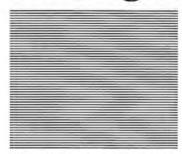
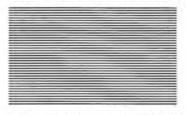
ROTTNEST ISLAND Management Plan



Progress Report on Implementation of the Recommendations



Information supplied by the Rottnest Island Authority August 1990





Department of Conservation and Land Management



PRINTED ON RECYCLED PAPER



The information in this report has been made available by the Rottnest Island Authority as background material for those wishing to make a submission to the mid term review being carried out by CALM.

Why write a submission?

It is an opportunity to provide information, express your opinion, suggest alternatives and have a say on how useful or relevant you think the recommendations are.

If you prefer not to write your own submission you could make a joint submission with others.

What happens to your submission?

All submissions will be analysed and a summary of them published which will include an indication of how each submission affected the review. If a submission is marked CONFIDENTIAL it will not be quoted in the summary or published.

The purpose of the review itself is to consider what progress has been made in implementing the recommendations in the plan, as well as their relevance and adequacy in the light of changed circumstances since its release in 1985.

What makes an effective submission?

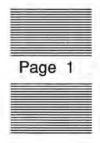
To ensure your submission is as effective as possible:

- · make it concise and clear
- list your points according to the number of the recommendation
- describe briefly each subject or issue you wish to discuss
- say whether you agree or disagree with any or all of the recommendations; clearly state your reasons (particularly if you disagree) and give sources of information where possible
- suggest alternatives to deal with any recommendation with which you may disagree.

N.B. It is important to indicate those recommendations you agree with not just those you disagree with.

Each submission is important in its own right but those that give reasons for concerns, give support where appropriate and offer useful information and suggestions are most useful.

Please turn to Page 2 for further details concerning Submissions





Deadline

Submissions are welcome until 1 November 1990.

Where to send your submission.

Written submissions should be sent to:
Executive Director
Dept of Conservation and Land Management
P.O. Box 104
COMO WA 6152
Attention: Manager Planning Branch

NOTE - The Government, in February 1987, accepted all except 17 of the 236 recommendations of the Rottnest Island Management Plan. The 17 recommendations concerned are marked "See Appendix 1" in the list below.

The Government's comments on the 17 exceptions are shown in Appendix 1. In the list of recommendations below the wording is that of the Rottnest Island Management Plan.





List of Recommendations

	LAND MANAGEMENT			
6.1 Implemented February 1988.	Rec. 6.1	The principles of the W.A. Department of Agriculture's classification of the development capability of the Island's landforms should be adopted. These are, firstly, that any further development works should be concentrated in areas of low environmental hazard, and secondly, the monetary input necessary to sustain the stability of the ecosystem increases exponentially from developing in areas of low environmental hazard to those with high environmental hazards.		
6.2 Implementation in progress. 80% complete. Walktrails/bird hides to be subject of further consultation.	Rec. 6.2	All lakes, swamps and freshwater seeps should be conserved and protected. The halophytic community on the margin of the lakes should not be disturbed by any future roadworks, permanent development, or vehicles. A buffer zone around the lakes should be defined by the lower and upper terraces delineated by Hesp et al., (1983). Vehicle tracks through this area should be closed. Around the airport no further disturbance to fringing vegetation of the lakes should occur. Walk trails and bird hides may be suitable in some areas of the upper terraces, and should be designed and located in consultation with the R.I.B. Environmental Manager. The swamps and seeps outside the lakes area should have no disturbance to associated vegetation, or any of the seasonally wet margins.		
6.3 Not implemented.	Rec. 6.3	Freshwater seeps located near the settlement area should have low open pine fences installed where pedestrian access is easily obtained.		
6.4 Implementation in progress (July '90) Herschell, Garden, Government House.	Rec. 6.4	Monitoring of the water levels and salinity within swamps and freshwater seeps should be initiated and maintained to monitor (a) the effects of water removal from the freshwater lens on the lakes and seeps, (b) the level of pollution (if any), and (c) the degree and rate of saline intrusion into the mined swamps.		
6.5 Implementation in progress (Feb '88).	Rec. 6.5	In consultation with the University of W.A. Zoology and Botany Departments, and other relevant bodies, the swamps which have been mined for marl extraction should be rehabilitated. This should be carried out with the utmost sensitivity, to avoid any further damage to the swamps and surrounding vegetation. Existing marl dumps should be removed, and a revegetation programme initiated (see Chapter 7).		
6.6 Implemented (Feb '88).	Rec. 6.6	If any further bitumenised catchment is planned, a feasibility study should include a site assessment of the effect that extensions will have on freshwater seeps, vegetation and visual amenity.		



6.7 Implemented (Feb '88).	Rec. 6.7	Lake water should not be used as a water source for fire control or other purposes.
6.8 Implementation in part. Sand is extracted from pit chosen in consultation with the EPA, still used for concrete batching. Quarries and sandpits being rehabilitated.	Rec. 6.8	A complete embargo should be placed on any further extraction of sand, marl and limestone for building construction purposes. All borrow pits and quarries should be rehabilitated, and re-vegetated. Future mining should be only for road margin rehabilitation and suitable measures, such as improved road drainage, and vehicle rationalisation should be implemented to reduce the need for constant maintenance. New pits should be outside the lake buffer zone (Rec. 6.2), vegetation conservation zones (Chapter 7), area underlain by exploitable groundwater (Chapter 10), and high/very high erosion prone areas and screened from general view.
6.9 Implemented (Feb '88).	Rec. 6.9	In consultation with relevant organisations, such as the Health Department and Western Australian Water Authority, the siting of future services should be carefully considered. Planning decisions should at least take into account (a) the impact on the landform and adjacent landforms; (b) the impact on the freshwater lens, seeps, and salt lakes; and (c) the visual impact on residents and visitors.
6.10 Implementation ongoing (July '90).	Rec. 6.10	A major programme must be initiated immediately by the R.I.B. to rehabilitate eroding sites, including road margins.
6.11 Implementation ongoing. Plan is currently being developed for remainder of RIMP grant period.	Rec. 6.11	Given the extensive rehabilitation works required, a 5 to 10 year plan should be drawn up outlining the number and type of works to be carried out each year, and monies should be sought for, and allocated to this programme. These plans should be reviewed as need dictates, and a yearly progress report should be made by the R.I.B. Environmental Manager, as part of the R.I.B. Annual Report (see Chapter 12).
6.12 Implementation in progress (July '90). Beach access way work is now the high priority (Thomson Bay, Basin, Ricey Beach).	Rec. 6.12	Management and rehabilitation works in the settlement area should have top priority, followed by formalised beach/dune accessways onto the most used beaches around the island (see Figures 6.4a to g).
6.13 Ongoing implementation - requirements of lessee	Rec. 6,13	A site rehabilitation programme should be drawn up concurrently with any plans for future development, and carried out concurrently as works proceed.
contemplating construction work (lodge, hotel). 6.14 Implementation ongoing (1990).	Rec. 6.14	The geological type sites, Herschel Lake Spit and Fairbridge Bluff (Rottnest Limestone) should not be disturbed. Other terrestrial sites listed in Section 6.6 should be signposted to inform the public of their significance.



4.2	VEGETATION MANAGEMENT			
7.1 Implemented (Feb '88).	Rec.7.1	No further reafforestation should occur on the area underlain by exploitable groundwater (outlined in Figure 7.3).		
7.2 Implemented (Sept. '89).	Rec. 7.2	The <u>Gasoul</u> succulent mat community comes under intense pedestrian pressure being located adjacent to the West End tourist bus stop, and should be fenced off with low pine rail fencing. Given no pedestrian pressure the community should be self-sustaining (see also Chapter 9). In sand dune areas, measures should be taken to reduce sand mobility and to establish perennial dune vegetation.		
7.3 Implemented (Feb '88 and subsequent). Atriplex seeded along Herschel Lake - Geordie roadside.	Rec. 7.3	The entire native marsh community should be protected from any further road works, waste disposal, and vehicle traffic. In areas where roads abut lakes (e.g. Garden Lake and Herschel Lake) experimental work should be conducted to determine if species of the marsh community (e.g. Rhogodia, Sarcocornia, Atriplex) could be seeded and planted on the lake/road fill margin to increase lakeshore stability, visual amenity, enhance lake habitats and increase road stability (see also recommendations in Chapter 6).		
7.4 Implementation ongoing (July 90). A nursery established 1989 and, subject to approval, P/T nursery position to be advertised.	Rec. 7.4	Melaleuca and Callitris stands should be regenerated. Trials should be established to assess alternative techniques. The impact of the regeneration on quokka populations should be carefully monitored (see Rec. 8.3).		
7.5 Ongoing implementation.	Rec. 7.5	Pittosporum stands should be monitored in the winter period (particularly from mid-winter on) for seedling germination. The seedlings should be frequently checked (especially during summer-autumn) for signs of deterioration or death from quokka grazing. If stressed, individual seedlings should be protected with wire hoops, or quokkas should be removed and the seedlings fenced.		
7.6 Ongoing implementation.	Rec. 7.6	Parakeet Bay, Geordie Bay, and other areas of Pittosporum stands (Fig. 7.3) should be monitored for Pittosporum seedling growth.		
7.7 Ongoing implementation.	Rec. 7.7	A similar monitoring procedure for <u>Templetonia</u> should be carried out as that outlined for <u>Pittosporum</u> (see Rec. 7.5; 7.6).		



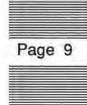
7.8 Implementation in progress (Sept. '89). Acacia rostellifera grove planted at Armstrong Bay, more planned.	Rec. 7.8	The Acacia littorea and Acacia rostellifera communities, where senescent, should be regenerated. Trials should be carried out to establish the best technique. The regeneration programme should be conducted on a structured approach with only a few thickets being manipulated at any one time. Simultaneous burning and/or fencing of numerous adjacent thickets should not be carried out as they provide prime shelter sites for quokkas.
7.9 Ongoing implementation (July 1990) mainly programed using voluntary groups using growtube protection. Approx. cost \$2/tree planted (\$1.20 growtube, 60c stakes, 20c plant).	Rec. 7.9	Large-scale reafforestation should be carried out inland and NW of Porpoise Bay and in the area bounded by the eastern border of the area underlain by exploitable groundwater and the Lakes. Plantings should be a random distribution of Melaleuca, Callitris, Pittosporum, Templetonia and shrub species. The impact of this programme on the quokka population should be carefully monitored (see Section 8.1.1 and Rec. 8.3).
7.10 Now implemented (Sept. '89).	Rec. 7.10	Melaleuca lanceolata should be planted in dense stands along the Longreach Bay dume slope and behind The Basin.
7.11 Implemented.	Rec. 7.11	Melaleuca lanceolata and Pittosporum phylliraeoides should be planted around the margins of the bitumen catchments.
7.12 A small trial area was seeded at Bathurst Point with no germination apparent.	Rec. 7.12	Limestone ridges between Porpoise Bay and Parakeet Bay should be seeded with Pittosporum and Templetonia (see Fig. 7.3). Seeds should be sown into the existing communities (primarily Stipa-Acanthocarpus). In natural Pittosporum and Templetonia communities, seedlings which have germinated within an Acanthocarpus clump commonly survive quokka grazing, as the unpalatable and prickly Acanthocarpus provides a protective barrier for the seedling. We suggest that this mode of seedling establishment should be utilised. Although labour intensive, planting of seeds within Acanthocarpus clumps may reduce the need for fencing, and increase Pittosporum and Templetonia survival rates.
7.13 Implemented (Feb '88).	Rec. 7.13	There should be no further planting of exotic species outside the settlement areas.
7.14 Implemented (Feb '88).	Rec. 7.14	The Agave succulent which grows between Government House, Herschel and Garden Lakes should be removed by mechanical means and destroyed.
7.15 Implementation ongoing. Lessees also required to comply where site reconstruction undertaken (Lodge).	Rec. 7.15	The Oleander shrubs on roadsides around the settlement and lakes should be removed by mechanical means and destroyed. They should be replaced with appropriate native species.

7.16 Not to be implemented. No further plantings will be done.	Rec. 7.16	All Norfolk Island pines outside the settlement area should be removed.
7.17 No commented recorded.	Rec. 7.17	Two or three woodland-scrub sites should be developed as low-key passive recreation sites. The sites should be fenced and provided with self-closing gates to prevent quokka access. The sites should be small, and provided with signs indicating walk trails, plant and animal species present and other information. The sites should be rotated on a 3-5 year plan. This would mean that recreation sites could be rotated with regeneration sites. That is, as one regenerated/reafforested Melalueca stand was well advanced in seedling establishment, it could become a new recreation site, and a former recreation site could be reafforested/regenerated.
7.18 Implementation ongoing - Dept Agriculture, CALM, Consultants, Soil Conservation Service (July '90).	Rec. 7.18	Detailed consultations should take place with as wide a range of people and organisations as possible to establish appropriate Vegetation regeneration techniques.
	FAUNA MANAG	EMENT
8.1 a) Completed ('90). b) Completed ('90). c) Completed ('90). d) Completed ('90). Application made for compactor for rubbish tip in 1990/91 RIMP Grant Scheme funding.	Rec. 8.1	The settlement areas should be made less attractive to quokkas by:- a) all rubbish bins being fitted with self-closing lids.
		 all rubbish collection areas being fully enclosed and fitted with self-closing doors.
		 all areas around structures which may provide shelter for quokkas being closed off.
		d) all external fresh water taps being designed to prevent quoklas gaining access to free water. This includes the provision of closed drains for all outlets.
		e) Investigating alternatives to sanitary land-fill for rubbish disposal.
		These procedures will also be effective in reducing the impact of Silver Gulls, ravens, feral cats and rodents. Implementation should begin immediately as part of the general improvement in island hygeine.

8.2 Implementation ongoing (July '90).	Rec. 8.2	The sewage lagoons, rubbish tips and fresh water catchments should be adequately fenced to prohibit quokka access. Trials should be carried out in conjunction with the Department of Conservation and Land Management and the Agriculture Protection Board to select an appropriate design. Electrification of fences around the rubbish tips should be investigated, and trials be instigated in conjunction with the Agricultural Protection Board of Western Australia. This procedure will also be effective in reducing the impact of feral cats.
B.3 Implementation ongoing (July '90). Nursery established 1989/90.	Rec. 8.3	A revegetation programme should be established for the eastern half of the island with a view to altering the species composition. The objective should be to establish a mixed stand of vegetation containing species both palatable and unpalatable to quokkas. This would support a smaller quokka population. Revegetation plots will need to have quokkas removed from them and exclusion fences constructed and maintained until seedlings are established. The choice of species to be used in revegetation programmes proposed in Chapter 7 should be selected to cater for the nutritional and cover needs of quokkas, as well as the needs of avifauna and visitor recreation. A combination of closed camopy, more widely-spaced trees and low shrubs should be used. Vegetation manipulation and revegetation programmes should be carried out in conjunction with rigorous quokka population monitoring programmes both before and after revegetation to ensure the altered habitat is adequate to maintain a quokka population. Revegetation programmes should be instituted slowly to allow displaced animals to re-establish themselves. Revegetation plots should be relatively small and discontinuous to avoid restricting quokka access to water as well as ensuring minimum disruption to the quokka population. (see Chapter 7 on Vegetation for detailed recommendations.)
8.4 Education of visitors and island residents is ongoing to prevent feeding wildlife. Signage in use in key areas.	Rec. 8.4	Handouts of scraps of food at bus stops, in the settlement, and else-where should be discouraged. Visitor-quokka physical contact should also be discouraged. A public education programme should be undertaken to make visitors and residents aware of the problems associated with quokkas. The education campaign should also include information discouraging the feeding of seagulls.



8.5 Ongoing implementation. No plans instituted yet to remove quokkas from settlements (1990).	Rec. 8.5	A programme of live trapping quokkas should be carried out to remove quokkas from the settlements, rubbish tip, sewage lagoons, water catchments and revegetation areas. This should be done in conjunction with the implementation of recommendations 8.1 and 8.2. These animals should be yarded and an assessment of Salmonella infections made before transferring to new areas. Before it is implemented, advice should be sought from the Department of Conservation and Land Management on possible relocation of quokkas to areas in the South-west of Western Australia, or sale or gift of animals to appropriate institutions in Australia or overseas. Relocation within Western Australia should only be to places known historically to be suitable quokka habitat but in which the quokka is now not present. An assessment of the likelihood of quokkas surviving in the new areas should be undertaken by the relevant wildlife authorities prior to relocation.
8.6 See Appendix 1 RIA has matter of wildlife park under review - subject to funding and appointment of warden position. Small visitor information centre should be replaced by new Reception Centre in 1990/91 - located at end of jetty in Thomson Bay. Serviced by RIA staff and Voluntary Guides.	Rec. 8.6	A wildlife park should be established in Anniversary Park - W.A.Y 79. The park should establish viewing and contact areas with quokkas. The park should also include displays of other wildlife found on Rottnest, particularly birds. The park should be carefully planned and managed to ensure that the animals do not present a human health risk, are well cared for and the site is clean and well maintained. This will necessitate the appointment of one full-time staff member responsible for managing the park. A visitor education/interpretation centre should be planned and constructed adjacent to the wildlife park and should contain displays on the ecosystems and ecological processes on the island as well as other environmental information. (see Rec. 11.4 and Section 11.2.2). The centre and park should be planned in collaboration with staff from the Department of Conservation and Land Management and the Zoological Gardens. (see Chapter 11).
8.7 Implemented (Sept. '89) Regulation 36 applies (RIA Regulations) Restricted periods not yet publicised.	Rec. 8.7	Access to islets, rocks and stacks should be restricted during periods of bird breeding. Members of the public desiring access during the restricted periods may be issued permits by the Environmental Manager.
8.8 Not implemented (July '90). Signs to be erected.	Rec. 8.8	Osprey nests on those headlands which give public access to the nests should be protected by means of appropriate information signs and, if necessary, fences.
8.9 Implemented (July '90).	Rec. 8.9	The Wedge-tailed Shearwater nesting areas (Cape Vlamingh, Fish Hook Bay and Radar Reef) should be protected by fencing and information signposts. A seasonal closure to pedestrian traffic should occur during the breeding season (August-April). To accommodate their landing habits low pine fencing should be used.





8.10 Implemented (July '90).	Rec. 8.10	The islands and spits in Lakes Baghdad, Herschel and Government House should be restricted areas. Public access should only be allowed by permit from the Environmental Manager.
8.11 Not implemented.	Rec. 8.11	Nesting sites of Fairy Terns should be identified by the Environmental Manager or the Warden at the start of each breeding season. If these are publicly exposed, suitable fences and signs should be erected. It may be necessary to decoy birds from high human use areas to more protected areas within the lake system.
8.12 Partial implementation (July '90). Policy and procedure of tip site rubbish burial being implemented.	Rec. 8.12	If reduced food availability results in Silver Gulls threatening the viability of other bird species on Rottnest and becoming increasingly aggressive to humans, investigations on culling programmes should be initiated in consultation with the Department of Conservation and Land Management, C.S.I.R.O., the Agriculture Protection Board and other appropriate authorities.
8.13 Implemented (Feb '88),	Rec. 8.13	 It is recommended that the current R.I.B. control programme for feral cats be continued. This entails: a) prohibiting the importation and/or keeping of domestic cats on Rottnest Island. b) monitoring the feral cat population to ensure it remains at a very low level. c) live trapping and euthanasia as necessary to maintain a low level of population.
8.14 Implemented (Feb '88).	Rec. 8.14	Because of the risk to visitors all field shooting of feral cats should stop.
8.15 Implementation ongoing (July '90).	Rec. 8.15	Settlement areas of Rottnest should be regularly surveyed on behalf of the R.I.B. for the presence of rodents by officers of the Health Department of W.A.,
8.16 Implemented (Feb '88, July '90).	Rec. 8.16	Any significant rodent populations in the settlements should be controlled by means of programmes recommended by the Health Department and in conjunction with officers of that Department.
8.17 Ongoing implementation.	Rec. 8.17	Areas of Rottnest outside the settlements should be monitored for the presence of rodents by the Environmental Liaison Officer.
8.18 No rodent activity detected on offshore stacks/islets.	Rec. 8.18	In consultation with the Agriculture Protection Board and the Department of Conservation and Land Management, any significant rodent populations outside the settlements, particularly those in bird breeding areas, should be controlled. Rodent populations on off-shore stacks and islets should be eradicated.



8.19 Implementation (Feb '88).	Rec. 8.19	The keeping of chickens for domestic purposes should continue to be permitted on Rottnest under conditions laid down by the R.I.B. following consultation with the Health Department of W.A. and subject to the enclosures complying with the conditions stipulated in the Health Act, 1911 as amended, Model By-Laws, Series "A".
8.20 Not implemented (July '90).	Rec. 8.20	Should it be shown that domestic chickens play a significant role in the spread of salmonella on Rottnest, domestic chickens should be removed from the island in consultation with officers of the Health Department of W.A.
8.21 Implemented. Strict conditions laid down for control of caged birds. (July '90).	Rec. 8.21	Caged birds should be permitted to be kept on Rottnest with the permission of the island management. The requirements of the Declared Bird Regulations of the Agriculture and Related Resources Protection Act (1976) should be enforced.
8.22 Implemented and being enforced. Notice in all issues of Rottnest Islander - brochures - notices to mooring lessees.	Rec. 8.22	The ban on all other domestic animals including cats and dogs on Rottnest should remain and be rigidly enforced.
8.23 Implemented. Reduced feral cat problem appears to have increased survival success of peafowl. Numbers are being monitored (and no hand feeding is planned (July '90)).	Rec. 8.23	The present population of peafowl on Rottnest should be allowed to persist on the island but not allowed to increase in numbers. Provision should be made by the R.I.B. for peafowl to be hand-fed during times of food scarcity. Feed should only be provided in containers in an enclosed feeding area. Unconsumed food should be removed to prevent access by rodents and quokkas.
8.24 Not implemented, but subjective assessment indicates numbers are healthy due to decreased feral cat	Rec. 8.24	The size of the pheasant population on Rottnest should be regularly monitored by the Environmental Liaison Officer.
impact (July '90). 8.25 Implemented (July '88) - CALM to be consulted on monitoring present situation (July '90).	Rec. 8.25	Any increase in the pheasant population on Rottnest should be prevented by means of a control programme approved by the Agriculture Protection Board and the Wildlife Authorities of the Department of Conservation and Land Management.
8.26 Ongoing implementation.	Rec. 8.26	Broadscale chemical control of nuisance insects is unwarranted, and use of domestic insecticides and personal repellents is the only desirable option at this stage. Information on the activity seasons and likely areas of occurrence of biting insects should be provided to users of the island.
8.27 Partial implementation. Partial screening of tourist dwellings is planned over next 4 year major maintenance program.	Rec. 8.27	Windows should be provided with corrosion resistant insect screens.



	MARINE MAI	VAGEMENT
9.1 Implemented (1989).	Rec. 9.1	Provision should be made for extending the reserved areas for swimmers in Thomson Bay and Longreach Bay, and gazetting a swimming area in Geordie Bay. Access to the shelters in Thomson Bay swimming area should be upgraded to allow for disabled persons. The need for mooring poles north of the main jetty should be reviewed.
9.2 Implemented (1989).	Rec. 9.2	Beach mooring and landing areas for small boats should be specified to permit segregation of beach boat landing and swimming.
9.3 Implemented - no ski area now exists in Rottnest bays.	Rec. 9.3	The Thomson Bay water ski area should be truncated or relocated to minimize conflict with other activities.
9.4 Fisheries Dept. no longer servicing Rottnest Island on regular basis. RIA personnel have been trained as inspectors (1989/90).	Rec. 9.4	Access to all beaches and headlands should be controlled to minimise erosion and damage to vegetation. Access to Bickley Bay for windsurfing or other uses should be controlled, via a designated pathway. Regular inspection and maintenance of pathways is necessary (see Chapter 6).
9.5 Implemented and will be referred to Research Committee/Environment Advisory committee when operational.	Rec. 9.5	The Fisheries Department should review the existing intensity of enforcement and increase if required. R.I.B. should make available required accommodation.
9.6 As above.	Rec. 9.6	Permits to collect intertidal platform dwelling marine organisms except abalone should be issued by the Fisheries Department, in consultation with the Rottnest Island Research Committee.
9.7 Implemented in full (1990)	Rec. 9.7	The closure of intertidal or subtidal areas for the purpose of scientific research should only occur in consultation with the Fisheries Department, the R.I.B. and the Rottnest Island Research Committee.
9.8 Implemented (1988).	Rec. 9.8	Due to problems with beach, cliff and dune erosion, lack of defined access ways and ablution facilities, there should be no camping or overnight stays allowed outside of the settlement areas.
9.9 Implemented (1988).	Rec. 9.9	Collecting of living intertidal or subtidal organisms for sale should be prohibited.
9.10 Implemented (1988).	Rec. 9.10	Organised reef-walks should be arranged through the Education and Information Officer.
9 . 1 1 Implemented (1988).	Rec. 9.11	No new moorings should be installed in areas of seagrass except in Thomson Bay. Further intensive accommodation of boats should be restricted to Thomson Bay.



Rec. 9.12	An environmental impact study and a cost benefit analysis should be initiated by the R.I.B. in consultation with appropriate authorities to assess options for future mooring use. The aim of the studies should be to investigate the possibility of transfer of the moorings to R.I.B. ownership, the best method of accomplishing this aim and to maximise community benefits from this transfer.
Rec. 9.13	The R.I.B. should provide moorings in Thomson Bay to be publicly available on a daily or weekly basis with a booking system similar to that for island accommodation.
Rec. 9.14	Discharge of sewage and dumping of rubbish at moorings should be prohibited. Occupiers of boats should use shore-based facilities, or discharge sewage into waters beyond the 11 metre contour.
Rec. 9.15	Where necessary underwater removal by divers of non-degradable rubbish should occur. It may be possible to use volunteers.
Rec. 9.16	Consideration should be given to the provision of secure facilities for smaller boats, which would be available for rent after pre-booking.
Rec. 9.17	Uncontrolled scavenging for wood, and lighting of fires on beaches should cease.
Rec. 9.18	Marine oil spill contingency procedures recommended in Department of Conservation and Environment Bulletin 104 should be adopted by the R.I.B.
Rec. 9.19	Marine Appreciation Areas should be endorsed by the R.I.B. and investigations should proceed into methods to preclude the removal of organisms except fish from these areas. Proposed Marine Appreciation Areas are: Transit Rocks, Kingstown Reefs, Phillips Rock, City of York Bay, all wreck sites, Pocillopora Reef and Radar Reef. Pishing should be banned from Pocillopora Reef.
	Rec. 9.13 Rec. 9.14 Rec. 9.15 Rec. 9.16 Rec. 9.17



3 k 3	1000	ND SERVICES
10.1 Implemented (1988).	Rec. 10.1	The following should be recognised as constraints within the limits of settlement:
		 The lakes system, incorporating a buffer zone.
		 b) Coastline, high and very high development hazard areas, including limestone headlands.
		 woodland areas, including some exotic planting within the existing settlement.
		 d) Airport approaches, as delimited by Department of Aviation.
		e) High ridge lines.
		f) Buffer zones around infrastructure such as the water catchment areas, and sewage treatment works. The former should be screen planted, whilst the latter should be 200 metres in extent.
		g) Sites and buildings of historic significance.
10.2 Implementation ongoing (189/90).	Rec. 10.2	The report by R.J. Ferguson (1977) should be reviewed by the Works Committee of the R.I.B. and National Trust, and any outstanding works proposals should be implemented at the earliest possible opportunity.
10.3 Implemented (1988).	Rec. 10.3	Any further works to any buildings or structures within any historic precinct on the island should be referred by the R.I.B. to the National Trust for their advice and comment. This includes any proposed structural alterations, additions, restoration or preservation. The referral to the Trust should be at the earliest possible stage of planning to ensure their advice is incorporated in any proposals.
10.4 Implementation almost complete (1990).	Rec. 10.4	The colonial buildings form a unique village which should be delineated. Suitable signs should be erected to inform people of entrances into the 'village' area and its historical importance. These should be placed adjacent to roads and the main jetty area. Purther information on the precinct should be made available through signs within the precinct and pamphlets (see Chapter 11).
10.5 Implementation almost complete (1990).	Rec. 10.5	Many of the existing advertising and direction signs are inappropriate. They should be removed and replaced with an information and notice board which complements the scale and character of the village area. Sign standards similar to those used by W.A. Department of Conservation and Land Management are appropriate.





10.6 Implementation ongoing.	Rec. 10.6	There should be a general clean up programme implemented by the R.I.B. to remove any extraneous material which detracts from the village area. The R.I.B. maintenance programme should be ongoing and include removal of weeds and rubbish from the Garden Lake foreshore and the cemetery.
10.7 Ongoing. Part of voluntary Guides tours during holiday periods (1989).	Rec. 10.7	The 'historic walk' around the settlement should be extended to include the cemetery and foreshore of Garden Lake. This walk trail should be accessible to disabled people, including those in wheelchairs.
10.8 Implemented,	Rec. 10.8	The Bathurst Point Lighthouse and Keepers cottage should be recognised by the R.I.B. as buildings of historical significance.
10.9 Restoration commenced. Funds sought in 1989/90 RIMP Grant but rejected (1990).	Rec. 10.9	Restoration of the cottage should be undertaken as outlined by Perguson (1977). Suitable signs should be erected which outline significant details of the buildings.
10.10 Implemented (Feb. 1988) maintenance ongoing (Dept. of Transport & Communications) 1990.	Rec. 10.10	The surrounding headland at Bathurst Point should be rehabilitated (see Chapter 6) and walk tracks delineated. There is an opportunity to provide a small lookout on the walk track.
10.11 Implemented (Feb '88).	Rec. 10.11	The existing rental cottages at Bathurst Point should be screened from the Lighthouse by planting of shrub vegetation behind the cottages.
10.12 Not to be implemented as proposed. Brochures only.	Rec. 10.12	The cave at Bathurst Point which relates to early settlement, should be identified and a sign detailing its background erected.
10.13 Not yet implemented.	Rec. 10.13	The salt works site should be recognised by the R.I.B. as an area of historic significance representing the only secondary industry to have taken place on the island.
10.14 Implemented (1989).	Rec. 10.14	All road building materials should be removed from the salt works by the R.I.B. and no further dumping or stockpiling of materials to take place.
10.15 Partial implementation.	Rec. 10.15	All rubbish on the salt works site and the adjacent lake foreshore should be removed by the R.I.B
10.16 Not implemented (1989).	Rec. 10.16	A suitable sign should be erected acknowledging the historical importance of the salt works site, possibly incorporating a photograph.
10.17 Partial implementation. Access way not needed.	Rec. 10.17	The salt works site could be incorporated into a larger walk/bike trail as part of the island education programme and include access for disabled people.(see Chapter 11).



10.18 Implemented (1988).	Rec. 10.18	The central lighthouse, keepers house and store should be recognised by the R.I.B. as an area of historic significance.
10.19 Implemented (Feb. '88).	Rec. 10.19	The walk tracks on the eastern side of the ridge at the Central Lighthouse should be temporarily closed and rehabilitated. A formal walk track and secure bicycle parking facilities could be constructed when rehabilitation is complete (see Chapter 6).
10.20 Implemented (1988).	Rec. 10.20	The R.I.B. should recognise the historical value of the Kingstown Barracks. Education programmes should make people, especially user groups, aware of the historical significance of the buildings (see Chapter 11).
10.21 Implemented (188).	Rec. 10.21	There should be no structural alterations, internal and external painting, alterations to fittings such as joinery, or additions to the Barracks and associated building without referral to the National Trust, at the planning stage.
10.22 Implementation underway. Funds are required to complete this task. Sponsorship has been forthcoming for materials.	Rec. 10.22	The Bickley Point gun emplacements at Bickley Point should be made safe by the R.I.B. and the Army as a matter of urgency. In particular, all rubbish, rusting wire and star pickets should be removed from the site.
10.23 Implementation almost complete (1989).	Rec. 10.23	The gun emplacements could be made part of an historical walk trail, as they provide fine vistas of adjacent bays. Any walk tracks and associated beach access should be carefully designed and located to minimise any potential erosion.
10.24 Implemented (1988).	Rec. 10.24	The Thomson House ruins should be assessed by the National Trust, for inclusion as a classified site.
10.25 Implementation in progress.	Rec. 10.25	The Thomson House ruins should be demarcated and signposted by the R.I.B. Signs on the road near Pink Lake should be erected. The existing track into the site will need upgrading and maintaining to reduce erosion.
10.26 Implementation in progress.		
Attempts have been made to agree on an appropriate memorial. Site allocated. New techniques being reviewed to locate Aboriginal burial ground accurately.	Rec. 10.26	In consultation with the W.A. Museum and the Local Aboriginal Community, the aboriginal burial area should be acknowledged by an on-site plaque, explaining the background to, and importance of, the area.
10.27 Adopted as RIA policy (1988).	Rec. 10.27	No further disturbance to the burial site should occur, except to maintain existing service lines.
10.28 Implementation in progress in association with Dept of Aboriginal Affairs and Absites Dept of Museum.	Rec. 10.28	The R.I.B. in consultation with W.A. Museum and local Aboriginal Groups should prepare a history of the burial site to be used in education interpretation programmes (see Chapter 11).



10.29 Implementation underway - will be completed during 1990/91 subject to funding through RIMP Grant Scheme.	Rec. 10.29	Plans should be prepared by an architect for a passenger and luggage shelter and walkway on the main jetty. The structure should be of low profile to minimise visual intrusion and be compatible with the architecture along the Thomson Bay foreshore.
10.30 Not implemented. Will be reviewed in 1990/91.	Rec. 10.30	An investigation into the feasibility of relocating the goods handling area should be undertaken by the R.I.B., Public Works Department, and the barge operators.
10.31 Implemented (1988).	Rec. 10.31	No buildings, or any structures which may further constrain the airstrip approaches, should be constructed within these approaches.
10.32 Implemented (1988).	Rec. 10.32	Any land use decisions which involve changing the present situation should be made in consultation with the Department of Aviation.
10.33 Implemented (1988).	Rec. 10.33	Puture widening of the runway strip, if necessary, should be accommodated within the existing runway strip. No further reclamation of Government House Lake should occur.
10.34 Implemented. Upgrade completed in association with EPA.	Rec. 10.34	Planning for the widening of the runway strip should take credence of the need to improve associated aerodrome facilities such as apron parking, and the impact this will have on surrounding land uses, landforms and faunal habitats (see Chapter 8).
10.35 Implemented (1988). 10.36 Implemented. Committee to report	Rec. 10.35	As and when required, the R.I.B. should note the funding arrangements available through the Department of Aviation for airport improvements.
in first half of 1990/91 financial year. 10.37 Not to be implemented. Policy	Rec.10.36	In consultation with local police, the R.I.B. should instigate a committee to review vehicle usage on the island, in particular, the need for certain vehicles, and the use of those vehicles.
guidelines on limited recreational use being formulated for presentation to RIA and Minister (1990).	Rec. 10.37	No private use of R.I.B. vehicles should occur outside of business hours, except on R.I.B. business, or for an emergency.
10.38 Not implemented in the format recommended. See above.	Rec. 10.38	Use of private vehicles outside of the settlement areas should be prohibited. Private mini buses used by the Hotel and the Lodge should be authorised by the R.I.B. to travel to specific places, at particular times.
10.39 See Appendix 1 Will be reviewed when financial position allows move to smaller capacity buses (1990).	Rec. 10.39	The existing R.I.B. tour buses should, as a matter of urgency, be replaced with smaller buses of approximately 20 seats.
10.40 Not to be implemented at the present time. Restrictions in force are considered satisfactory.	Rec. 10.40	All vehicles, except those which may be required in an emergency, should have a speed governing mechanism to conform with the maximum speed limit on the island.





Not to be implemented. Upgraded round island bus service is catering for disabled people. Strong opposition exists to use of mopeds. Licensed disabled access vehicles are permitted on application (1990).	Rec. 10.41	Alternative future transport systems and energy sources for vehicles should be investigated by the R.I.B. Mopeds or similar vehicles would currently satisfy the needs of staff on many short trips.
10.42 Implementation ongoing (1990).	Rec. 10.42	An integrated bicycle education (Bike-Ed) course should be established at the Rottnest Island Primary School.
10.43 Implemented (1988).	Rec. 10.43	The Rottnest Island Police should maintain an accurate and up to date record of bicycle theft, and laws relating to the unlawful use of property should be rigorously enforced.
10.44 Implementation in progress (1990).	Rec. 10.44	The Rottnest Island Medical Centre should undertake a 12 month study of bicycle accidents/injuries.
10.45 Implementation in progress (1990).	Rec. 10.45	The provisions relating to the standards for bicycles (Part 30 of the Vehicle Standards Regulations) should be enforced for hire and private bicycles on Rottnest. This should include provision of child seats.
10.46 Street lighting now upgraded.	Rec. 10.46	There should be enforcement of the Road Traffic Code as it applies to bicycles ridden at night without lights, particularly where there is inadequate street lighting.
10.47 Implemented (1989).	Rec. 10.47	Secure and stable parking racks (hitching rail and/or towell rack type) should be installed at all holiday accommodation units in the Thomson Bay and Longreach/Geordie Bay settlement areas. Hard stand areas and bicycle parking should be constructed and installed at all the popular coves and beaches around the Island.
10.48 Partial implementation (1989).	Rec. 10.48	Parking facilities should be provided for people using the telephones and conducting business at the Board Offices. The two post and rail barrier areas should be modified to allow more convenient access and egress for bicycles and prams.
10.49 Partial implementation due for completion with new building 1991/92.	Rec. 10.49	The Bike Hire premises be expanded to more efficiently maintain and operate the hire bikes, and to provide for the service and repair of private bicycles.
10.50 Implemented (1989).	Rec. 10.50	The R.I.B. in consultation with Education and Information Officer, and Environmental Liaison Officer should prepare and publish a Rottnest Bike Map for the convenience of all visitors to the Island. The Bike Map should detail bicycle tours around the Island and provide information about the points of interest, cycling tips, terrain conditions, availability of fresh water, distances, Tour Bus routes and times, ferry information, store, bakery and restaurant hours, and any other pertinent information.



a) Implemented (1989). b) Implemented (1989). c) Implemented (1988). d) Implemented (1988).	Rec. 10.51	The following areas be set aside as pedestrian only areas, with low pine fencing, and adjacent bicycle parking facilities provided:- i) the shopping mall
		ii) the area in front of the R.I.B. Office and telephones
		iii) the milk bar forecourt at Thomson Bay
	120	iv) the beer garden of the Rottnest Hotel
		Other areas should be set aside as and when necessary.
10.52 Implementation almost complete (1989). RIA funding principally used. Pamphlets and guided tours ongoing.	Rec. 10.52	Walk trails should be developed on a thematic basis i.e. historical, birdlife, geological. Design of these trails should take into account the needs of the disabled. These should be signposted and formalised, with information plaques at points of interest. Pamphlets and interpretive services should be produced detailing these walks (see Chapter 11).
10.53 Implemented (1989).	Rec. 10,53	Rottnest Island should be declared an area to which the Health Act applies. This action can be taken under Section 143 of the Health Act 1911 as amended.
10.54 Implemented (1989).	Rec. 10,54	All plans and specifications for buildings on the island should be referred to the Health Department of Western Australia for approval as would be required by Section 143 of the Health Act 1911 as amended.
10.55 Implemented (Feb '88),	Rec. 10.55	Roofs, and fences associated with the catchment areas and storage tanks should be checked to ensure they are secure. The current weekly programme of checking should be continued and any repairs required should be effected immediately.
10.56 Implemented (Feb '88)	Rec. 10.56	Intakes, vents and overflow channels should be checked to ensure that they are secure. The current weekly programme of checking should be continued and any repairs required should be effected immediately.
10.57 Implemented (Feb '88).	Rec. 10,57	Roof gutters, stilling sumps and sand traps located in the intake areas to all storage tanks and on the edge of the bitumenised catchments should be cleaned regularly. When rainfall occurs in the summer months, standing water and debris should be removed from these areas immediately. A programme of surveillance should be undertaken weekly to inspect these areas and any repairs effected immediately.
10.58 Implemented (Feb '88).	Rec. 10.58	Rainwater catchments should not harbour any quokkas, reptiles or birds. Potential harbourage for animals within the catchments should be removed, as should any animals. Current weekly checks should be maintained.





10.59 Implemented and monitoring ongoing.	Rec 10.59	Weekly water quality samples must be taken at Tank 5 and View Hill Tank. The residual chlorine level should be checked and forwarded together with the water samples to the State Health Laboratories. The water results should conform to the "Desirable Quality for Drinking Water in Australia" criteria and the Health Act 1911 as amended Food and Drug Regulations Standard for potable water Reg.
10.60 Not to be implemented (July 1990) residual levels of chlorine being sustained.	Rec 10.60	A09.001. If acceptable levels of residual chlorine (.24ppm) are not sustainable, then an automatic online chlorination unit should be installed.
10.61 Implemented (Feb. '88).	Rec 10.61	The bitumenised rainwater catchments should be screened by increased planting of suitable species around the perimeter fences (see Chapter 7). Trees should be sited to minimise debris and leaves entering catchment areas.
10.62 It is proposed (1990) that there be no increase in the size of the bitumen catchment for environmental reasons.	Rec 10.62	If any extension of bitumen catchments are required, then they should be limited in area to the minimum required to yield the ratio of 2:1 groundwater:rainwater needed for full exploitation of the aquifer. This ratio may be able to be varied while ensuring water quality standards are maintained.
10.63 Implemented in part.	Groundwate Rec 10.63	
10.64 Implemented (Feb '88) and monitoring ongoing.	Rec 10.64	Monitoring of bores by the Public Works Department and the R.I.B. should continue in accordance with programmes as recommended by the P.W.D. to assess the physical and chemical condition of the aquifer. Any production bore which develops excessive salinity (exceeding 1500 mg/l T.S.S.) should be reduced in pump rate and monitored closely to confirm satisfactory performance at that reduced rate.
10.65 Ongoing supervision/monitoring of the bore is taking place (July '90).	Rec 10.65	The well used by the central lighthouse should be pumped at a lower rate to prevent the saline intrusion caused by current pumping practices. It may be necessary to shut down this well for more than one winter to achieve satisfactory salinity levels. This should be supervised and monitored by P.W.D.



10.66 Implemented and WAWA assistance is used in this process (July '90). (As part of water related services upgraded).	Rec. 10.66	Overpumping of bores and wells should not be carried out as this increases the rate at which unacceptable salinities develop. Intermittent pumping of wells should not occur. Bores on the margin of the freshwater lens should be used until unacceptable salinity levels are reached, then shut down. Stand-by bores located more centrally on the aquifer should then be operated at a continuous low pumping rate. Accurate prediction of water demand and greater tank storage capacity is required to facilitate optimum management of the wellfield.
10.67 Implemented. Refer to above for Water Related Services projects.	Rec.10,67	The location of future production bores should be based on measurement of the thickness of the freshwater lens, rather than from estimates of lens thickness based on water rest level. Exploratory bores should be drilled prior to the construction of production bores.
10.68 Implemented and the 96000 m3/yr not exceeded during 1990 borefield work (W.R.S. Project).	Rec. 10.68	The estimated safe yield of 96,000 m ³ /yr will require confirmation through development of the wellfield in stages coupled with continued monitoring and regular reassessments of aquifer performance. Therefore further development of the wellfield should not exceed a rate of 2 or 3 new bores per year. Production bores should be no closer than 250 metres apart.
10.69 Implemented. More information is now available on scope and performance of the borefield as a result of monitoring.	Rec.10,69	As the borefield system approaches safe yield exploitation, the R.I.B. should note that increasing staff time and resources will be required. Budgetting for borefield expansion should be mindful of the proportionate increase in maintenance and monitoring required.
10.70 Not to be implemented as stated. Other recording calculations are used (July '90).	Rec. 10.70	Future calculations from annual average rainfall for runoff yield, should be based on the 80th percentile of the annual average, as recorded at the Central Lighthouse by the Bureau of Meteorology.
10.71 Implemented (Feb '88).	Rec. 10.71	All fences around the sewage treatment works should be inspected weekly to ensure that they are secure, to prevent access by wildlife. Any repairs should be effected immediately.
10.72 Implemented (Feb '88).	Rec. 10.72	Encroachment of sand onto the fences of the sewage treatment works should be monitored and if necessary, removed immediately to ensure that terrestrial wildlife access does not occur.
10.73 Implemented (Feb '88). Wastewater treatment plant proposed to be	Rec. 10.73	A buffer zone of at least 200 metres should be preserved around the treatment works which would preclude any future accommodation, or structures.
resited as part of WRS upgrade. 10.74 Implemented (Feb '88).	Rec. 10.74	Screen planting of suitable species, such as <u>Acacia</u> rostellifera should be implemented on the boundary of the treatment works to act as a visual barrier, and to help stabilise sand drift.





10.75 Problem will be removed with resiting of the plant way from present location (July '90).	Rec. 10.75	In consultation with Public Works Department, and Health Department, investigations should be instigated into methods of reducing the odour problem emanating from the treatment works.
10.76 Refer above.	Rec. 10.76	Discharge of raw sewage from Point Clune should cease as soon as is practicable. The effluent should be subjected to secondary treatment. As an interim measure, extension of the outfall into deeper water is desirable. More information is required to determine the specifications of this extension.
10.77 Refer above.	Rec. 10.77	In consultation with Public Works Department, investigations should be made regarding the feasibility of redirecting Geordie/Longreach sewage to the primary treatment works.
10.78 Refer above.	Rec. 10.78	Investigations should proceed, in consultation with Public Works and Health Departments, on the relocation and upgrading of the sewage treatment and its possible integration with a waste disposal and water generation system for the Island.
10.79 Implemented (89/90).	Rec. 10.79	The R.I.B., in consultation with Health Department of W.A. and the Keep Australia Beautiful Council (W.A.), should investigate a bin design or designs which are appropriate for Rottnest's domestic and commercial waste, with emphasis placed on self-closing lids to exclude wildlife.
10.80 Implemented (1988).	Rec. 10.80	The brick enclosures for bins on foreshores should be removed and relocated to the nearest road as fully enclosed areas.
10.81 Implementation in progress subject to funding of a compacter/tractor under RIMP Grant Scheme 1990/91.	Rec. 10.81	Current practice of daily covering of organic wastes with clean sand at the sanitary landfill site should continue with immediate coverage after wastes have been dumped. The accumulation of inorganic wastes and building rubble presently beside the sanitary landfill site should be buried with clean earth to deny a habitat for wildlife.
10.82 Implementation in progress using bags for glass and aluminium at dwellings (89/90).	Rec. 10.82	The R.I.B., in consultation with the Health Department of W.A. and the Keep Australia Beautiful Council (W.A.), implement a pilot scheme for separation of rubbish at source. Existing bins (60 litre oil drums) can be used for bottles and cans, with new bins for organic wastes. A contractor from the mainland should be arranged to remove bottles and cans.
10.83 Preliminary review has been undertaken. No implementation to date based on poor perceived cost benefit of alternatives.	Rec. 10.83	Investigations should be proceeded with immediately, in consultation with the Health Department of W.A. and Keep Australia Beautiful Council (W.A.), on the applicability of a future alternative waste disposal system, especially those which have potential for energy recovery.



10.84 Implemented (Feb '88).	Rec. 10.84	All future extensions to the power grid supply should be underground to minimise visual intrusion.
10.85 New generators installed and switchboard upgraded (1989). Wind generated power now used from	Rec. 10.85	In consultation with the S.E.C., the R.I.B. should investigate future options for power generation, including relocation of the power station.
turbine (1990). 10.86 Partial implementation (1990).	Rec. 10.86	Existing unsealed access tracks to beaches and coves should be sealed and where access is undesirable, they should be closed. There is no need for any further road building within the main circular coastal road.
10.87 Not to be implemented (1990).	Rec. 10.87	Controlled access for cyclists should be allowed around the southern shores of Lake Serpentine.
10.88 Implemented (Feb '88).	Rec. 10.88	Under no circumstances should any new causeways be built across the salt lakes.
10.89 Partial implementation. Will be finally resolved with resolution of Lombardo lease (1990).	Rec. 10.89	The Thomson Bay foreshore should be rationalised to allow for predominant north-south movements. The Ferry Jetty road should have speed humps and motorists' give-way signs. The cycle path should be constructed on the south side, in front of the outdoor eating area, and connecting to the road leading to the Rottnest Hotel.
10.90 Roads outside settlement new complete (MRD 1990) other partially complete.	Rec. 10.90	Major roads within and outside of the settlement areas should have a seal width of 5.0 metres. All other roads should be sealed to a width of 3.0 metres, and motor vehicle traffic should be restricted on these roads. (see Table 10.2).
10.91 Implemented (programmed for ongoing upgrade and maintenance).	by the R.I.B. Maintenance of regularly, to ensure the best	A formal road maintenance programme should be compiled by the R.I.B. Maintenance of roads should be done regularly, to ensure the best possible surface and shoulder conditions. Rough and uneven surfaces should
10.92		be repaired and/or reconstructed.
Ongoing implementation (1990). Street lighting upgrade almost complete. Street signs being planned currently.	Rec. 10.92	Investigations into upgrading lighting and road signs on the island should be implemented immediately by the R.I.B.
10.93 Implemented and training policy development ongoing.	Rec. 10.93	The Western Australian Fire Brigade and the Bush Fire Board should be commissioned to conduct detaile inspections of Rottnest Island and its facilities fo
10.94 Not to be implemented. Recycled fresh water will be available for use in fire-fighting when WRS upgrade is complete ('90).	Rec. 10.94	A salt water ring main and standpipes should be provided for the Thomson Bay, Geordie and Longreach settlements.
10.95 Implemented.	Rec. 10.95	Firefighting equipment should be upgraded in line with the recommendations of the Bush Fires Board and the Western Australian Fire Brigade.



10.96 Partial implementation (1990).	Rec. 10.96	Rottnest Island should be linked into the Perth "000" emergency telephone system with the Rottnest alarm able to be triggered from the emergency control room in Perth.
10.97 Not implemented (1990).	Rec. 10.97	Signs containing information on what to do in the case of fire and other emergencies should be prominently displayed around the settlements and all accommodation units.
10.98 Implemented and ongoing.	Rec. 10.98	Fire fighting teams should be formed and trained in bush and building fire control, first aid and rescue techniques. Training should include attendance at suitable courses, i.e. Bush Fires Board, for all involved personnel.
10.99 Implemented (1988) ongoing.	Rec. 10.99	Continual training of employees should be carried out in order to maintain a core of persons capable of handling emergencies. Regular drills should be conducted by the team to maintain a state of readiness for men and equipment.
10.100 Implemented (1988).	Rec. 10.100	All new buildings should comply with the provisions of the Uniform Building Bylaws (1974). Where practicable existing buildings should be upgraded to this standard.
10.101 Implemented (1988).	Rec. 10.101	A fire detection and call-out system should be established for the island. This system should include the lighthouse keeper, and call stations at the airport, Oliver's Hill and West End.
10.102 Implemented (1988).	Rec. 10.102	All flammable liquid and explosive storage should continue to comply with the Explosives Regulations, Road Transport Regulations and Flammable Liquids Regulations of the Explosives and Dangerous Goods Act.
10.103 Implemented (1988).	Rec. 10.103	A policy of total exclusion of fires should be adopted by the R.I.B., allowing only fires lit in barbecues provided and fires for reafforestation and/or research purposes.
10.104 Counter disaster plan being implemented in association with police, SES, Nurses, Marine & Harbours, Ferry & barge operators (1990).	Rec. 10.104	Policies for the control of fires and dealing with emergencies on and around Rottnest should be developed by the R.I.B. in consultation with the W.A. Fire Brigade, Bush Fires Board, Department of Aviation, Department of Marine and Harbours, Police and the State Emergency Service. These policies should be circulated to all R.I.B. staff, Police, Nursing Post and lessees.
10.105 Implemented and continually maintained.	Rec. 10.105	The firebreak system should be rationalised with a view to the formation of strategic firebreaks. This should be done in consultation with the R.I.B. Environmental Liaison Officer, the W.A. Fire Brigade and the Bush Fires Board.



10.106 Implemented - Engineer acts.	Rec. 10.106	One R.I.B. staff member should be designated as Emergency Services Officer and given overall responsibility for the development of emergency policies and procedures. The name and location of the Emergency Services Officer and his responsibilities should be circulated to all R.I.B. Staff, Police, Nursing Post and lessees.
10.107 Implemented (1988).	Rec. 10.107	In consultation with the Town Planning Department and the M.R.P.A., the Minister responsible for the R.I.B. should investigate methods to ensure planning control procedures and urban design principles apply to Rottnest Island.
10.108 Implemented (1989/90).	Rec. 10.108	Any future major development proposals on Rottnest Island should be referred to the Environmental Protection Authority for consideration All proposals should be subject to public review.
10.109 Approved in principle for operational activities.	Rec. 10,109	The R.I.B. should endorse the Guidelines for Future Development on Rottnest Island as a framework within which future land uses on the island can be considered.
11.1 Implemented - pre Feb '88 and ongoing. Signage brochurage.	ISLAND COMMU	The R.I.B. should adopt a policy of promoting the natural, historical and cultural features of Rottnest Island. To implement this policy the R.I.B. should provide high quality visitor information services about the Island's natural and cultural features and the available visitor facilities.
11.2 Completed (1989).	Rec. 11.2	All visitor information services should be centrally planned and co-ordinated by the Environmental Education Officer whose position should be renamed the Education and Information Officer.
11.3 Implementation in progress subject to RIMP Grant Scheme funding 1990/91.	Rec. 11.3	The R.I.B. should redevelop the current Welcome Kiosk to become a Visitor Information Centre and shelter. The centre should contain free maps and pamphlets on basic services and facilities (including those for disabled persons), and management objectives. More detailed should be information available for purchase.
11.4 See Appendix 1 Partially implemented (1990) and will substantially be addressed with construction of reception centre at the end of the main jetty.	Rec. 11.4	A Wildlife Information Centre should be established in conjunction with the Wildlife Park in W.A.Y.79 Anniversary Park. This Information Centre should be planned in collaboration with staff from the Department of Conservation and Land Management, W.A. Museum and other relevant experts, and should contain displays on the ecosystems and ecological processes on the island as well as the environmental information. (see Rec. 8.6).



Rec. 11.5	A lookout could be established on West End to provide shelter for visitors and information on the natural and historical features of the area. The structure should be unobtrusive with architecture and materials compatible with the surroundings.
Rec. 11.6	Donations for constructing and managing the Wildlife Park, Wildlife Information Centre, and West End Lookout could be sought from visitors to Rottnest and corporate sponsors as well as Government sources.
Rec. 11.7	The R.I.B. should establish the Rottnest Island Voluntary Guides Group with the major objective of conducting visitor education programmes on Rottnest.
Rec. 11.8	Volunteer guides for the Rottnest Island Voluntary Guides Group should be selected and trained by the Education and Information Officer.
Rec. 11.9	Once initiated, the Rottnest Island Voluntary Guides Group should be established as an incorporated body independent of the R.I.B
Rec. 11,10	All activities of the Voluntary Guides on Rottnest should be under the control of the R.I.B. and the general direction of the Education and Information Officer.
Rec. 11.11	The R.I.B. should instigate a staff training programme. The programme should include basic environmental information and visitor relations training, and should be available to all island staff. The courses should be co-ordinated by the Education and Information Officer.
	Rec. 11.6 Rec. 11.7 Rec. 11.8 Rec. 11.9

11.12 Implementation has been attempted without success. Alternative methods of communication have been instigated (1989/90).	Rec. 11.12	The R.I.B. should facilitate the formation of a Rottnest Island Residents' Association to represent the interests of the island community to various authorities. The R.I.B. should encourage, and if possible assist, the Association to make contact with the Community Planning and Public Affairs Section of the Community Services Department.
11.13 Implemented (89/90).	Rec. 11.13	The R.I.B. should facilitate the formation of a Rottnest Island Chamber of Commerce to represent the interests of the Rottnest Island business community.
11.14 See above.	Rec. 11.14	Both organisations (Rec. II.12 and II.13) should be established separate from and independent of the R.I.B. Both organisations should be incorporated bodies with office bearers elected by members, and office bearers should be invited to attend Board meetings on a regular basis to report on issues of concern.
11.15 Courses underway but funding not available from Ministry sources. 700 people have completed Inservice courses.	Rec. 11.15	The Education Department of Western Australia should recognise the environmental education potential of Rottnest Island, and establish fully-funded in-service training courses for teachers intending to use Rottnest Island as a teaching resource.
11.16 See Appendix 1 Implemented 1990 under the Chairmanship of Dr P E Playford of Geological Survey following approval of Minister for Tourism.	Rec. 11.16	Research activities on Rottnest Island should be overseen by the Rottnest Island Research Committee responsible to the R.I.B. The role of the Committee would be to: 1. Approve and co-ordinate all research programmes undertaken on the island. 2. Monitor the progress of all research undertaken on Rottnest. 3. Relay information which may be relevant to management of the island to the R.I.B. and its executive staff. 4. Receive requests from the R.I.B. and island executive staff on specific information needs. 5. Arrange for relevant research programmes to be instituted to meet the needs of the island management. This committee could have representation from the R.I.B. and executive staff, scientists and research organisations. The R.I.B. Environmental Liaison Officer should ex officio be the executive officer of the committee, which could report to the R.I.B. The E.I.O. could be an observer.



11.17 See Footnote - Refer Cabinet decision. To remain in present location. Overall control under Research Committee direction, with responsibility allocated to UWA member.	Rec. 11.17	closed and eventually removed and research activities relocated to the Kingstown Barracks area.
11.18 See Appendix 1 See above 11.17.	Rec. 11,18	The Rottnest Island Research Station should be established in the Kingstown Barracks. The Station should be run by the Rottnest Island Research Committee and available on a booked rental basis to all research workers and post-secondary students. No public access should be permitted to areas where research is undertaken.
11.19 See Appendix 1 See above 11.17.	Rec. 11,19	Provision of the Rottnest Island Research Station facilities should be co-ordinated by the Rottnest Island Research Committee. Funds could be obtained from user groups and the R.I.B.
11.20 See Appendix 1 See above 11.17.	Rec. 11.20	Accommodation in the Kingstown area should be set aside for research workers to be rented as required on a self-catering or catered basis.
11.21 See Appendix 1 See above 11.17.	Rec. 11.21	The Research Station and associated accommodation should be controlled and booked through the Environmental Liaison Officer acting as executive officer for the Rottnest Island Research Committee.
11,22 Implemented (1988).	Rec. 11.22	The R.I.B. should adopt a policy committing the Kingstown Barracks area for the purposes of environmental education.
11.23 Implemented (1988).	Rec. 11.23	The Environmental Education Centre should be controlled by a Committee with representation from the R.I.B., the W.A. Education Department, independent schools, post-secondary institutions and the Department for Sport and Recreation. People from throughout the community — students, visitors, island residents — should be guaranteed equitable access to the Centre and its facilities.
11.24 See Appendix 1 Administered by R.I.A.	Rec. 11.24	The Environmental Education Centre should be administered by the W.A. Education Department and sufficient funds should be made available to that Department to equip and run the school upon administrative lines similar to the present Camp Schools, with access guaranteed to all groups within the community.
11.25 Implemented (88/90).	Rec. 11.25	Unacceptable forms of behaviour on Rottnest Island should be actively discouraged by the island's management and police.



12.1 Implemented (1988).	ADMINISTRATION AND IMPLEMENTATION		
	Rec. 12.1	The Rottnest Island Board should be re-constituted under its own legislation. This legislation should delimit the membership, terms and representation of the Board; ensure that appropriate legislation applies and enunciate the specific functions, duties, operations and accountability of the R.I.B.	
12.2 See Appendix 1 Implemented (1988).	Rec. 12.2	Members of the Rottnest Island Board should include at least one person representing each of educational, historical and environmental interests.	
12.3 Implemented (1988).	Rec. 12.3	While legislation proposed in Rec. 12.1 is being drafted, Government should take immediate steps to ensure that the Health Act, Uniform Building Bylaws and other relevant legislation apply to the Rottnest Island Board and its operations.	
12.4 Implemented (1988).	Rec. 12.4	A full-time Executive Officer/Deputy Chairperson should be appointed to facilitate the functioning of the Rottnest Island Board. This person should be an experienced administrator and personnel manager with the necessary skills to oversee and co-ordinate the operations of a large and complex organisation and ecosystem.	
12.5 Implemented (1989).	Rec. 12.5	The executive staff of the Rottnest Island Board should be reorganised to recognise the separate but complementary skills necessary to manage the settlements and the surrounding terrestrial and marine environment.	
12.6 See Appendix 1 Implemented (1989) with RIA, not CALM FTE complement.	Rec. 12.6	The position of Environmental Liaison Officer should be upgraded to Environmental Manager. The position should be a professional position within the Department of Conservation and Land Management, with the occupant seconded and responsible to the R.I.B.	
12.7 See Appendix 1 Implemented with RIA staff complement.	Rec. 12.7	The position of Education and Information Officer (Rec. 11.2) should be a professional position within the Education Department. The occupant should be seconded and responsible to the R.I.B. for a period of approximately 3 years.	
12.8 Implemented (1988),	Rec. 12.8	An additional Ranger should be appointed to cover the terrestrial areas of Rottnest Island. The Ranger should be responsible for policing of island bylaws, including environmental management and assisting the Environmental Manager as necessary.	



12.9 See Appendix 1 To be implemented. Subject to adequate funding and allocation of an FTE for the position.	Rec. 12.9	 In the longer term a Warden should be appointed. The position would entail: (i) locating nesting/breeding areas, (ii) constructing and monitoring protective works for all species, (iii) drawing up and maintaining a public education programme in conjunction with the R.I.B. Education and Information Officer.
12.10 Implemented (1988).	Rec. 12.10	The Rottnest Island Board should be required to produce and make publicly available an Annual Report.
12.11 Implemented (1988).	Rec. 12.11	The Rottnest Island Board Annual Report should be prepared in accord with the recommendations of the Third Report of the Standing Committee of the Legislative Council of W.A. on Government Agencies.
12.12 Implemented (1988).	Rec. 12.12	The Auditor-General should be requested by the relevant Minister to review the operations of the Rottnest Island Board annually.
12.13 Implementation ongoing. Should be completed 1990/91.	Rec. 12.13	All land which has been transferred in fee simple to the Western Australian State Government and is currently held as vacant crown land, including land recently acquired from the Army (Department of Defence) should be revested and included in Reserve A16713.
12.14 Implemented (1988).	Rec. 12.14	The land held by the Commonwealth Government on Radar Hill (Swan Locations 5114 and 4133) should be transferred to the State Government at no cost, revested and included in Reserve Al6713.
12.15 Implemented in part (1988/89).	Rec. 12.15	The land described as Swan Locations 4130, 3110 and 3081, including the Central Lighthouse and weather station and Bathurst Point Lighthouse should retain their existing purpose and for management reasons should be incorporated as reserves under the Australian National Parks and Wildlife Conservation Act 1975.
12.16 Implemented (1988).	Rec. 12.16	Swan Location 5363 adjacent to the Central Lighthouse should be transferred to the Western Australian State Government free of cost, revested and included in Reserve Al6713.
12.17 Implemented (1988).	Rec. 12.17	The boundaries of the Rottnest Island Reserve should be extended seaward to the 15 metre contour all around the island. The eastern boundary of the reserve should be where the 15 metre contour abuts the Fremantle Port Authority Outer Harbour boundary.
12.18 Implemented (1989/90).	Rec. 12.18	The R.I.B. should prepare a public report on an annual basis on the progress made in implementing the Management Plan for Rottnest Island.



Rec. 12.19	The economic situation of the R.I.B. should be examined by the W.A. State Government with a view to determining whether the R.I.B. should continue to attempt to be financially self-supporting.
Rec. 12.20	On conclusion of the examination outlined in Rec. 12.16, the W.A. State Government should issue a clear policy direction to the R.I.B.
Rec. 12.21	The R.I.B. should evolve and publish a series of policy statements for future management of the Island, based on the recommendations of the Management Plan for Rottnest Island.
Rec. 12.22	The W.A. State Government should assume the responsibility of ensuring, by way of the R.I.B., that the environmental quality of Rottnest Island is maintained. The R.I.B. should investigate the possibility of the Department of Conservation and Land Management undertaking environmental management works on their behalf via a memorandum of understanding.
Rec. 12.23	Any funds provided by the Government for environmental works should be partitioned from accommodation and other revenue. The use of those funds should be accounted for on a separate basis within the R.I.B. Annual Report.
Rec. 12.24	The Rottnest Island Management Plan should be reviewed by the Department of Conservation and Land Management in consultation with the R.I.B. before the end of 1990, and the review be published.
	Rec. 12.21 Rec. 12.22 Rec. 12.23



APPENDIX 1

BURKE GOVERNMENT'S DECISION ON THE ROTTNEST ISLAND MANAGEMENT PLAN

The Plan is to be implemented over five years at a cost of \$600,000 p.a. subject to approval from the Cabinet Budget Committee. Any new developments will be restricted to the Thomson Bay area in accordance with Figure 10.1 and will have to be consistent with the Management Plan. For example, future developments must harmonise with and enhance its immediate environment, and developers will contribute to management of the physical and biological environment.

Chapter 6

All recommendations (6.1 to 6.14) accepted.

Chapter 7

All recommendations (7.1 to 7.18) accepted.

Chapter 8

All recommendations except 8.6 accepted.

Recommendation 8.6 - The RIB to investigate the need for such facilities, especially in view of the development of the Kingstown Environmental Education Centre.

Chapter 9

All recommendations (9.1 to 9.19) accepted.

Chapter 10

All recommendations except 10.39 accepted. In view of the fact that the Rottnest Island Board purchased nine buses from the MTT and had them painted in the Rottnest colours, the RIB to investigate the cost benefit of using smaller buses on Rottnest Island.

Chanter 11

All recommendations except 11.4, 11.16 - 11.21 and 11.24 accepted.

Recommendation 11.4 - see recommendation 8.6.

Recommendation 11.16 - Research Committee to be chaired by a representative from CALM and CALM also to provide the executive support. The Committee, once established, to address recommendations 11.17 to 11.21, evaluate options and recommend action to the RIB.

Recommendation 11.23 - RIB has already implemented this recommendation.





Recommendation 11.24 - Kingstown Barracks to be continued to be administered by the Rottnest Island Board. The Barracks is already under successful re-development as a broadly based Community Environmental Education Centre. It is operating extremely well under the auspices of Mr Tom Perrigo who has been on secondment from the Education Department. The success of the enterprise has been in a large measure due to the commitment and enthusiasm of Mr Perrigo. Well over 70,000 have passed through the Kingstown Barracks. It is extremely important that the momentum generated be continued. The RIB has appointed Mr Perrigo the Environmental Education and Information Officer and will absorb his salary from 1 July, 1987. He will continue to be responsible also for the day-to-day running of the Kingstown Barracks.

Chapter 12

All recommendations accepted except for 12.2, 12.7, 12.9, 12.19 - 12.20, and 12.22.

Recommendation 12.2 will be taken into consideration when preparing legislation setting up the Rottnest Island Authority.

Recommendation 12.6 - The Rottnest Island Authority shall be represented on the selection panel for this position and the appointment to be ratified by the Authority.

Recommendation 12.7 - The RIB has appointed Mr T Perrigo to its staff as the Environmental Education and Information Officer. From 1 July, 1987, the RIB will absorb his salary into their budget. The Education Department will provide advice and manpower assistance as and when required.

Recommendation 12.9 to be reviewed after two years by the Rottnest Island Authority in conjunction with advice from CALM.

Recommendations 12.19 - 12.20 have already been undertaken, when taking into consideration the Functional Review Committee and Public Service Board Reports and the Rottnest Island Board submission during 1985/86 to the Hon. Minister for Budget Management. The Rottnest Island Board is to become self-financing at the end of the five-year implementation period for the management plan.

Recommendation 12.22 - The first part of this recommendation is accepted. The Rottnest Island Authority may from time to time investigate specific work being contracted to CALM.

February 1987



