of proposed area	Marine reserve multiple use & zoning
	Integrated management	Planning process & public participation

Knowledge and understanding of marine conservation reserve concepts also varied among sector groups (Fig. 5). The commercial fishing sector group was the best informed overall. This may have been influenced by previous liason by CALM with local fishers to explain the marine conservation reserve process prior to the interviews. Within the commercial fishing sector, integrated management was the least understood concept. The poorest results were in the press sector. All groups had difficulty in identifying the values associated with the local marine waters. Local residents also performed more poorly than average. The level of understanding for all marine reserve concepts by sector group is recorded in Table 5.

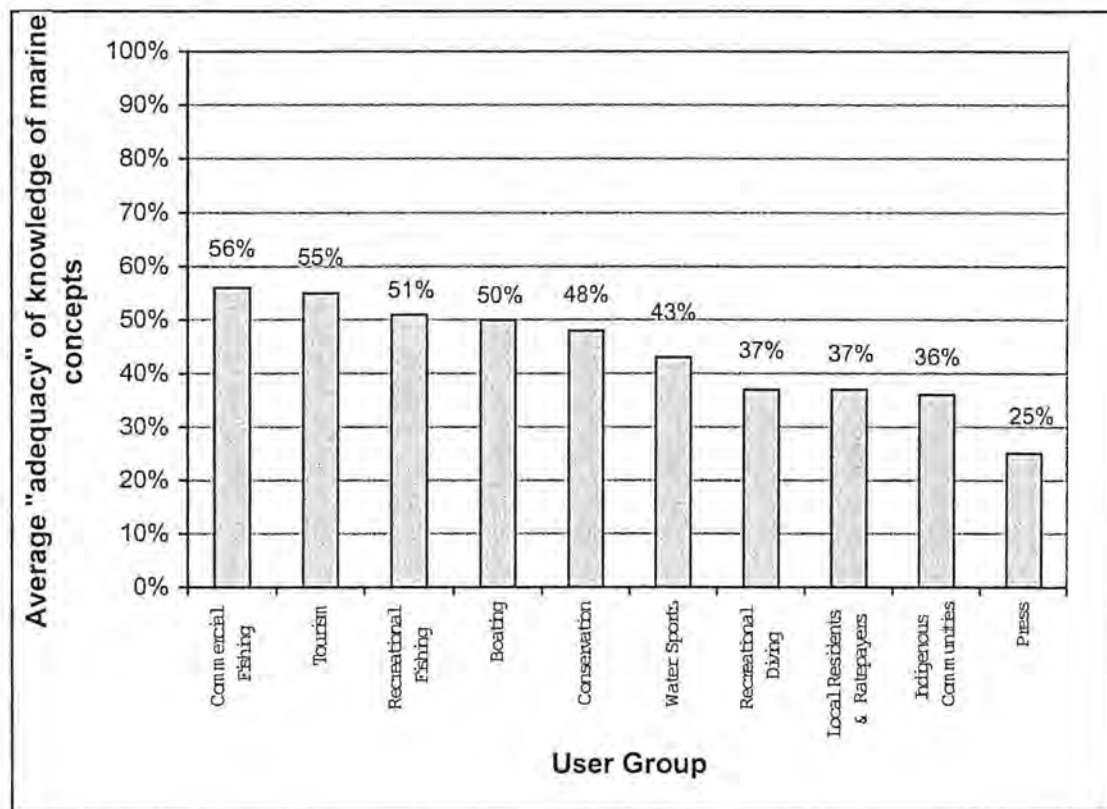


Fig. 5: Average levels of adequate knowledge and understanding (%) across all marine conservation reserve management concepts for each community sector.

Table 5: Knowledge and understanding of marine conservation reserve concepts within community sectors

Sector/Group	Marine reserve concept	Total number of respondents	Number of respondents with adequate understanding of concept	% of respondents with adequate understanding of concept
COMMUNITY SECTORS				
Local residents & rate payers	Values of proposed area	71	19	27%
	Marine reserve multiple-use & zoning	70	32	46%
	Representativeness and no-take	71	23	32%
	Sustainability	71	47	66%
	Integrated management	71	13	18%
	Planning process & public participation	71	25	35%
Aboriginal Communities	Values of proposed area	11	2	18%
	Marine reserve multiple-use & zoning	12	2	17%
	Representativeness and no-take	12	10	83%
	Sustainability	11	11	100%
	Integrated management	12		
	Planning process & public participation	12	1	8%
Vacation visitors	Values of proposed area	1		
	Marine reserve multiple-use & zoning	1	1	100%
	Representativeness and no-take	1	1	100%
	Sustainability	1	1	100%
	Integrated management	1		
	Planning process & public participation	1		
RECREATIONAL SECTORS				
Boating	Values of proposed area	17	6	35%
	Marine reserve multiple-use & zoning	17	11	65%
	Representativeness and no-take	17	8	47%
	Sustainability	17	13	76%
	Integrated management	17	2	12%
	Planning process & public participation	17	11	65%
Diving	Values of proposed area	9	2	22%
	Marine reserve multiple-use & zoning	9	4	44%
	Representativeness and no-take	9	3	33%
	Sustainability	9	5	55%
	Integrated management	9	3	33%
	Planning process & public participation	9	3	33%
Fishing	Values of proposed area	46	19	41%
	Marine reserve multiple-use & zoning	46	22	47%
	Representativeness and no-take	45	28	62%
	Sustainability	46	34	74%
	Integrated management	46	9	19%
	Planning process & public participation	46	29	63%
Water Sports	Values of proposed area	9	4	44%
	Marine reserve multiple-use & zoning	9	4	44%
	Representativeness and no-take	9	4	44%
	Sustainability	9	5	55%
	Integrated management	8	2	25%
	Planning process & public participation	9	4	44%

INTEREST GROUPS				
Conservation	Values of proposed area	28	11	39%
	Marine reserve multiple-use & zoning	28	15	54%
	Representativeness and no-take	28	13	46%
	Sustainability	28	16	57%
	Integrated management	28	8	29%
	Planning process & public participation	28	17	61%
COMMERCIAL SECTORS				
Commercial Fishing	Values of proposed area	21	10	48%
	Marine reserve multiple-use & zoning	21	13	62%
	Representativeness and no-take	21	13	62%
	Sustainability	21	18	86%
	Integrated management	21	7	33%
	Planning process & public participation	21	9	43%
Tourism	Values of proposed area	27	15	18%
	27	27	17	16%
	Representativeness and no-take	27	14	19%
	Sustainability	27	26	99%
	Integrated management	27	8	34%
	Planning process & public participation	27	19	14%
PRESS				
	Values of proposed area	4		
	Marine reserve multiple-use & zoning	4	1	25%
	Representativeness and no-take	4	1	25%
	Sustainability	4	3	75%
	Integrated management	4		
	Planning process & public participation	4	1	25%

3.5. ISSUES AND CONCERNS

30 individual issues and concerns were identified by the respondents. Of these 30, three concerns were cited by at least 25% of the respondents:

- declines in fish stocks (80% of respondents);
- the need for adequate no-take zones (30% of respondents); and
- the need for equitable resource allocations between commercial and recreational fishers (25% of respondents).

The majority of other issues were raised by fewer than 5% of respondents (Fig. 6).

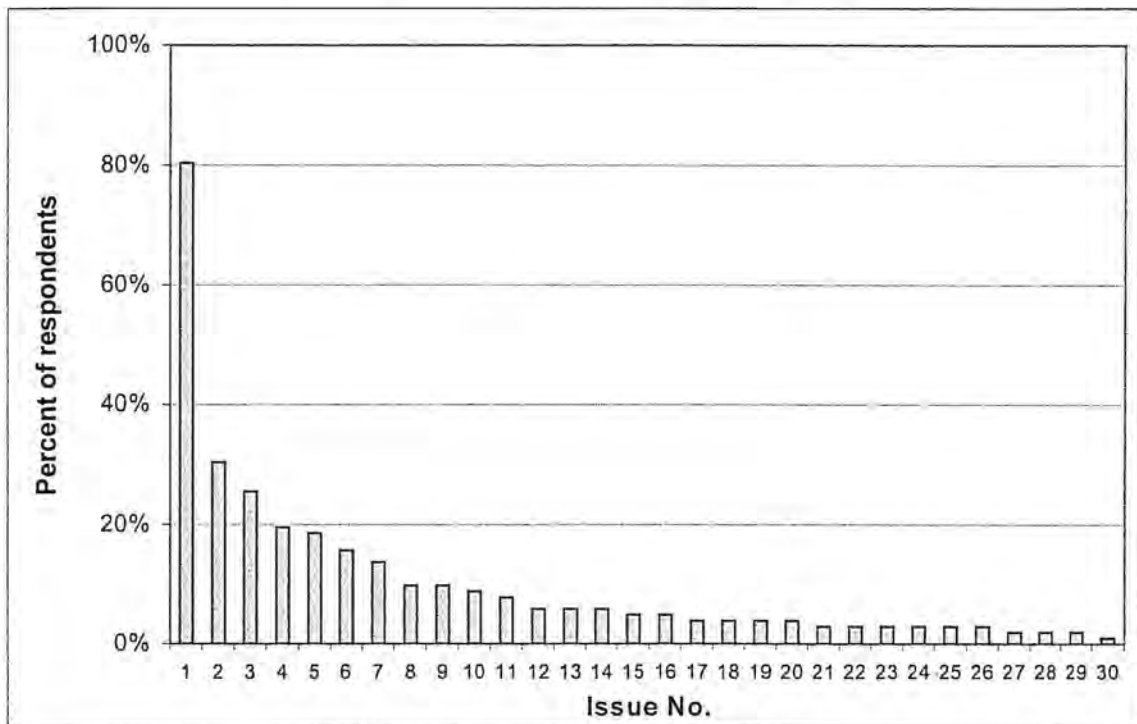


Fig. 6: The percentage of respondents citing each concern, numbered 1 to 30 (see Table 6 for corresponding concerns).

Table 6: The issues and concerns most frequently identified by respondents.

Code	Concern	No of people	User Group with concern
<i>Environmental impacts & degradation</i>			
1	Noticeable decline in the level of fish stocks	82	All sectors
17	Netting has a major negative impact	4	L1, R3, R5
21	Concern over heavy industry having access to waters if resources present	3	L1, R5, I1
12	New technologies are an issue as catches increase	6	L1, R1, R3, C1
27	Increasing populations of seals and whales eat diminishing fish stocks	2	L1, C1
28	Trawling in Geographe Bay unacceptable	2	L1, P
10	Concern about damage from boat moorings and other infrastructure	9	L1, R3, I1, C1, C3
22	Belief that seagrass beds in Geography Bay are in decline	3	L1, L4, I1
23	Concern over spearfishing reducing stocks	3	R1, R2, R3
<i>Planning Outcomes</i>			
18	Concern that there will be bans/restrictions on spearfishing	4	L1, R1, R2, C3
8	Issue that general marine education needs to be ongoing to achieve sustainability	10	L1, R1, R3, R5, I1, C3
15	Concern that recreational fishing restrictions will negatively impact on tourism	5	L1, R1, R3, I1
2	Concern that we get adequate no-take areas in place	31	L1, L2, R1, R2, R3, R5, I1, C1, C3
24	Concern that no-take areas will impinge on personal catches	3	L4, R1, R2
25	Concern that recreational catches/bag limits are currently too high	3	R1, R3
30	Concern that all MCR waters should be no-take	1	R3
11	Concern that fishing activities done for a long time should be stopped causing loss of enjoyment / income (pro's)	8	P, C1, C3
<i>Planning Process</i>			
9	Concern that Dept. of Fisheries are concurrently reviewing amateur bag limits blurring issues	10	L1, R1, R2, R3, R5, I1, C3
6	Concern over inadequate marine knowledge / insufficient research	16	L1, R1, R2, R3, R5, I1, C3
26	Concern perceived that Govt. Depts. could work more closely	3	L1, R3
19	Concern about the fairness of the selection process for the CAC	4	L1, I1, O1
7	Suspicious of political processes / involvement	14	L1, L2, R1, R2, R3, R5, I1, C1
13	Concern about lobby groups undue influence in the planning process	6	L1, R1, R2, R3, C1
<i>Resources and Policing</i>			
29	Concern that fees will be introduced to use the marine reserve	2	L1, R5
5	Concern that there will be inadequate enforcement of regulations	19	L1, R1, R2, R3, I1, C3
3	Concern that resource allocations will be unfair	26	L1, R1, R3, R5, I1, C1, C3
4	Concern about ongoing conflict between amateurs and professionals	20	L1, R1, R2, R3, I1, C1, C3
16	Concern that there will be inadequate resources to continually monitor the water quality of rivers and streams into the MCR	5	L1, R3, I1
14	Concern that amateur catches are not monitored (making it difficult to share a fishery resource)	6	L1, R2, R3, I1
20	Concern there will be too few resources for sustainable catches to be managed	4	R3, I1
Key: L1 – Local residents, L2 – Indigenous people, L3 – Vacation visitors, L4 – Adjacent landowners, R1 – Rec. boating, R2 – Rec. diving, R3 – Rec. fishing, R4 – Surface water sports, I1 – Conservation, C1 – Commercial fishing, C3 – Tourism, P - Press.			

By sector, local residents, recreational fishers, conservationists and recreational boaters cited the most concerns (Fig. 7). Indigenous people and commercial fishers, although important sectors, had fewer but perhaps more targeted concerns.

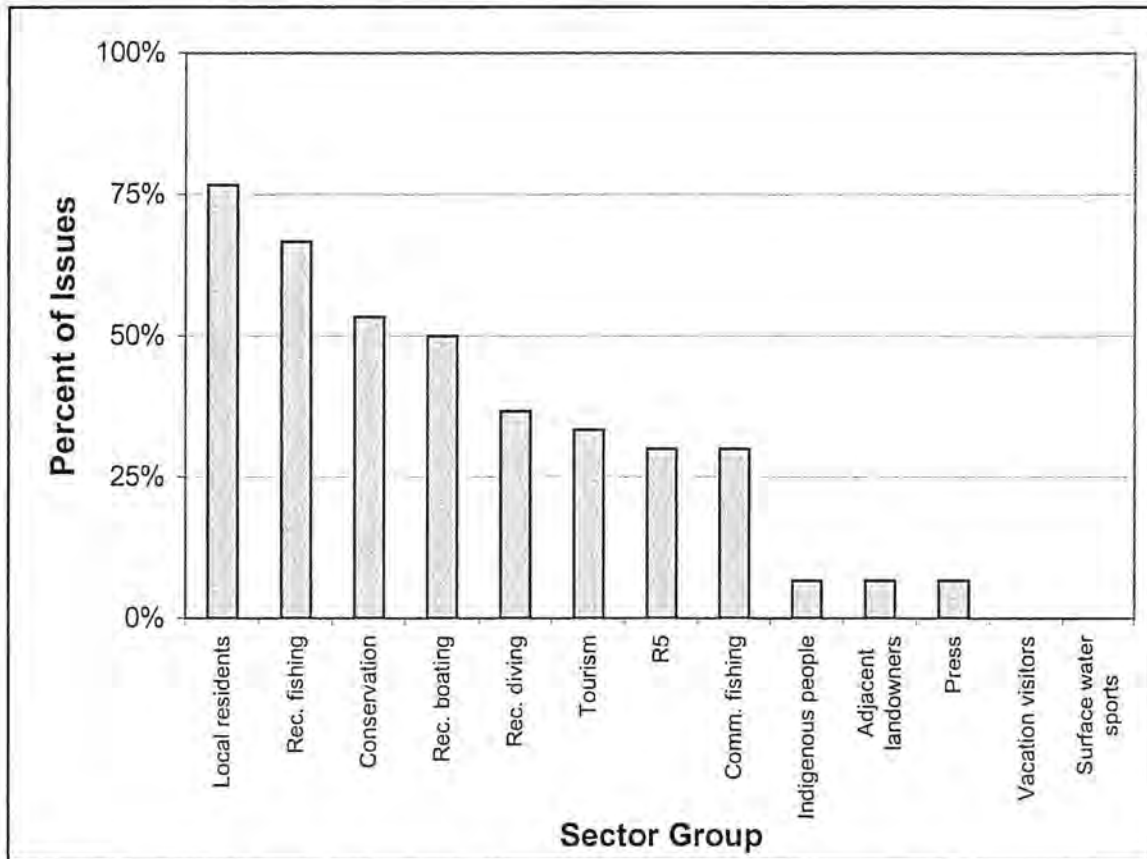


Fig. 7: Percentage of issues identified by each sector group. For sector codes, see table 6.

Concerns generally fell into four categories: (1) Environmental Impacts and Degradation (9 concerns identified on average by 12% of respondents); (2) Resources and Policing (7 concerns identified on average by 11% of respondents); (3) Planning Outcomes (8 concerns identified on average by 9% of respondents); and (4) the Planning Process (6 concerns identified on average by 8% of respondents) (table 6).

Environmental Impacts and Degradation

Concerns with respect to environmental impacts and degradation were most commonly cited in the interviews. Approximately 80% of respondents agreed with the proposition that fish stocks are declining. This broad question was often asked as an “ease into” general conversation as the answer is seemingly very obvious and unambiguous. The next most commonly stated concern (9% of respondents) was with respect to infrastructure extensions, for example moorings, marinas, jetties, etc. There were concerns that the new planning process would lead to more infrastructure. For instance, a recent increase in the number of commercial boats fishing for rock lobster has seen numerous extra permanent moorings placed at all protected bays of the west coast.

Respondents also expressed concerns over a variety of fishing related issues including the use of new technology to increase catch (6% of respondents). This concern was expressed mostly by recreational fishers with respect to the use of specialised equipment that locates fish schools and fishing grounds. Recreational fishers also identified specific fishing techniques of trawling and netting as damaging fish stocks because of the indiscriminate nature of the catch. However, these concerns were not always rooted in existing conditions; there has not been trawling in Geographe Bay for quite a few years but the issue still crops up.

Given the large concentration of people on the shores of Geographe Bay, this area raised specific environmental concerns. The hopes that the bay's seagrass beds would be maintained and monitored with the implementation of a process that addresses the need for facilities such as moorings, boat ramps and marinas was expressed.

Resource sharing between recreational and commercial fishermen

A major concern related to the ongoing conflict between commercial and recreational fishers and the allocation of resources between these groups. Approximately 25% of respondents expressed doubt that the resource allocation will be fair and 20% were worried by the seemingly ongoing conflict between the two major take groups. This is an area where CALM and the Department of Fisheries will need to work closely to ensure a positive outcome.

Resources and Policing

Having a sufficient number of officers to enforce any rules and regulations that could be created due to the proposed marine conservation reserve was questioned by 19% of respondents. They feel that the Department of Fisheries has too few enforcement officers and believe this end result will be the same. As adequate funding to manage the marine conservation reserve is subject to government allocation, there was concern that other government priorities will see resources for ongoing sustainable management remaining inadequate.

Planning Outcomes

Concerns over planning outcomes revolved around the need to ensure that (1) planning outcomes would contribute to the sustainable management of the area and (2) potential personal impacts were minimised. The need for "adequate no-take" areas accounted for 30% of the planning outcome responses, with recreational fishers most supportive of the need for adequate no-take areas. Varying numbers of respondents (1-8%) were concerned that planning outcomes would lead to income loss and restrictions on fishing grounds and gears. In particular, there was anxiety (particularly amongst commercial fishers) about past fishing practices (some for a very long time) being banned or substantially modified (8%). Commercial fishers had a concern that reduced access to fish stocks will result in a reduction of catch. Approximately 10% of respondents indicated a need for adequate education programs.

Planning Process

There appeared to be significant enthusiasm for the planning process in the local community with a limited number of concerns. Approximately 16% of respondents raised the concern that research funding and knowledge base of local marine systems is inadequate. This view seems to be linked to the large number of "migratory" species (eg salmon, herring, crabs) in the area which respondents felt were poorly understood.

Distrust of the planning process was also evident: 14% of respondents were suspicious of political involvement and political processes. This distrust was evident across most sectors but especially among the recreational fishers in the survey. Respondents were concerned that after long community consultation, politicians may override the planning process for 'political reasons'. The selection of membership of the community advisory committee was viewed by some with suspicion as there is the fear that lobby groups (sometimes small) can have undue influence on the process resulting in inequities in final outcomes.

Attitudes towards the planning process were being influenced by the Department of Fisheries review of amateur rules encompassing the Capes area (Recreational Fishing Management Strategy for the West Coast – Fisheries Management paper number 153). In particular, 10% of respondents were concerned about the relationships between the Department of Fisheries' review and the marine conservation reserve planning process.

3.6. RELATIONSHIPS AND ALLIANCES

Relationships within sectors and alliances between sectors were not readily referred to in discussions and statistics from the interview sheets are small.

Commercial fishing sectors tend to be relatively separate in the Capes area. The abalone fishers, lobster fishers, shell collectors and live fish collectors were all quite independent from each other although there were close relationships among some local fishers. There was also a loose working relationship between Bunbury, Dunsborough and Augusta professionals. Several fishers expressed a lack of support from the Western Australian Fishing Industry Council (WAFIC). They see WAFIC as being preoccupied with state-wide issues and less with issues at a local level affecting them directly.

Recreational fishers were not a single group. Recfishwest operates at a statewide level, there were several local fishing clubs and a couple of the Perth based clubs. There was also a large group of local 'independent' fishers.

The relationship between commercial and recreational fishers was characterised as poor (24% of respondents). A few indicated that an education program giving the facts on catch levels would be helpful in dismissing "flourishing" myths (for example: some claim that if we remove commercial fishers from crabbing, we will see the take by recreational fishers increase dramatically).

Water sports groups saw themselves as being minimally affected, seeing water quality as their most important concern. They seem to have little or no connection to commercial or recreational fishers. Tourism is a rapidly growing sector in the Capes area, and they tend to support recreational fishing rather than commercial fishing. Their logic is that if a tourist cannot catch a fish, they will go elsewhere.

There is likely to be a strong alliance among coastal community groups (eg Yallingup Resident Association / Gracetown Progress Association etc.) as they are concerned with similar issues. They have also all been tapping into Coastcare grants for local rehabilitation work and are structured similarly.

Several responses from indigenous people indicated their alliance is with those sectors promoting sustainable use. Many of the indigenous people like fishing and there was some indication they would favour restrictions on large catches for both commercial and recreational fishers. It was however been difficult to obtain widespread discussion and interest.

Relationships among government departments were perceived as important. Approximately 6% of respondents felt that co-operation between Government agencies working on marine management needs to be improved. This is a perception within the community that needs to be kept in mind during the public planning process. The perception will be fuelled if the CALM and the Department of Fisheries were seen to be not effectively communicating. Both local Shire Councils were supportive but were very keen to see the detail. They were pleased with the depth of community consultation.

4. SUMMARY

The high level of receptivity to the proposal for the Geographe Bay-Capes-Hardy Inlet marine conservation reserve and the relatively low level of concern among respondents were very encouraging. Education and communication resources will be best targeted at respondents with cautious views, focusing on knowledge gaps and the key concerns that have been highlighted. Specifically, it will be important to increase understanding of local values, integrated management and ensure that the process is transparent and understandable. Also key, will be information on the longer-term benefits of marine conservation reserves, the importance of research and monitoring to address knowledge gaps, and the role of adaptive management in improving management strategies as our knowledge base increases.

There was a certain level of cynicism, distrust and suspicion among the respondents with respect to the process of establishing a marine conservation reserve. Low levels of community ownership and previous negative experiences with Government public participation processes have left many

members of the community feeling powerless and cynical that decisions will be made by powerful sectors behind closed doors that are contrary to their viewpoint. To counter these sentiments and to ensure that individuals have an effective voice, the planning process needs to be open, with clear and active communication pathways between decision makers on the community advisory committee and community members at grass roots level. In addition, rationales for decisions need to be broadly distributed and explained. For instance, it would be good to make available a broad list of criteria used to select community advisory committee members and it will be critical to send detailed information to all unsuccessful candidates. Notwithstanding this, CALM needs to be clear that the ultimate decision making authority lies with Government Ministers based on advice from the Marine Parks and Reserves Authority and therefore there is capacity for amendments to be made to the proposal following the community consultation process.

Communication around fisheries issues will be particularly key to promote a positive interaction between commercial and recreational sectors. Similarly, a positive relationship between Department of Fisheries and CALM and an integrated approach to marine management will be important. The negative attitudes were deeply held by some respondents and may be difficult to influence.

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Appendix II: Issues analysis – notes for participating staff

Issue analysis: Notes for Participating Staff

Introduction

Public Participation is an interactive process by which interested and affected individuals, organisations, departments and government entities are consulted and involved in decision making. This process both informs and seeks a response from the public.

The overall goal of the public participation program (PPP) in the planning and management of Western Australian marine conservation reserves is:

To develop community ownership, stewardship, and understanding of marine conservation reserves.

The reserve planning process incorporates two phases for public involvement, and issue analyses are undertaken at the beginning of the first phase, either before, or just after the first meeting of a community advisory committee.

Stage 1 of public involvement takes place before the Notice of Intent, primarily through the advisory committee process.

Stage 2 of public involvement takes place after publication of the Notice of Intent primarily through written submission.



The objective of the issue analysis stage of the PPP is:

To develop a community profile on which to base the development of a communication strategy to encourage and facilitate community involvement in planning marine conservation reserves.

Issue analyses provide an opportunity to;

- gain an understanding of community attitudes towards, and levels of understanding of, the local marine reserve proposal,
- gain an understanding of alliances and conflicts within and among community groups,
- open channels of communication and develop rapport with key community members,
- provide information to key members of the community,
- identify appropriate liaison pathways to facilitate effective participation in the reserve planning process.

The following method will be adopted;

1. Gather data by contacting key community representatives from all relevant user and interest groups. Contact will consist primarily of face-to-face discussions.
2. Summarise the data to determine the attitudes and aspirations, levels of understanding, and community relationships for all relevant user and interest groups.
3. Define key messages and appropriate communication techniques together with a program of actions for each group in order to develop appropriate attitudes, minimum levels of understanding and to assist with development of a shared vision both within and among community groups.

The discussion data sheets are designed to record;

- attitude,
- levels of knowledge,
- the existence of conflicts and alliances, and
- commonly used methods of communication.

These forms should not be completed in the presence of a member of the public, but instead should be completed from memory as soon as possible after each discussion. Relevant notes taken during the discussion should be recorded in the note book provided.

Before members of the community can have effective input into the reserve planning process, they need to have a cooperative attitude and a minimum level of understanding. People who are strongly negative or hostile will not consider other points of view or accept new information. People who do not have a minimum level of understanding of the marine reserve concept and planning process will not be able to participate effectively in the planning process. The achievement of an appropriate attitude is therefore the first essential step towards the facilitation of effective input into the planning process.

Attitude

When recording attitude, an effort should be made to try and distinguish between attitude towards the marine reserve proposal, and attitude towards the interviewer.

If you consider that the person is displaying an attitude which is not provided in the choices on the forms (e.g. indifference) please record this adjacent to the boxes.

You may also like to ask a question about the attitudes of other members of the community group which the person represents, and note this on the form.

Hostility is not an uncommon response. Hostility however, is rarely meant personally. Although sometimes expressed passionately, hostility is usually directed either at the agency which you represent or is a result of a misunderstanding of the marine reserve concept. People in this frame of mind will usually not hear counter arguments if they are presented too quickly. They will instead filter out information which you provide and take on board only what supports their entrenched ideas. Staff will need to be both tolerant and patient in these circumstances and remember that one of the main reasons for undertaking a thorough PPP is to ensure that these opinions are brought into the open at an early stage of planning and dealt with well before a reserve is declared.

If hostility is based on a negative perception of the agency, the interviewer will need to work towards developing their own identity with the person, i.e. transferring the interaction to a more personal level

and developing a relationship. Relationships are built on **trust** and there is a need to be both **reliable** and **consistent** in dealings with the person in order to develop a relationship.

Hostility which is based on misinformation will also require manipulation of the situation. Again, it is only after the development of individual identity and personal trust, that the person will become receptive to new and accurate information. The development of relationships is therefore central to the PPP process and ongoing resources will be needed to undertake this task.

Initially, the emphasis will need to be on **listening**. Active listening will not only help to identify the source of the problem, it will also show the person that you are interested in him/her. It is a good idea to concentrate on common ground and experiences and build on these e.g. a love of the sea. Whatever the mood of the discussion, people should always be thanked for their time and if appropriate, for their frankness. The promise of further information and a follow up by mail is important in hostile cases because it reinforces your trustworthiness. Subsequent meetings, phone discussions etc will gradually build the necessary relationship.

Occasionally, people become embarrassed by their own behaviour and are reluctant to contact you in the future. You may need to be persistent.

Staff should try to identify genuine distress relating to a perception that livelihood or some other basic need is under threat. These cases may require urgent reassurance from senior staff.

Level of knowledge

Level of knowledge should be determined by asking open questions and levels should be recorded as a line along the sliding scale for each topic. A minimum level of understanding required for each topic is defined as having an understanding of the following;

Values of proposed area: At least three value attributes from the following list in relation to the proposed area;

- | | |
|----------------------|--------------------------|
| - commercial fishing | - scientific |
| - tourism | - educational |
| - recreation | - scenic / amenity |
| - wildlife | - conservation |
| - petroleum | - pearling & aquaculture |

Multiple-use & zoning: Western Australian marine reserves allow for many uses, both commercial and recreational.

Different activities are separated into geographically distinct areas.

The types of marine reserve and zoning options in Western Australian.

Representativeness & no-take: Diversity of ecosystem types around the State and the concept of samples of each being represented within a State wide reserve system.

Diversity of habitat types within the proposed reserve area and the concept of samples of each being represented within no-take zones.

Reasons for no-take areas and issues of zone scales for the different reasons.

Sustainability: Cumulative impacts of multiple use.

Integrated management: Many agencies have management jurisdiction in the marine environment. Marine reserves provide a management framework to coordinate the activities of all these agencies.

Planning process & public participation: Advisory committee has community based membership. Advisory committee substantially develops the indicative management plan. Public input into the initial stages of planning is primarily through Advisory committee members. After the publication of the draft management plan there is a statutory public submission period for written submissions direct to CALM.

It may not be appropriate to investigate the level of knowledge in all areas listed on the form in detail. However, we will need to know whether there is an adequate level of knowledge in the areas of multiple-use and zoning plus the planning process and participation as a minimum.

Having assessed the level of knowledge of the user/interest group which the contact person represents, information should be distributed to increase the level of knowledge and understanding of the contact person. It is often useful to arrange to forward additional information by mail because this reminds the person of your visit a few days later and also demonstrates that you do what you say you will do.

We need to know how best to communicate with each user/interest group. Information relating to methods of communication which are used by members of the user group will assist in later stages of the PPP process.

It is wise not to assume that all contacts can read and write. Some sensitivity may be necessary in these cases.

Questions / concerns / knowledge gaps + community conflicts and alliances

This information will become evident by asking open questions.

Conflicts within the community which relate directly to the marine reserve proposal need to be addressed during the planning process in an attempt to reach a resolution which is satisfactory to all parties. Any information which will assist in determining the most appropriate course of action to resolve conflict will be useful.

Rumours

These will come out naturally during the discussion. There is no need to address this issue directly through questioning.

Some possible questions:

What is Integrated Management?

Historically, human activities in marine and coastal environments have been managed by a number of separate agencies often in isolation from each other and with little involvement from the general community. Integrated management provides a framework for government and the community to consider the total impact of all human activities on each other and on the natural environment.

What is Sustainability?

Sustainability means ensuring that current human usage does not overload the environment and reduce the options for present and future generations.

Energy from sunlight, primary production limits productivity of ecosystem. Sustainability means maintaining impacts below a level which natural community can replace/repair.

Why is the planning process so involved?

The planning process provides for input from all interest groups, whether your interest is conservation, fishing, tourism, mining or as a member of an indigenous community. A commitment to community involvement in reserve planning ensures local knowledge is included and an appropriate zoning plan is developed. A sense of community ownership and overall support is essential for effective long-term marine reserve management.

Can I fish in marine reserves?

Recreational fishing is permitted in **Marine Management Areas** and in General Use zones, most Recreation and some Special Purpose zones of **Marine Parks**. Fishing is not permitted in **Marine Nature Reserves** or in Sanctuary zones of **Marine Parks**.

Why are marine parks zoned?

Zoning provides for conservation while allowing sustainable recreational and commercial activities. While a wide range of activities are permitted in multiple-use marine reserves, the zoning system minimises conflict by establishing some zones for extractive or intrusive activities and other zones for undisturbed nature study and passive enjoyment of the natural environment.

Why declare reserves when so much of our coast appears healthy?

While marine reserves have a role to play in repairing environmental damage, their primary objective is to conserve the environment in a healthy condition for all users both present and future. So what better time than now to establish marine reserves while our environment is in relatively good condition.

How do I get involved in marine reserve planning and management?

During the planning process, discuss your concerns with advisory committee members and make a written submission to CALM when the draft management plan has been released. Membership of the marine reserve management advisory committee, a local friends group or other volunteer association provides avenues for involvement in management after the reserve is declared.

Why is CALM doing this not Fisheries?

It is Government policy - refer to New Horizons. Fisheries will maintain responsibility for managing fishing within marine reserves. The reserves provide an integrated management framework for all agencies to work together and complement one another.

How can you call this a reserve when you can drill for oil in it?

All activities will be permitted within marine reserves provided they do not significantly impact on the environment and do not significantly impact on other users. Assessment of petroleum activities will be undertaken under the *Environmental Protection Act* through the environmental impact assessment process. All activities within a multiple use marine park will be reviewed in terms of the environmental impacts and potential for conflict with other users so that the cumulative impacts remain below the sustainable limit.

The concept of reserves in the marine environment is different to that on land because the marine environment is untenured and far more interconnected. Marine reserves embrace the concept of multiple-use and are equivalent to the integrated management of large tracts of land e.g. whole shires, for all of the purposes within that area. These might include agricultural use, town sites, national parks and mining.

What's the difference between no reserve, General Use Zones and Marine Management Areas?

Integrated management provides a management framework to maintain impacts below the sustainable limit for the environment rather than considering the sustainability of each use on an individual basis. Management agencies share a vision for marine reserve areas.

Marine management areas are usually large and there is similar emphasis on the three sectors of conservation, recreation and commercial activities. Marine Parks can be declared within the outer boundaries of Marine Management Areas - a nested approach.

What's the point of having reserves with tiny sanctuary zones?

It's true that the potential functions of no-take areas depend on the scale of the area. Small areas still provide scientific reference points. However, they are unlikely to provide any benefits in terms of stock refugia or replenishment.

The small marine reserves in the Metropolitan area are primarily to manage high levels of recreation. The sanctuary zones within these parks function primarily as scientific reference areas.

What do you need no-take areas for? We're used to bag limits and other restrictions that prevent overfishing?

While Western Australia has a good record of fisheries management, catch effort data is gathered on a different scale to that required to protect small areas of coast. Data areas translate into blocks of 100km x 100km or 10,000 square kms. Therefore there could be significant depletion in small high usage areas which would be undetected or indicate just slight decline.

There are also several areas where anecdotal evidence suggests that stocks are well below those experienced by fishers 20 or so years ago - refer to Marmion study and Ningaloo and South coast studies under way.

Management through monitoring is very expensive and it is more expensive if the pressure on the resource approaches the critical limit. i.e. intensity of research must be equivalent to the risk factor - refer to critical health situations for comparison. No-take areas provide insurance against lack of information or the collection of the wrong information - it's like having something in the bank, how many people live hand to mouth with no security in the bank? No-take areas are cheaper to manage and protect the whole habitat, not just the few species which are prized by fishers.

Where can I use my boat?

No activity will be affected by a marine reserve unless it damages the environment or unfairly impacts on other users. Boating is unlikely to be restricted other than for safety reasons or if pressure builds to an unsustainable level. The more users in an area, the greater the need for limiting impacts so that the cumulative impact does not exceed the sustainable level. All activities which cause significant impacts may be pressured by other users into adopting minimal impact practices. In the case of boating this may mean a review of mooring designs, antifouling procedures, waste disposal and refuelling techniques.

Is this likely to improve my business or are you going to stop people using the area?

There are many examples where tourist businesses have benefited by increased visitation to marine reserve areas. Business will also benefit from the assurance that integrated management will maintain usage at or below the sustainable limit. The vital resource of your business - i.e. the environment will therefore have greater assurance for the future.

If the limit of sustainable use is not to be exceeded, areas with high usage or large cumulative impacts will need to review the impacts of all activities. A review of your business to adopt best minimal impact practices will benefit all users.

It's all very well declaring parks, but there's never any money to manage them. What are you going to do about that?

There is a specific step in the statutory planning process which requires that advice be provided to cabinet regarding the costs associated with managing each marine reserve.

CALM cannot manage marine reserves alone. There is a need to consider the development of partnerships with local government and communities for funding day-to-day management. In the same way that parks and gardens are funded, the community will need to consider the costs of developing and the costs of not developing marine reserves.

This is just the thin end of the wedge, are you lot going to want to charge for moorings and ramp fees etc?

The Government has a user pays policy. If users make high demands on Government, these demands will need to be funded somehow.