

**MARINE MANAGEMENT SUPPORT:  
CENTRAL WEST COAST**

**MARMION MARINE PARK COMMUNITY  
AWARENESS  
SURVEY RESULTS:  
12 OCTOBER 2002**

**Data Report: MMS/CWC/MMP-71/2003**

**A collaborative project between Marine Conservation Branch and Swan Coastal District.**

**Prepared by  
Melissa Mazzella  
Marine Conservation Branch**

**January 2003**



**Marine Conservation Branch  
Department of Conservation and Land Management  
47 Henry St, Fremantle  
Western Australia, 6160**





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## ACKNOWLEDGEMENTS

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**SUMMARY**

A baseline survey was conducted on 12 October 2002 to gauge public awareness of the Marmion Marine Park and generally of Western Australia's marine conservation program and associated management framework (including the role of the Department and MPRA).

Interpretive signage was installed along the dual use pathway to promote important conservation messages relating to Marmion Marine Park. The baseline survey provides pre-signage data and a follow-up survey (using the same questionnaire) will be conducted during autumn 2003 to gauge any change in the community's awareness as a result of the signs. This will thereby provide a measure of the effectiveness of such signage in this area in informing the community of the existence and purpose of the Marmion Marine Park and on the State's marine conservation program and associated management framework.

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## 1. INTRODUCTION

The Marine Conservation Branch (MCB) aims to build a constituency for marine conservation in Western Australia as a part of a broader public awareness program of marine protected areas and marine conservation in general. The design and installation of coastal interpretive signage for Marmion Marine Park is one project that stems from this public awareness program. A total of 30 signs have been installed along the recently upgraded dual-use pathway that runs adjacent to Marmion Marine Park. Sign locations are indicated in Appendix 1.

Because more than two million recreational users frequent Marmion Marine Park annually, it is an ideal location to improve the community's awareness of marine conservation in WA and to assess the effectiveness of related public awareness initiatives. The proposed signage aims to inform the community of the management role of the Department of Conservation and Land Management (the Department), the Marine Parks and Reserves Authority (MPRA) and the ecological and social values of Marmion Marine Park. The signs have a series of themes including: *'something for everyone'*, which is information about different user groups in the area; *'protecting places to live'*, containing environmental information about flora, fauna and ecology; and *'making a difference'*, highlighting things individuals can do to help conserve the environment. The Department has financed the development and installation of these signs.

This baseline survey (12 October 2002), together with a future survey planned for Autumn 2003, will help to gauge the effectiveness of new interpretive and educational signage recently installed. The results of these surveys serve a dual purpose. They will not only gauge the success of the signage, but will also contribute to the human usage information requirements of the review for the Marmion Marine Park Management Plan (Department of Conservation and Land Management, 1992).

## 2. OBJECTIVES

The objectives of this survey were to:

1. Assess the community's current awareness of:
  - WA marine conservation reserves;
  - The Department of Conservation and Land Management; and
  - The Marine Parks and Reserves Authority.
2. Obtain baseline data to compare awareness after the signage is installed.
3. Obtain demographics of the population sample.

## 3. MATERIALS AND METHOD

### 3.1 QUESTIONNAIRE

The survey consisted of eight questions (Appendix 2) designed to gauge:

- public awareness of marine conservation reserves in Western Australia;
- awareness of the Department's role in managing marine parks;
- awareness of the role of the MPRA;
- the demographic of participants; and
- the nature of activities conducted in or adjacent to the marine park.

### **3.2 SURVEY TEAM**

The survey team consisted of a volunteer, two members of staff from the MCB and one member of staff from the Swan Coastal District. All interviewers carried identification such as a name badge containing a Department of Conservation and Land Management logo, a Departmental hat and/or Departmental clothing.

Interviewers were divided into two teams consisting of one male and one female, with one team starting from the southern boundary of Trigg Island working north and the other starting from the northern boundary of Burns Rocks working south. Points were randomly selected along the coast to interview people. These locations included areas around Trigg Island, Bennion Beach, Mettams Pool, North Beach, Hillarys Beach, Mullaloo Beach, Shenton Avenue, Ocean Reef and Burns Beach. Survey participants were approached individually by interviewers along and adjacent to the boundaries of Marmion Marine Park between approximately 10:00am - 2:30pm on Saturday 12 October, 2002.

### **3.3 SURVEY METHOD**

Questions one and two were put directly to participants with no direction from interviewers. For question three, four possible answers were provided by reading them out to participants. In relation to questions four and five, the survey data constituted a recording of whether the participants either answered the respective question correctly or incorrectly. Questions six to eight also provided multiple choice answers.

## **4. RESULTS**

A total of 173 people were interviewed for the survey, as summarised in Table 1.

### **4.1 QUESTION 1: CAN YOU NAME A MARINE PARK IN WESTERN AUSTRALIA?**

Approximately 49% of those surveyed could name Marmion Marine Park or Ningaloo Marine Park but only 10% were able to correctly identify either Rowley Shoals, Shark Bay, Swan Estuary and/or Shoalwater Island marine parks.

### **4.2 QUESTION 2 (B): IF THEY NAME MARMION THEN ASK: WHERE DOES MARMION MARINE PARK EXTEND TO?**

Only 13% of those surveyed could correctly state the extent of Marmion Marine Park.

Table 1: Marmion Marine Park public awareness survey 12/10/02 - Summary results

Question 1: Can you name a marine park in WA?						
	Ningaloo	Rowley Shoals	Shark Bay	Swan Estuary	Shoalwater Is	Marmion
%	49	1	5	1	3	49

Question 2 (b): If they named Marmion then - Where does Marmion Marine Park Extend to?		
	Correct	Not correct
%	13	87

Question 3: Who manages marine parks in WA?					
	Fisheries	CALM	DEP	EPA	Not recorded
%	23	46	8	5	23

Question 4: What does EPA mean?		
	Correct	Not correct
%	45	55

Question 5: What does MPRA mean?		
	Correct	Not correct
%	3	97

Question 6: How often do you visit the area?							
	First	Daily	Weekly	Monthly	Yearly	Other	Not recorded
%	6	29	39	12	3	7	4

Question 7: What activities do you do here?										
	Swim	Sightsee	Picnic	Fish	Snorkel	Dive	Run	Walk	Surf	Other
%	43	9	18	14	17	4	10	50	25	26

Question 8 (a): Are you female or male?			
	Female	Male	Not recorded
%	33	60	7

Question 8 (b): To which age group do you belong to?						
	<15	15-24	25-30	31-39	40-59	60 +
%	5	14	14	20	34	11

Question 8 (c): From where are you visiting?					
	local	Perth metro	WA country	Interstate	Overseas
%	66	22	5	5	2

#### 4.3 QUESTION 3: WHO MANAGES MARINE PARKS IN WA?

Five percent of participants thought that more than one of the four Government departments (i.e. Department of Fisheries, Department of Conservation and Land Management, Department of Environmental Protection and the Environmental Protection Authority) were responsible for the management of marine parks in Western Australia. In contrast, 23% could not or did not associate the four departments as management agencies of marine parks. Fifty-four percent did not identify the Department of Conservation and Land Management as the State's management agency of marine parks in WA.

**4.4 QUESTION 4: WHAT DOES THE EPA MEAN?, AND QUESTION 5: WHAT DOES THE MPRA MEAN?**

Forty-five percent were able to expand on the EPA (Environmental Protection Authority) acronym, whereas only 3% do so for the MPRA (Marine Parks and Reserves Authority).

**4.5 QUESTION 6: HOW OFTEN DO YOU VISIT THIS AREA?, QUESTION 7: WHAT ACTIVITIES DO YOU DO HERE?, QUESTION 8 (A) : ARE YOU FEMALE OR MALE?, (B) TO WHICH AGE GROUP DO YOU BELONG? AND (C) : FROM WHERE ARE YOU VISITING?**

Sixty percent of respondents were male. Thirty-one percent were aged 40-59 years. Thirty-nine percent said they visited the area weekly and 29% said they visited the area daily. Sixty-six percent of participants said they lived locally, 22% within the metropolitan area, 5% in country WA and interstate and 2% overseas. Fifty percent said they visited the area to walk and 43% said they visited the area to swim in the marine park. Figure 1 represents how often the people that were surveyed frequent Marmion Marine Park relative to where they live. It displays the trend that the closer a person lives to Marmion Marine Park the more likely they are to visit it.

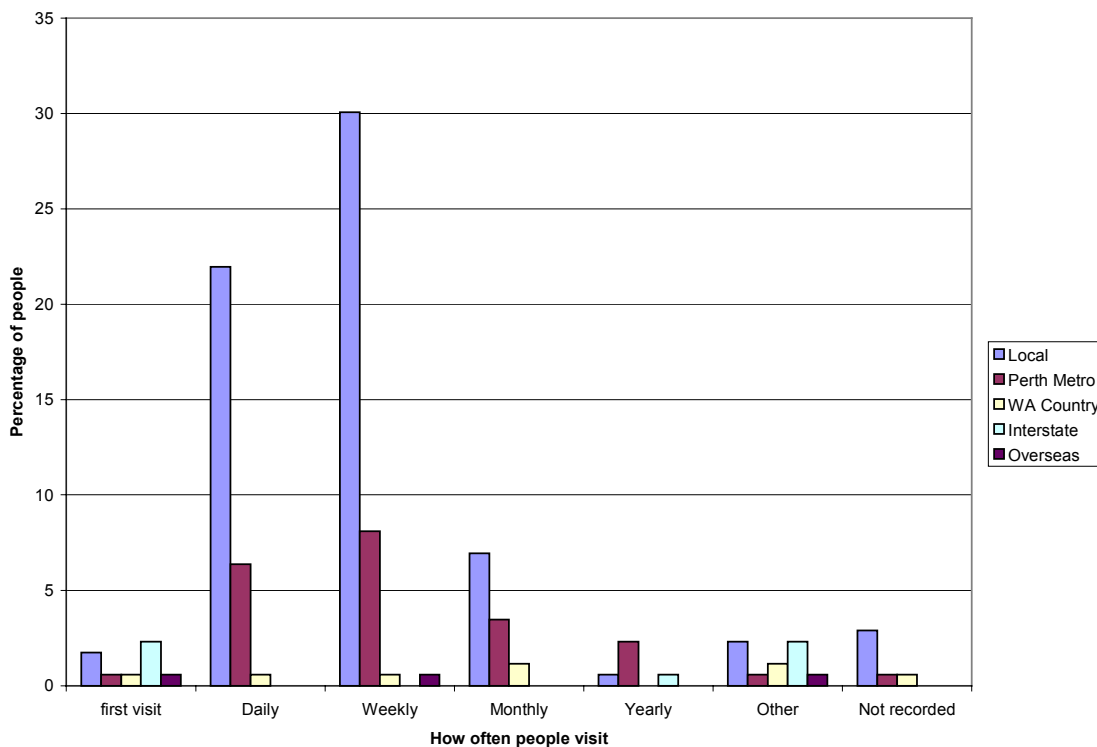


Figure 1: How often people frequent Marmion Marine Park relative to where they live.

**4.6 RAW DATA**

The raw data that was collected in this survey is presented in Appendix 3.

## 5. DISCUSSION

### 5.1 QUESTIONS 1 AND 2

From the data collected, it can be inferred that community awareness of Marmion Marine Park in general and in particular of its extent could be improved upon. Whilst the results of community members able to name Marmion or Ningaloo marine parks was encouraging, only a few were able to name the other marine parks. The proportion of people able to name Ningaloo Marine Park may be related to the recent publicity with the Save Ningaloo campaign (<http://www.save-ningaloo.org>) which has raised its awareness.

Although not the subject of a specific question, it was apparent that there was some confusion with what is a marine park. A number of participants referred to Watermans Observation Area (WOA) as a marine park when responding to questions one and two, which was most likely due to the WOA's associated prominent signage. This may reflect the general effectiveness of signs in raising awareness and that coastal users are at least realising that the area does have important marine conservation values. Some of the participants replied that AQWA (Aquarium of Western Australia at Hillarys Boat Harbour) was a marine park. This result is most likely due to the considerable amount of advertising that AQWA does, resulting with people associating the marine content and a theme park/zoo-like atmosphere as a 'marine park'. This highlights the need for instilling awareness of what a 'marine park' in the natural environment is. It is also noteworthy that some people responded that Hillary's, Ocean Reef and Rottnest were marine parks. Whilst only 49% of people could name Marmion Marine Park, it was notable that many others (number not recorded) identified the fact that there was a marine park somewhere around the area that was surveyed.

### 5.2 QUESTION 3

The response to question three (where 46% answered correctly) may have been influenced by the obvious Departmental logo on hats, clothing or badges of those conducting the survey. It is not possible to ascertain the level of influence this had on participant's responses. This possible bias needs to be taken into account for the post sign installation survey. It is necessary to keep this variable the same in that survey. A high percentage (59%) did not associate the Department as being responsible for management of marine parks including the 23% that answered the Department of Fisheries. This indicates that more effort should be placed on creating awareness of the Department's role in marine conservation.

### 5.3 QUESTION 4 AND 5

From the responses to question four, it was notable that participants were able to at least state Environmental Protection correctly but many incorrectly thought the 'A' stood for Agency, rather than Authority. This may have been due to fact that the word 'Agency' was used in question three. This variable should also be kept consistent in future surveys. It was obvious that many participants were trying to guess the answers to questions four and five as many were not sure of the correct answer. The differences between the results obtained for question four and five can be attributed to:

1. the high profile EPA has;
2. the EPA acronym is used over the world, with the first two initials in most cases standing for Environmental Protection;
3. MPRA low public profile;
4. there is possibly no other well-known marine acronym with the same initials; and
5. the EPA has been in operation much longer than the MPRA.

#### **5.4 QUESTION 6**

It appears that people who do visit Marmion Marine Park do so with some regularity, with the majority (68%) of people visiting on a weekly or daily basis. This regular visitation provides a platform to access the public in the way of interpretive and educational signage, as these signs are likely to be sighted by the majority of coast users more than once in a relatively short time frame. This also provides for the fact that by the time the next survey is conducted, participants will have had a chance to see the signs.

#### **5.5 QUESTION 7**

The survey identified that whilst at the coast, coastal users participate in a number of activities. People visit the coast for its ability to provide for these recreational activities. The attractiveness of all activities, including swimming, surfing, snorkeling, diving, sightseeing, picnicking etc., rely to a large extent on the maintenance of current environmental conditions of the Marmion Marine Park. The marine park signs that have been installed designed to improve people's awareness of the environment and hopefully provide the impetus use the park's values in a sustainable manner.

#### **5.6 QUESTION 8 (A)**

According to the 2001 national census, the male:female ratio within Western Australia is about 49%:51% (Australian Bureau of Statistics 2001). The survey indicates there were substantially more male than female coastal users (60%:33%). It is unclear why the difference was so great, however, the time of day or day of the week, may have in some way influenced the result. However, it does indicate that at the time of the survey more males were utilising Marmion Marine Park than females.

#### **5.7 QUESTIONS 8 (B)**

The age distribution within the population sample is similar to that of the population as a whole. The exception being the under 15 age group was lower than is representative of Perth's population as in the 2001 Census (Australian Bureau of Statistics 2001). This may be attributed to the selection of participants, being limited to those old enough in the under 15 age group able to understand the survey questions. The majority of the population sample were in the 31-39 age group (20%) and the 40-59 age group (43%). This shows that at the time surveyed, there was on average an older population of coast users present, which is representative of Perth's and Australia's aging population (Australian Bureau of Statistics 2001).

#### **5.8 QUESTION 8 (C)**

The survey showed, as to be expected, that the majority of those surveyed lived locally. It stands to reason that people are more likely to visit places they live closely to and this is reflected in the survey results. Locals were found to be more likely to visit daily or weekly than a person living elsewhere.

## **5.9 IMPROVEMENTS AND RECOMMENDATIONS**

To improve the accuracy of the data obtained and hence the results of the survey, responses to all questions needs to be obtained from all survey participants. In this survey, for example, a number of questionnaires did not have recorded answers to question eight, which is possibly due to participants not giving a response to the question. Although question eight was not the main focus of the survey, it is sill important to obtain data on all questions from survey participants.

Appendix 1 indicates that there are areas along the coast which will not have any new signage installed and as a consequence, some of the population sample will not be exposed to the interpretation and educational signage. Nonetheless, the next survey design should replicate this survey for the best statistical comparison.

It is recommended for future surveys that there is a general comment section relating to marine conservation in Western Australia at the end of the survey. Questions in this section could include topics such as ideas on how to improve public awareness of marine conservation; what are some ways they consider to be the best to promote it, and; what would encourage the community to become more involved in marine conservation. These responses would come directly from the target audience, and will give an indication on ways to increase public awareness.

It is evident that a greater emphasis should be placed on educating the community to improve awareness, thus creating understanding from which interest is gained. This lead to users of the Marmion Marine Park having a better understanding of the need to care for the values of the marine park and in so doing, may lead to more sustainable usage. Overall, it was a poor result from a mainly local population sample as most participants were unaware of the Marmion Marine Park, the marine role of CALM and identifying the MPRA. It is hoped that through the new interpretive signage, knowledge and awareness of Marmion Marine Park, the Department and the MPRA will be transferable to those that walk past.

The next survey will complement the first, by assessing (i) the influence of new signage to be installed, (ii) knowledge and awareness of coastal users along Marmion Marine Park and (iii) to determine if community awareness can be effectively improved using this method.



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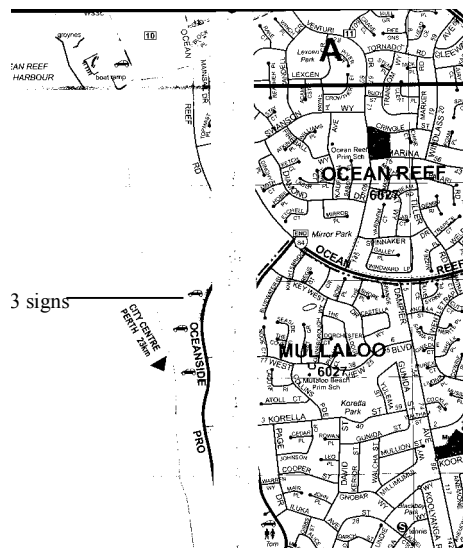
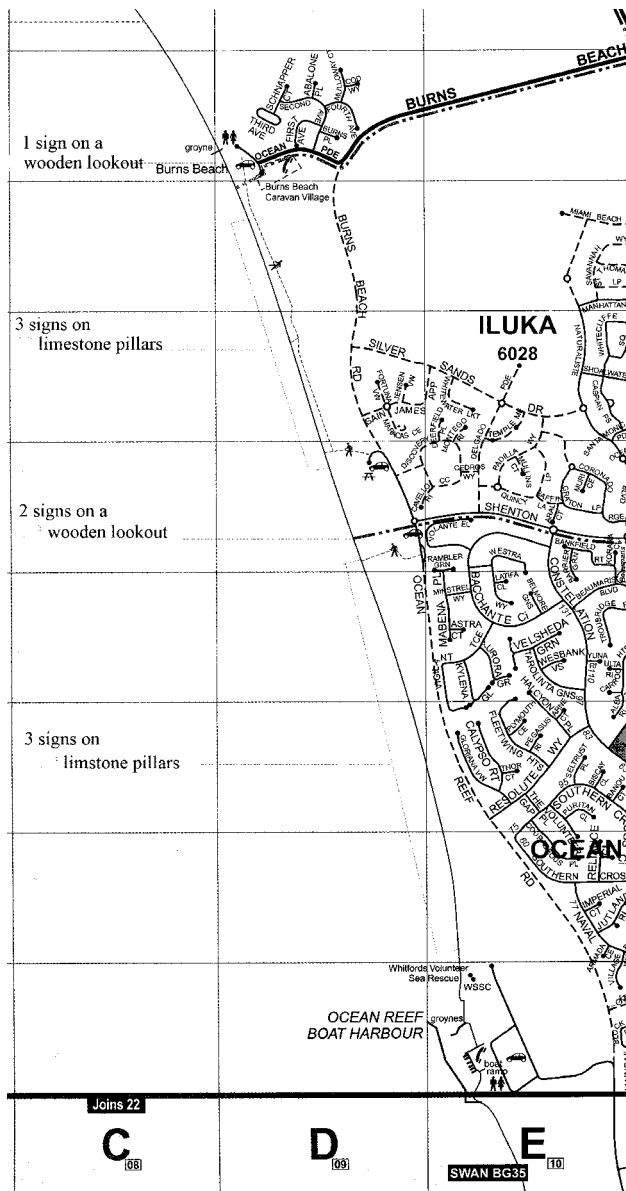
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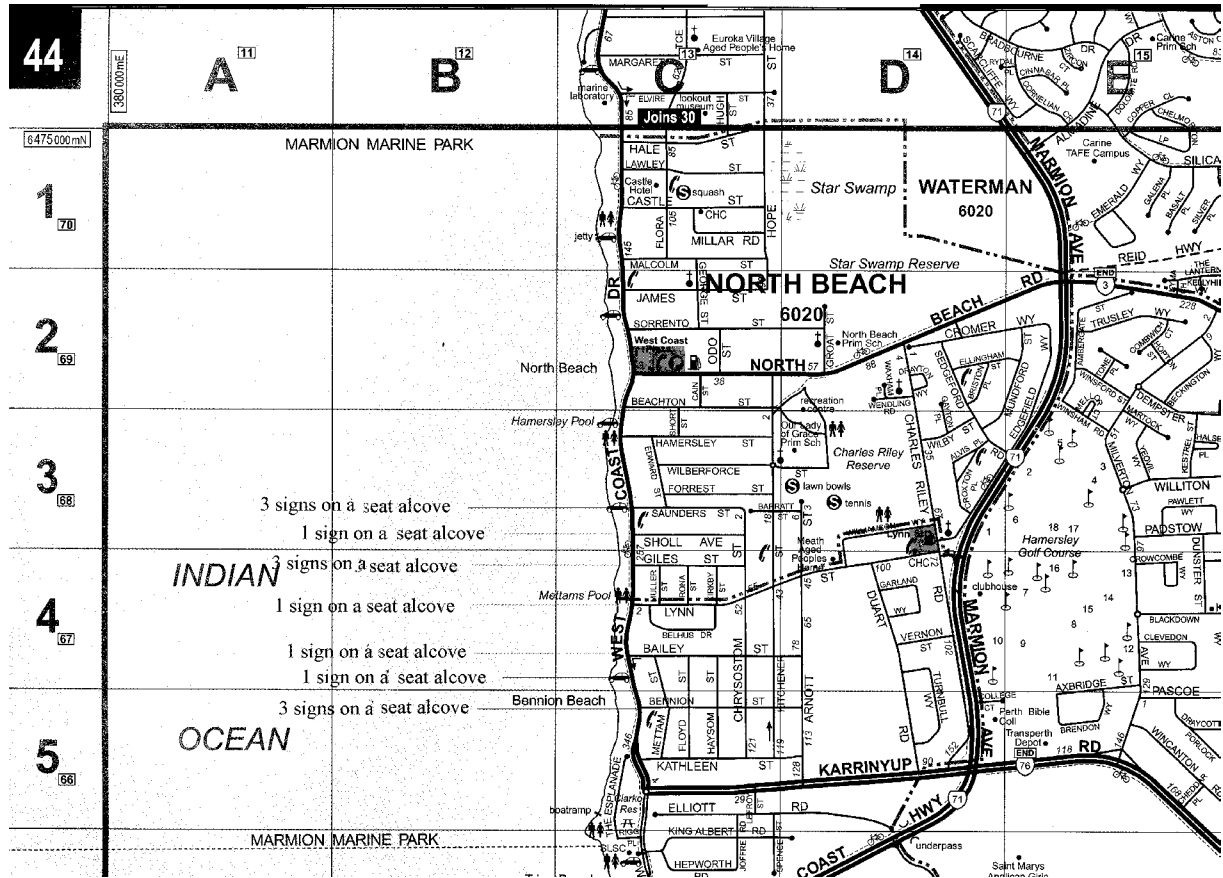
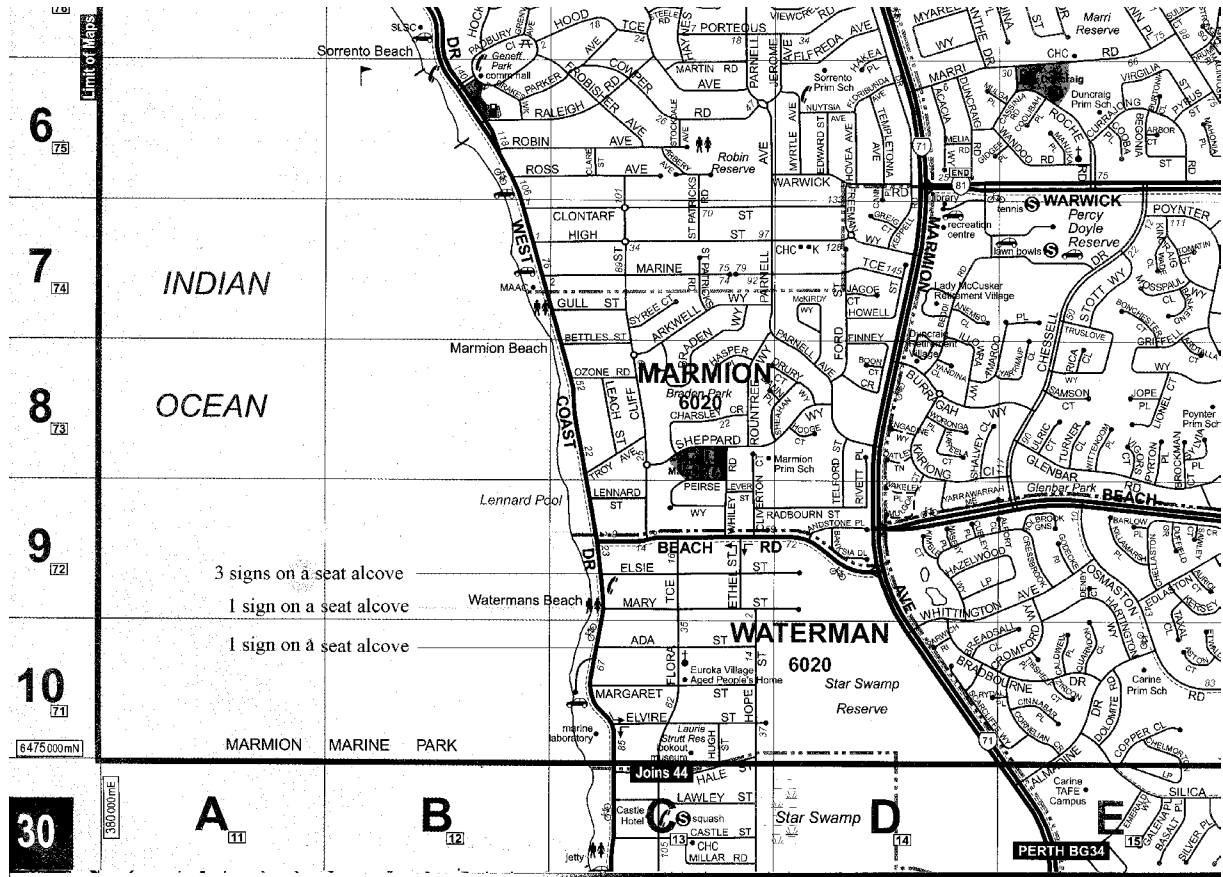
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**APPENDICES**

**APPENDIX 1. SIGN LOCATIONS**





**Appendix 2.**

**Marmion Marine Park public awareness survey**

**1. Can you name a marine park in Western Australia?**

Ningaloo	_____	Swan Estuary	_____
Rowley Shoals	_____	Shoalwater	_____
Shark Bay	_____	Marmion	_____

**2. a) Can you name a marine park in the Metro area?**

Swan Estuary \_\_\_\_\_  
 Shoal Water \_\_\_\_\_  
 Marmion \_\_\_\_\_

**b) If they name Marmion then ask: Where does Marmion Marine Park extend to?**

\_\_\_\_\_

**3. Who manages marine parks in WA?**

a) Department of Fisheries \_\_\_\_\_  
 b) Department of Conservation and Land Management \_\_\_\_\_  
 c) Department of Environmental Protection \_\_\_\_\_  
 d) Environmental Protection Agency \_\_\_\_\_

**4. What does the EPA mean?**

\_\_\_\_\_

**5. What does the MPRA mean?**

\_\_\_\_\_

**6. How often do you visit this area?**

First visit	Monthly
Daily	Yearly
Weekly	Other _____

**7. What activities do you do here?**

Swim	Dive
Sightsee	Run
Picnic	Walk
Fish	Surf
Snorkel	Other _____

**8. a) Are you? Female / Male**

**b) To which age group do you belong?**

Under 15	31-39
15-24	40-59
25-30	60 & over

**c) From where are you visiting?**

- Live locally
- WA Perth Metro region
- WA Country
- Interstate (which state?) \_\_\_\_\_
- Overseas (which country?) \_\_\_\_\_

















