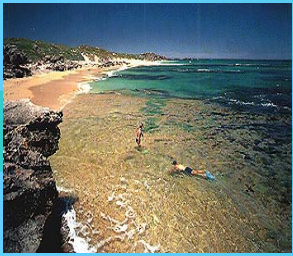


# Visitor usage trends in Shoalwater Islands Marine Park 1994 - 2003



Presented by: Sonya Brunt      Supervisor: Dr Sue Moore  
Assistance from: Kylie Ryan - A/Marine Conservation Officer CALM  
School of Environmental Science - Murdoch University and  
CALM Recreation and Tourism Research Reference Group



# **Overview of presentation**

**Research Objectives**

**Study Site**

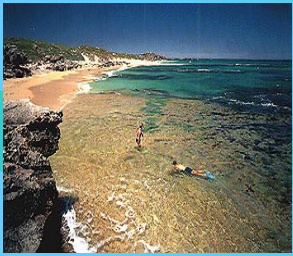
**Methodology**

**Results**

**Discussion**

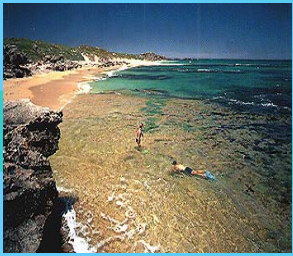
**Conclusion and**

**Recommendations**



# Research Question

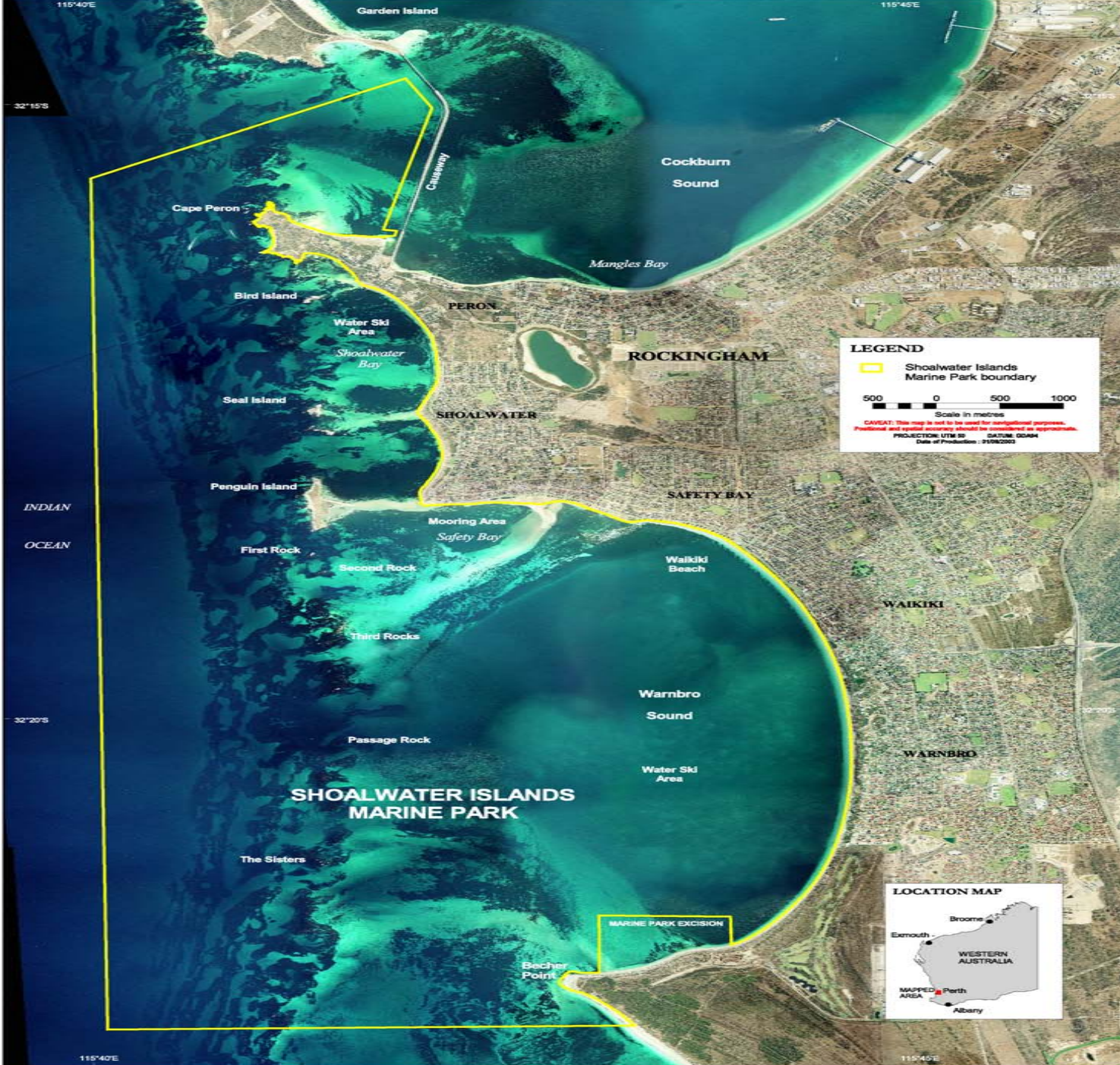
**What are the trends in visitor numbers, locations and activities in Shoalwater Islands Marine Park (SIMP)?**

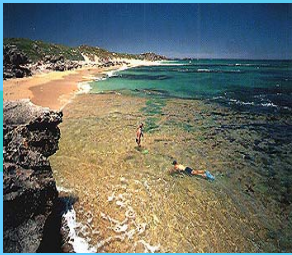


# Study Area

- SIMP is located approximately 50 km South of Perth in Western Australia
- 10 km of coastline from Garden Island causeway to Becher Point
- Between 1 and 6 km seaward
- Gazetted a Marine Park on May 25 1990
- Managed by Department of Conservation and Land Management (CALM)
- Draft management plan released in 1995 – not yet finalized





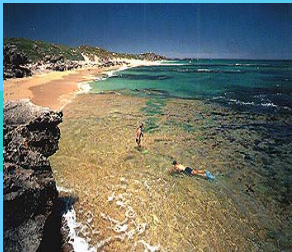


# Methods

## 1. Primary data

### ➤ Aerial survey

- undertaken on Saturday morning, Easter Weekend 2003
- One hour – 2 passengers and pilot
- Used GPS coordinates to distinguish sectors
- One person filmed using a video camera; second person counted activities
- Plotted results in Arcview



# Methods

Activities divided into:

## People-based activities

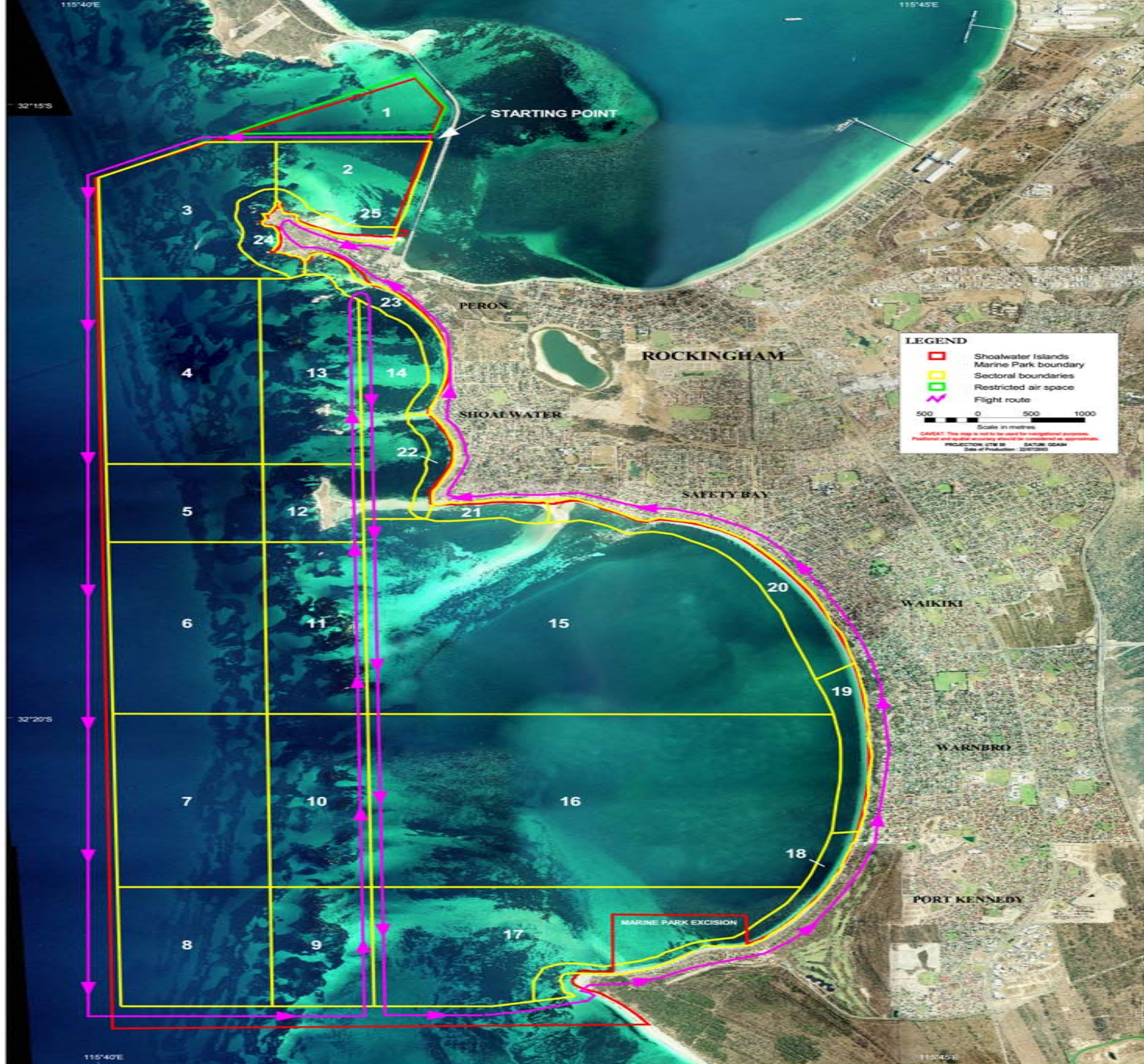
- people (on beach)
- swimmers
- fishermen (on beach)
- snorkelers
- scuba divers
- surfers

(and body boarders)

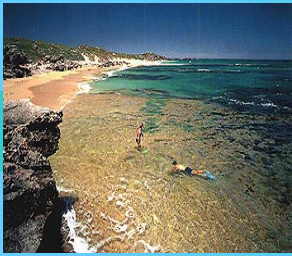
## Craft-based activities

- vessels (motorised)
- personal watercraft  
(jet skis)
- sail craft (yachts)
- kayakers
- wind surfers /  
kite surfers





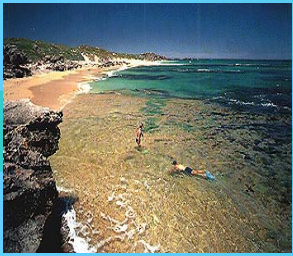




# Methods

## 2. Secondary data

- SIMP boat patrol data 1994 – 2002
  - analysed activities at 7 SIMP locations
- CALM VISTAT data
- CALM commercial tour operator data
- A City of Rockingham beach user survey 2001
- Penguin Experience Island Discovery Centre sales records 1995 – 2003
- Results of 4 Penguin Island visitor surveys
- City of Rockingham population statistics



# Results

## ➤ Aerial Survey

103 people observed

people (on beach) 75%

swimmers 19%

snorkeling 3%

fishermen (on beach)  
2%

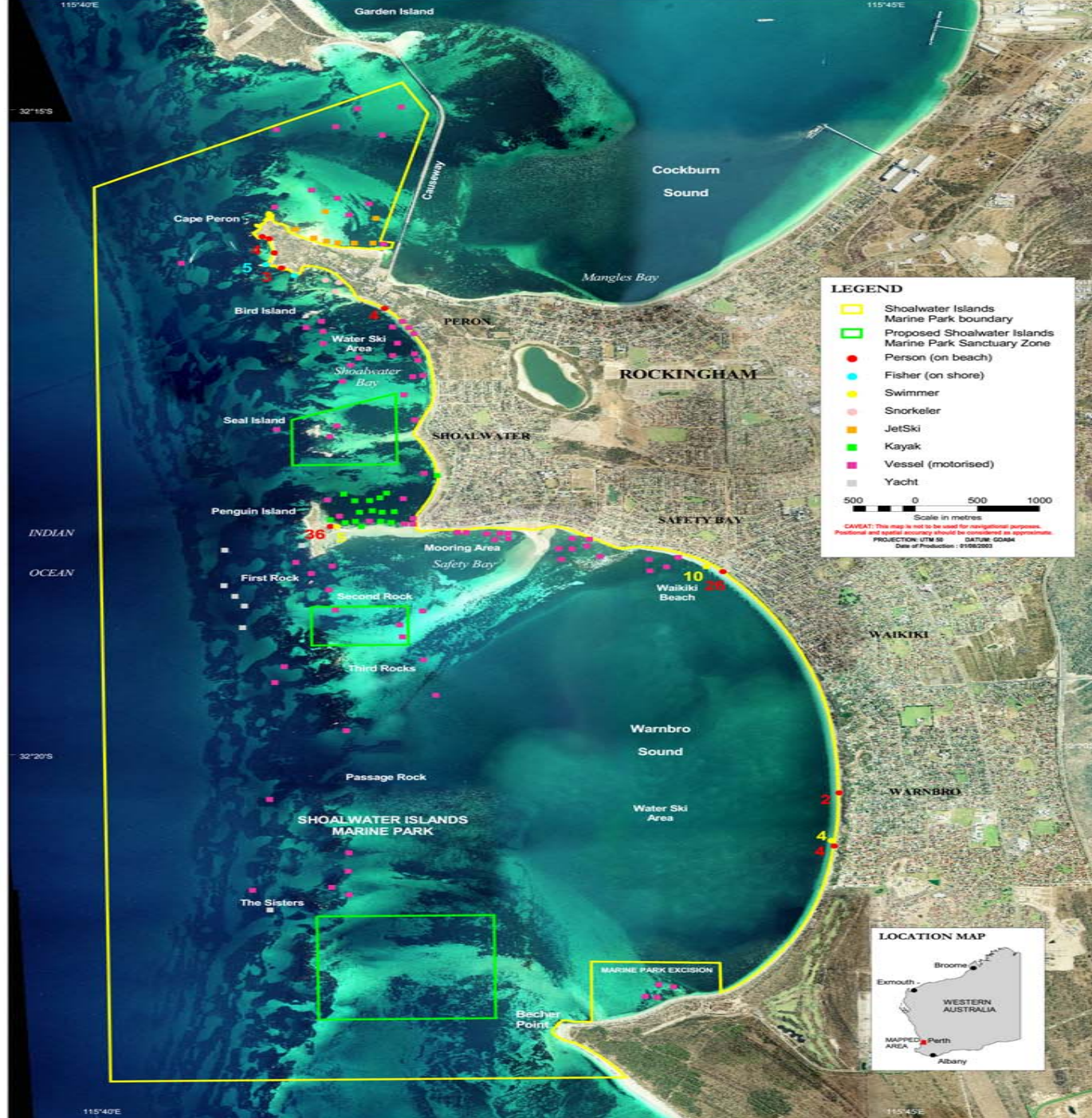
101 craft observed

vessels (motorised) 73%

kayaks 15%

yachts 6%

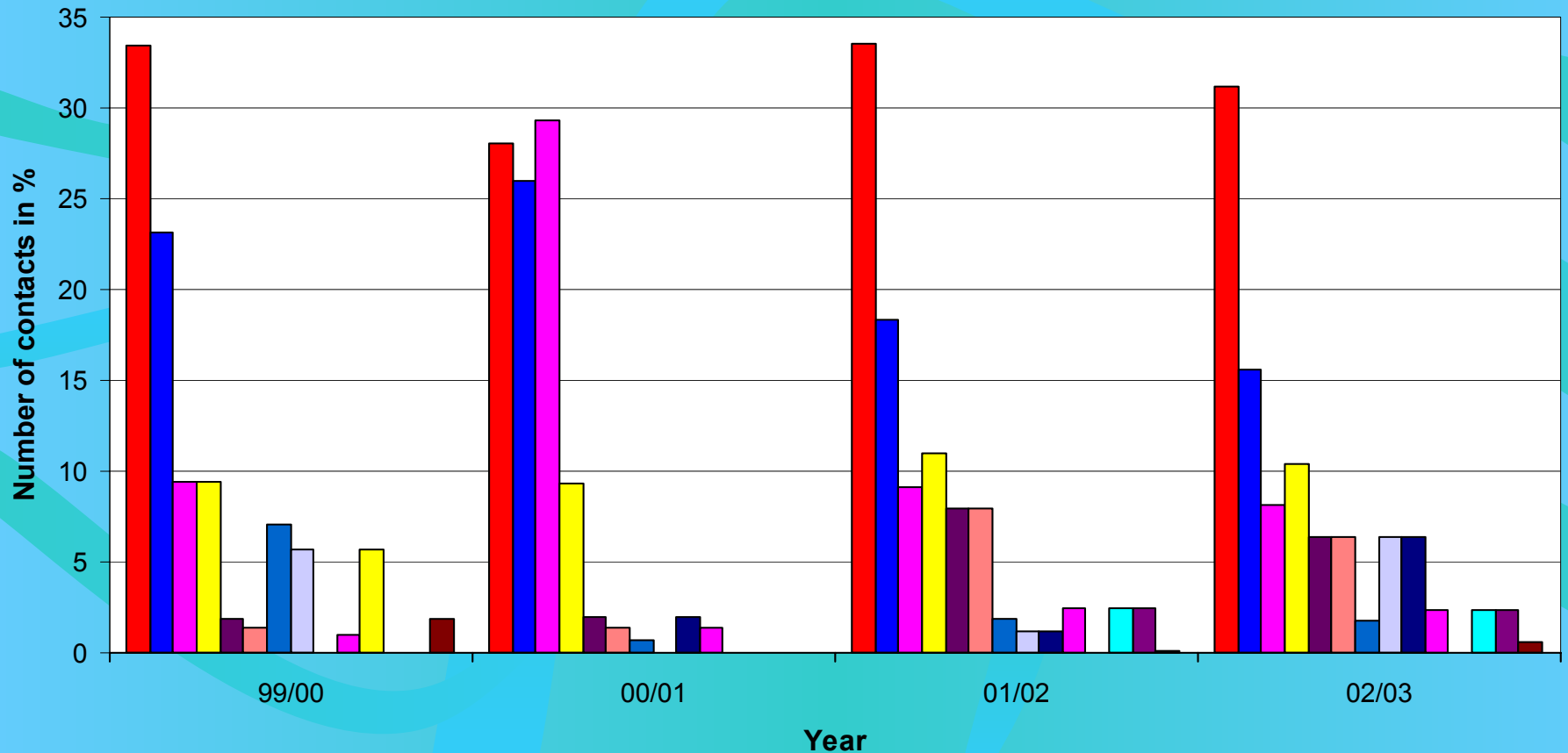
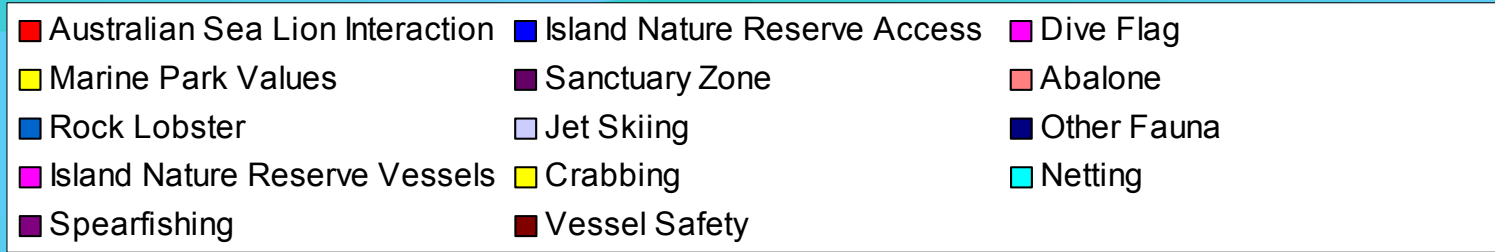
jet skis 5%



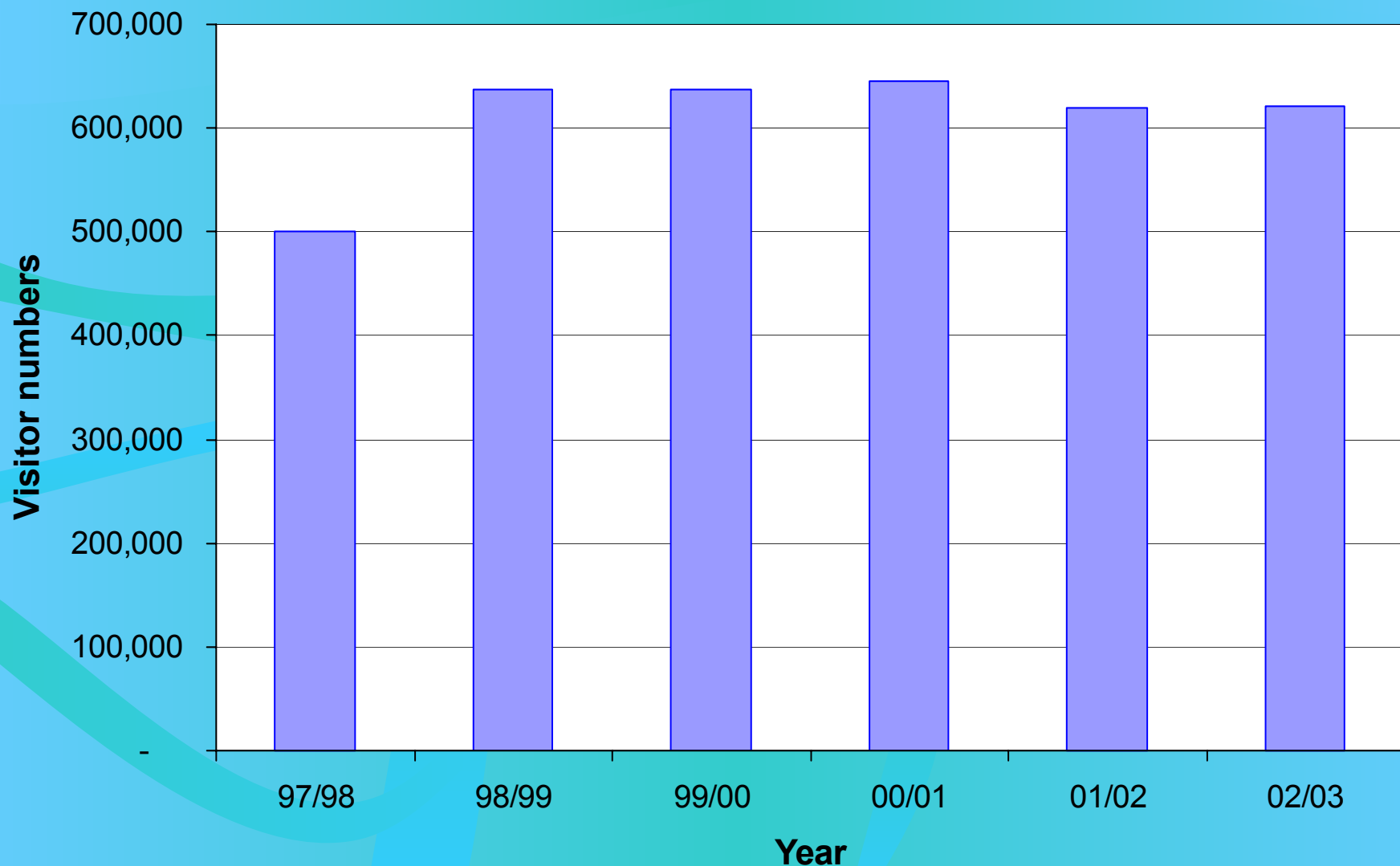


| Boat Patrol Data<br>1994 - 2002 | Becher<br>Point | Tern<br>Island | Penguin<br>Island | Sisters | Point<br>Peron | Bird<br>Island | Seal<br>Island |
|---------------------------------|-----------------|----------------|-------------------|---------|----------------|----------------|----------------|
| People (on beach)               | →               | ↓              | ↑                 | None    | ↑              | None           | ↑              |
| Swimmers                        | ↓               | →              | ↑                 | None    | →              | →              | →              |
| Snorkelers                      | ↑               | ↓              | ↑                 | →       | ↑              | →              | ↓              |
| Scuba divers                    | None            | →              | ↑                 | →       | ↓              | →              | →              |
| Fishermen                       | ↑               | ↑              | ↑                 | →       | →              | →              | →              |
| Spear fishers                   | →               | →              | →                 | →       | →              | →              | None           |
| Vessels                         | ↓               | →              | ↓                 | →       | ↑              | →              | ↑              |
| Wind surfers                    | None            | →              | →                 | None    | None           | None           | →              |
| Surfing                         | →               | →              | →                 | None    | →              | →              | →              |
| Kayakers                        | None            | None           | →                 | None    | →              | →              | →              |
| Jet skis                        | →               | →              | →                 | None    | →              | →              | →              |

# Issues used to educate visitors in SIMP 1999 - 2003

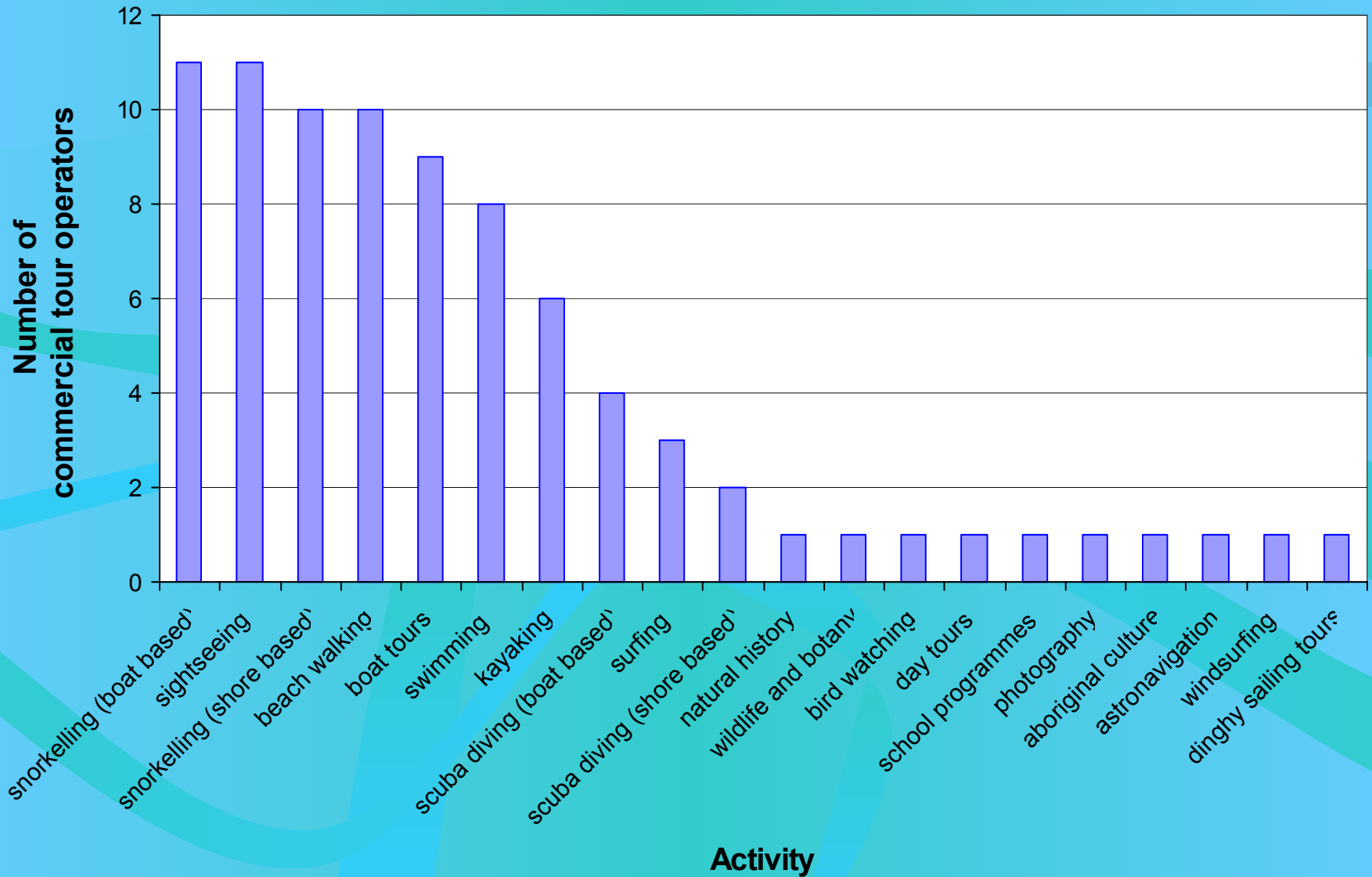


# Total yearly visitors in SIMP from VISTAT data 1997 - 2003

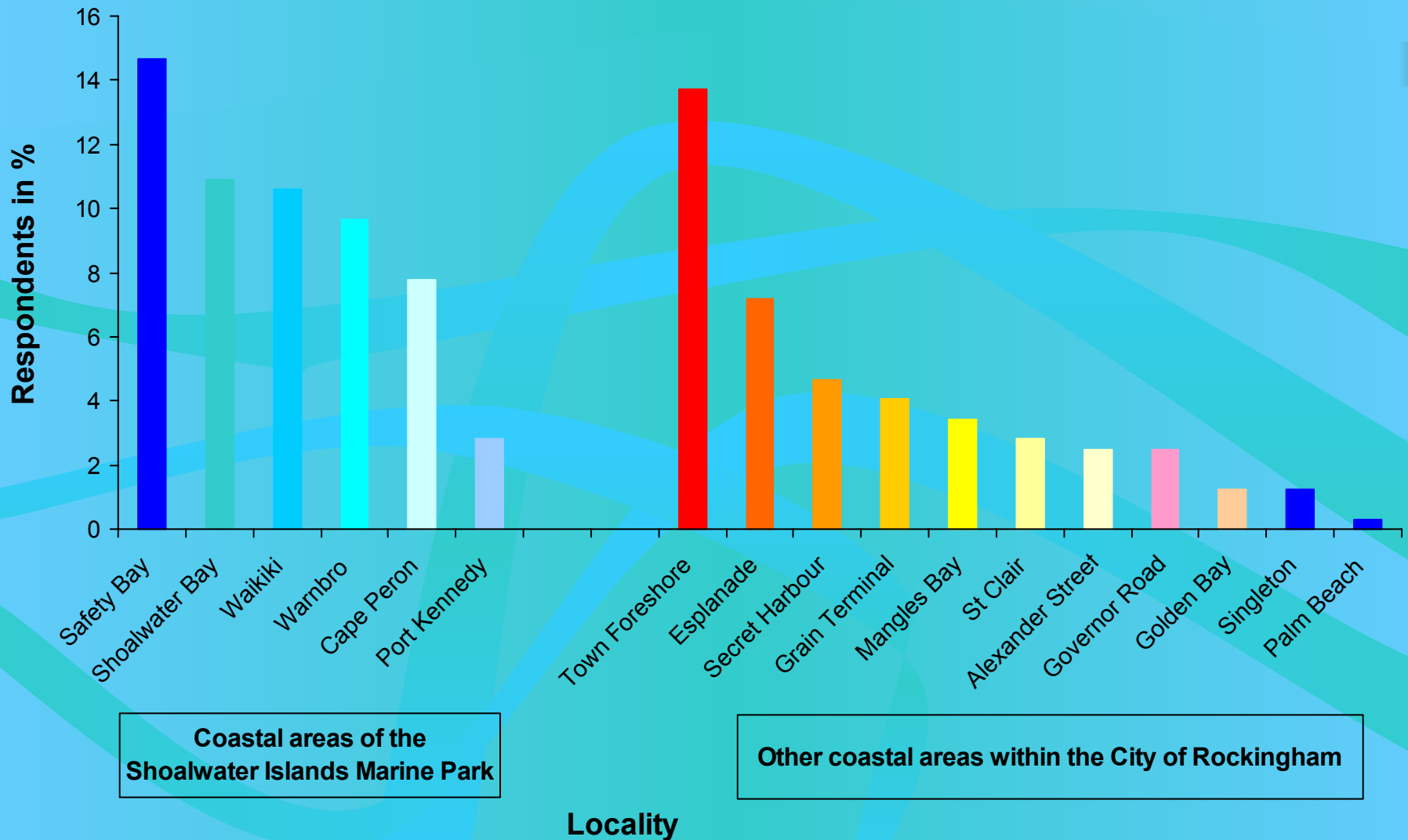




# Commercial Tour Operators and activities in SIMP as at 2003



# Beaches used by City of Rockingham citizens 2001



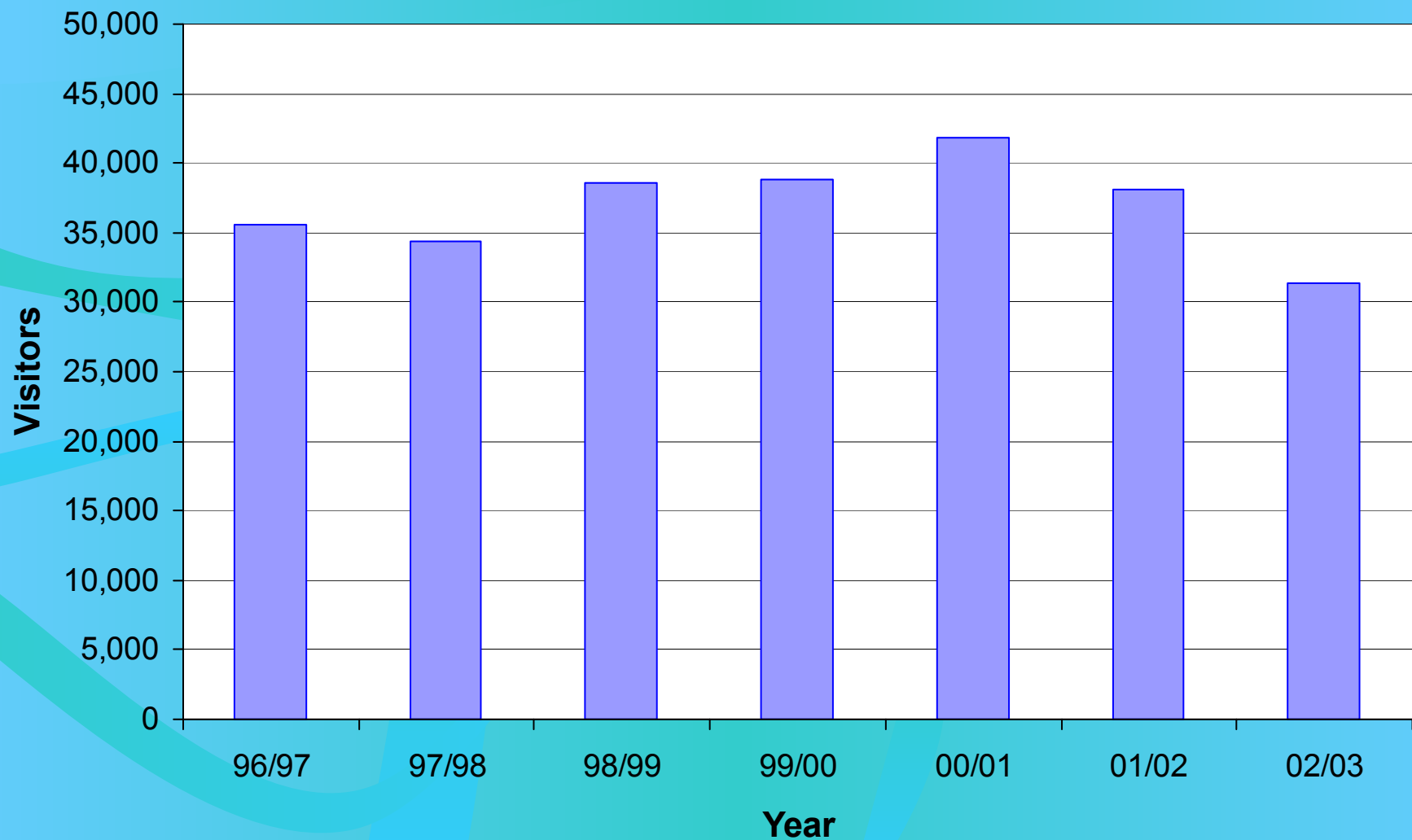
Source: Rockingham Beach user survey 2001

# Penguin Experience Island Discovery Centre



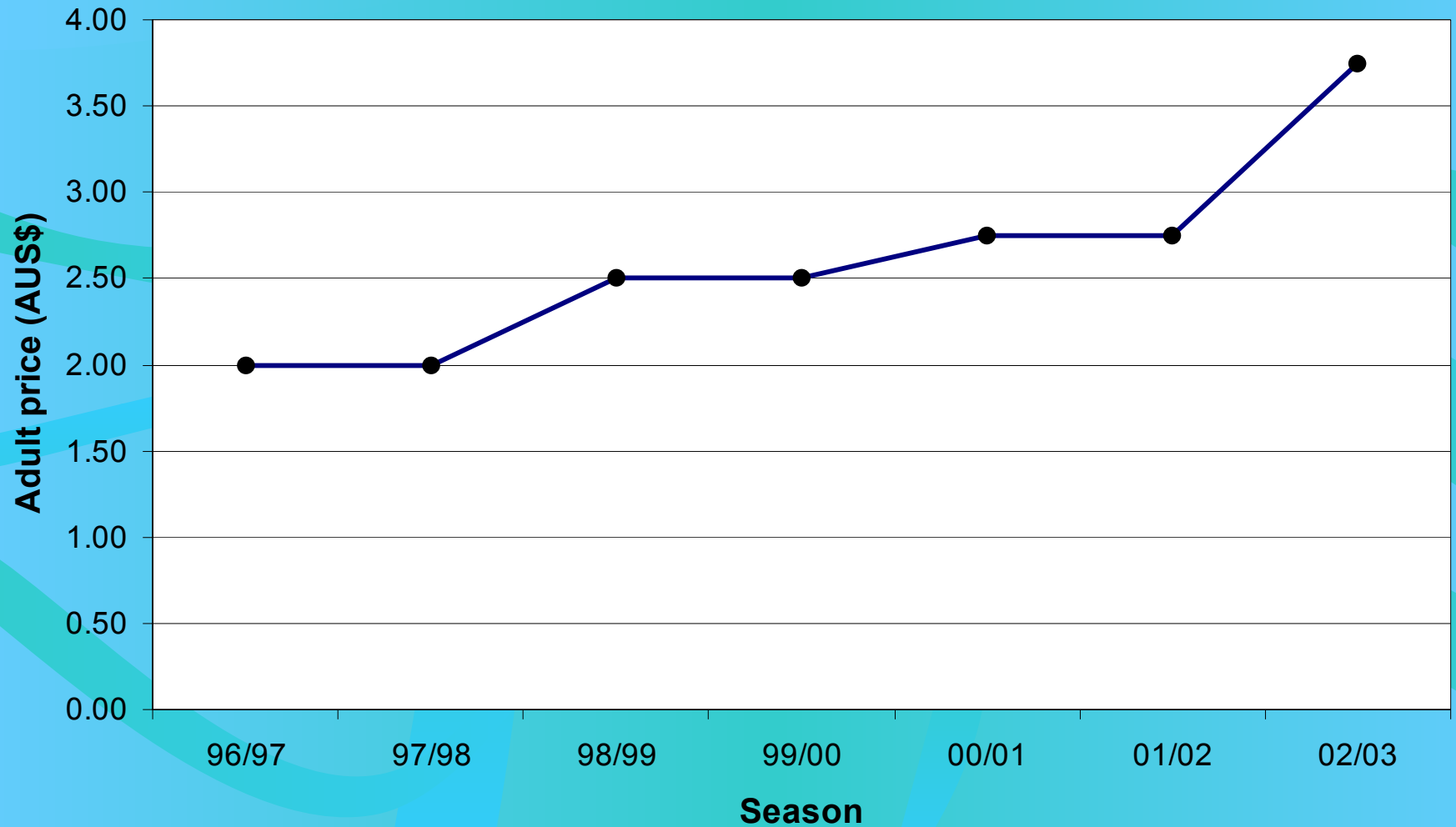


# Total yearly visitors to the PEIDC 1996 - 2003



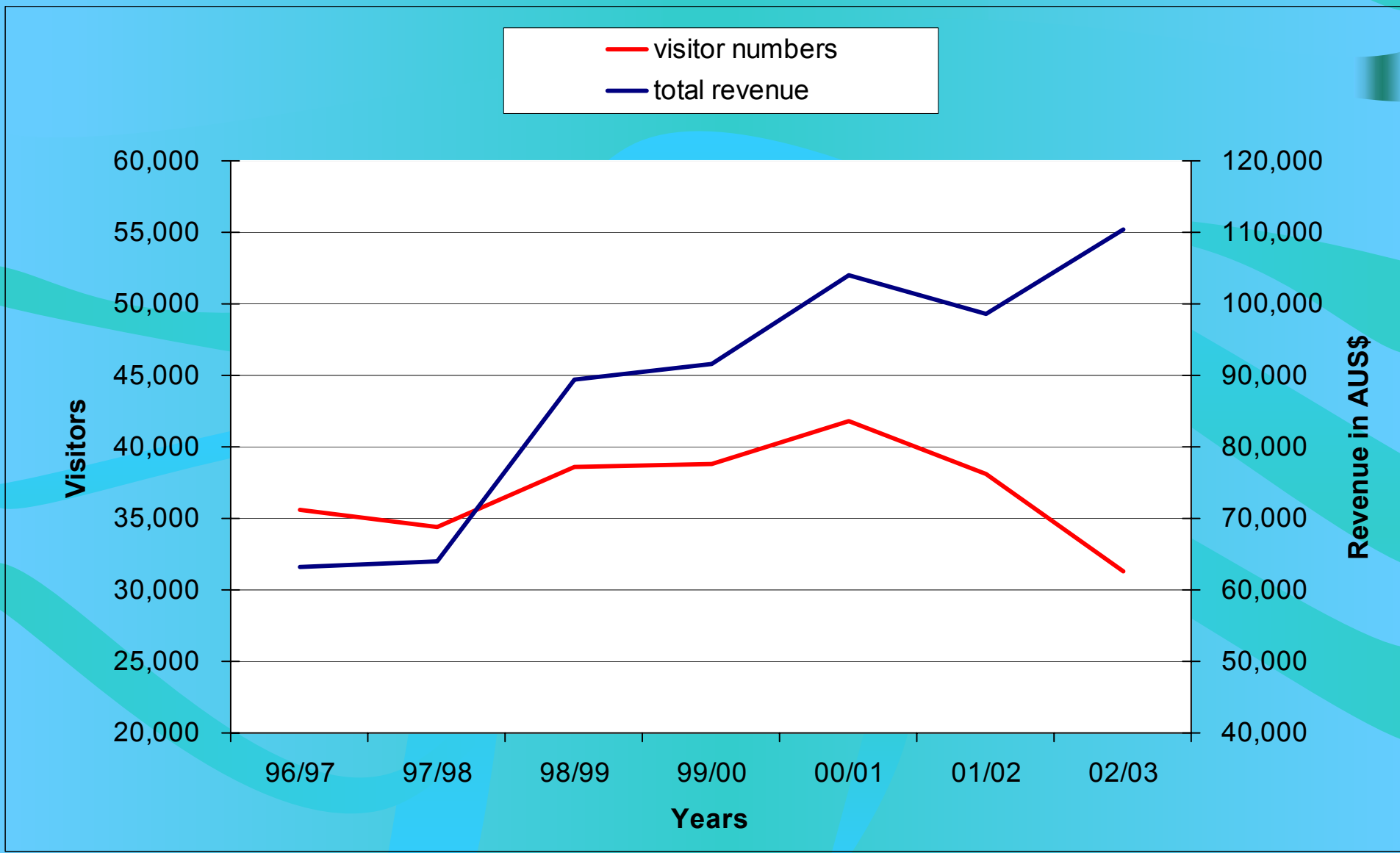
Source: CALM PEIDC sales records 1996 - 2003

# Amount CALM charge the CTO for every adult traveling by ferry to the PEIDC 1996 - 2003



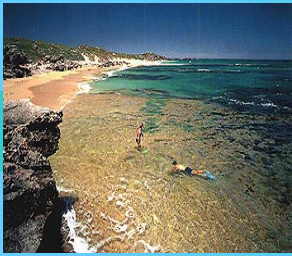
Source: CALM PEIDC sales records 1996 - 2003

# Total annual CALM revenue compared to total annual visitors to the PEIDC 1996 -2003



Source: CALM PEIDC sales records 1996 - 2003





# Penguin Island visitor surveys 1996, 2000, 2001 & 2002

For the majority of respondents, it was their first time visit;

Reason for visiting was to see the Penguins and to swim/snorkel;

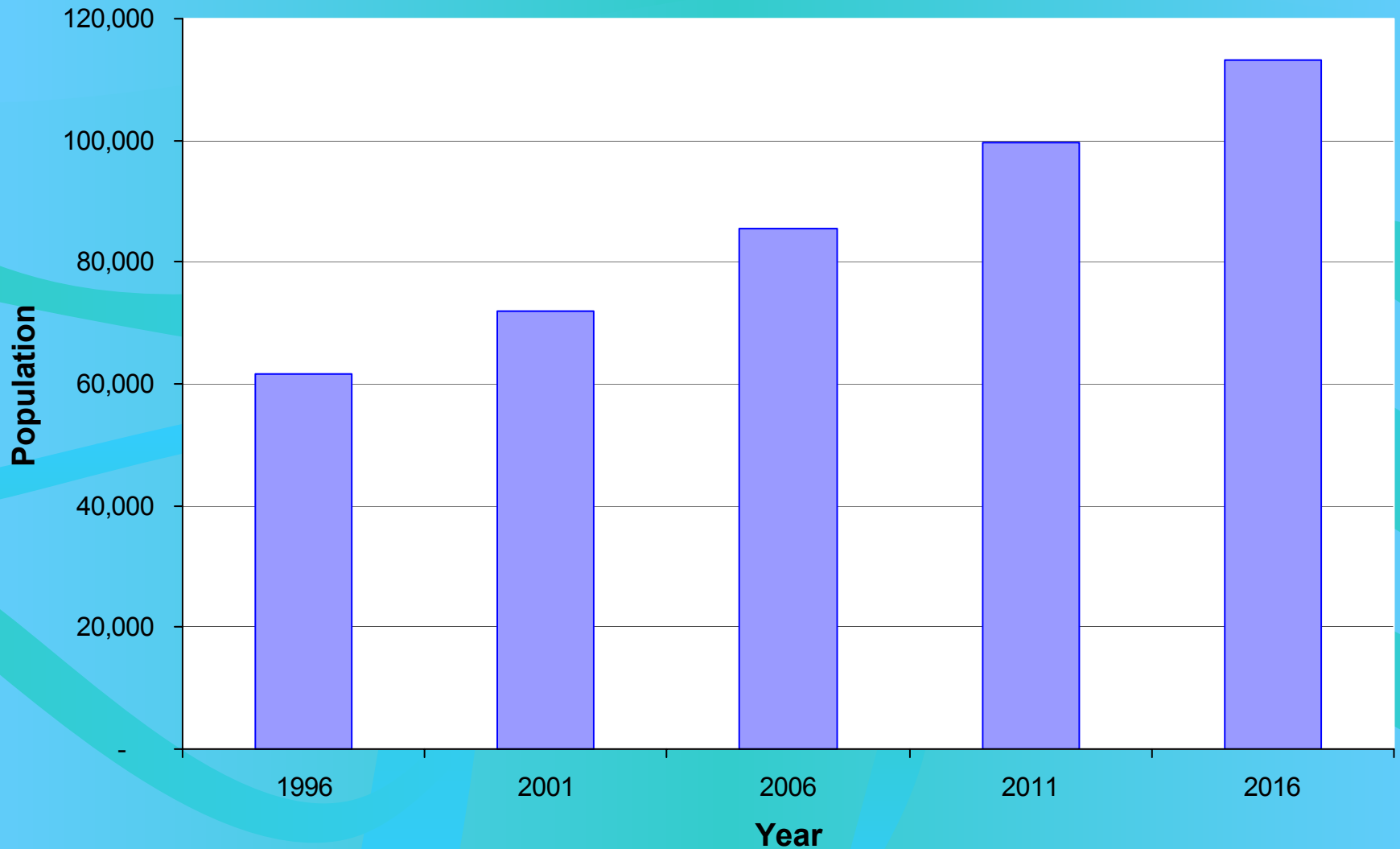
More than 50% of all visitors hear about Penguin Island through word of mouth;

More than 77% of visitors are with family and friends;

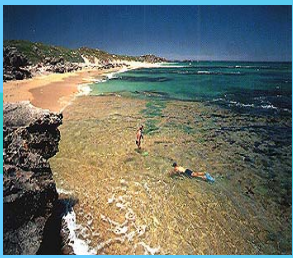
Majority are between 25 and 39 years old; and

Majority are from the Perth metropolitan area

# Population projections for the City of Rockingham 2001

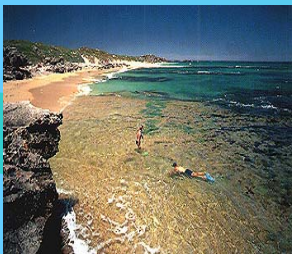


Source: Department for Planning & Infrastructure, 2001



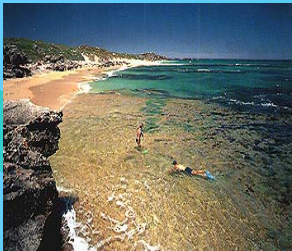
# Discussion

- People-based activities increasing, craft-based activities are not showing any trends
- People based activities increasing fast at Point Peron and Penguin Island
- Accessibility plays an important role in high use areas
- Increasing costs of ferry and entrance into PEIDC may mean increasing number of visitors are walking the Mersey Point sandbar



# Discussion (cont.)

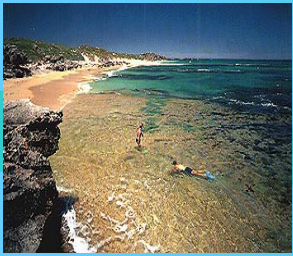
- Australian Sea Lion Interaction is the major issue
- CALM boat patrols only monitor 200 meters diameter around chosen high use areas, aerial survey counted craft in unmonitored areas
- Aerial surveys cost approximately \$475 and boat patrols cost approximately \$400.



# Recommendations

- Develop a monitoring programme that encompasses entire of SIMP;
- Incorporate monitoring of sandbar (early morning users);
- Integrate monitoring of the Islands and the Marine Park;
- Integrate monitoring of Rockingham Lakes Regional Park and SIMP;
- Education & interpretation – Australian Sea Lion interaction, diving and island nature reserve access; and
- Undertake a visitor questionnaire of SIMP, not just Penguin Island.





# Conclusion

- People-based activities in SIMP are increasing; craft-based activities in SIMP show flat trends
- There is a need for a comprehensive visitor monitoring programme for the whole of SIMP
- The importance of monitoring visitor use is becoming more and more important in the management of natural resource management.