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TRAINING OF PROTECTED AREA MANAGERS IN THE SOUTH PACIFIC

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SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME

TRAINING OF PROTECTED AREA MANAGERS IN THE SOUTH PACIFIC

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REPORT OBJECTIVES

This Report has five objectives:

- * To assess existing staff and skill levels of protected area managers in South Pacific countries
- * To assess and identify priority training needs for protected area management in the South Pacific.
- * To identify the priority options for undertaking protected area management training in the South Pacific.
- * To identify the assistance required by South Pacific countries in implementing protected area training programmes.
- * To outline recommendations to facilitate the effective implementation of protected area management training in South Pacific countries.

INTRODUCTION

2.1. GENERAL

The development of national parks and protected areas is at an early stage in the South Pacific. This issue was addressed in detail at the Third South Pacific National Parks and Reserves Conference in Western Samoa in 1985, organised by the South Pacific Regional Environment Programme with assistance from the International Union for Conservation of Nature and Natural Resources (IUCN), and the governments of Western Samoa, New Zealand and New South Wales (Australia). were a number of important outputs from this conference such as the preparation of an action strategy for protected areas in the Pacific region. (The Action Strategy). This Action Strategy identified the fact that, although there are only a limited number of South Pacific countries that have established protected areas, most countries are likely to increase their involvement in this area. Very few of the countries in the region have a national parks service; most rely on other government agencies, such as Departments of Forestry, to manage their protected areas. A number of factors underline the increasing involvement of island countries in this area. These include the appointment of a Protected Areas Management Officer at SPREP and the involvement of international conservation bodies in Protected Area Management in the South Pacific.

A key element targeted in the Action Strategy was that most agencies that are responsible for protected area management have a critical lack of staff and financial resources. This factor is compounded by a lack of staff skills in the field of protected area management. Eaton (1985) notes that, in the South Pacific,

"the shortage of staff is partly due to financial constraints and the low priority given to conservation in most government public expenditure planning, but it also reflects both the lack of training facilities and poor career prospects for those involved in conservation area management. None of the countries of the region has a comprehensive in-country training programme specifically for protected areas staff. Instead, any training is either in other disciplines such as forestry, or else takes place outside the region, in either case the training may for obvious reasons be only of partial relevance."

It should be noted that this problem is not unique to protected area management in the South Pacific. For example Thorsell (1985) notes:

"The World Conservation Strategy has identified limitations on the human capacity to manage as a major constraint to effective conservation. At the same time, it is a recognized principle of effective management that a complement of trained and committed staff are the foundation of the operation of any protected area system."

The Action Strategy specifically addressed the issue of training and outlined the following objectives and activities.

Objectives
To develop Training Programmes to ensure the availability of adequately Trained manpower.

Activities (National, regional, international levels)

- Encourage the inclusion of appropriate protected area management skills in relevant educational curricula.
- 2. Publish and distribute a training manual on protected area management in the South Pacific.
- Develop and undertake in-service training programmes to develop protected area skills drawing on appropriate regional expertise. Emphasis to be placed on the practices of traditional use and their incorporation into contemporary park management procedures.

Encourage participation of staff at regional and international training programmes.

Encourage bilateral training involving secondment of officers, from countries within and outside the region, to facilitate on-the-job training of local staff.

Undertake a regional manpower requirement survey to identify future training needs and opportunities.

Provide basic reference manuals and publications on protected area management to all park officers in the region.

This report deals with activity 6 i.e. "To undertake a regional manpower requirement survey to identify furture training needs and opportunities".

PROCESS FOR IMPLEMENTING TRAINING PROGRAMMES 2.2

It is important that the survey of training needs be seen as one element of an overall process or approach to development of effective and relevant training programmes. This process should have the following four broad elements and sub elements: (after Thorsell 1982).

2.2.1. Identification of Context

* Identification of resource management issues and concerns (at the island and regional level).

* Identification of legal and institutional framework, including aspects agencies responsible for protected area management; what protected areas exist etc.

2.2.2. Assessment of Training Needs

This step would involve the assessment of specific training requirements and should be based on a systematic survey of island countries. information that should be obtained from such a survey includes:

* number of staff involved in protected area management

* existing level of skill in the field of protected area management

* key work tasks that are undertaken by field staff

* preferences and priorities of island countries for different types of training courses and for the different options for implementing training

2.2.3. Identification of Key Training Needs and Options for Implementation This step would involve:

* identification of priority training programmes based on the key

findings from the assessment of training needs.

* identification of options that are available to meet these needs. These options will vary with a number of factors, such as the geographic area involved. The assessment of options will involve the identification of existing training programmes and curricula as well as foreshadowing those that may potentially develop.

2.2.4. Implementation of Training Programmes

This step would involve the development and implementation of training programmes. This implementation should be, outlined in a strategic plan which covers aspects such as : training courses; location; funding source etc.

2.3. PRINCIPLES GUIDING TRAINING

There are a number of principles which should guide the development of training programmes for protected area managers in the South Pacific. These include:

- * The development and implementation of training programmes should be approached in a structured and logical way, such as the process outlined in section 2.2.
- * Training should reflect the unique circumstances existing in the South Pacific i.e. Training programmes should flow over the overall direction outlined in the "Action Strategy" and should be tailored to specific country needs.

* Training in the South Pacific should initially concentrate on the development of basic all round skills i.e. an emphasis on producing generalists rather than specialists.

* A diversity of approaches should be used in implementing Training Programmes.

* There should be a clear identification of potential sources for funding and assistance.

2.4. APPROACH ADOPTED IN THIS REPORT

This report aimed to provide basic information for the steps 2.2.2. and 2.2.3. noted above i.e. (2.2.2) Assessment of Training needs and (2.2.3) Identification of key training needs and options for implementation.

The Report also provides basic (limited) information in relation to step 2.2.1. and 2.2.4..

Information in this report was compiled in four ways:

- * Survey form (Appendix A) was sent to South Pacific countries in the South Pacific Commission area. The form was carefully designed in consultation with SPREP so that relevant information was obtained.
- * Personal interviews were undertaken with country delegates to the Regional Conference for consideration and review of the SPREP work programme for 1987/88 held in Noumea, New Caledonia during September 1986.
- * Discussions were held with various representatives of tertiary and other institutions in Australia that are involved in the field of protected area management training.

* A review of relevant literature was also undertaken.

3. EXISTING STAFF AND SKILL LEVELS OF PROTECTED AREA MANAGERS IN THE SOUTH PACIFIC

The Training needs survey (Appendix A) identified the number of staff that are currently involved in protected area management in the South Pacific and the existing skills that these staff have. The survey also identified specific areas managed for nature conservation in each country.

3.1. AREAS MANAGED FOR NATURE CONSERVATION

The areas managed for nature conservation purposes in each South Pacific country are outlined in detail elsewhere (for example, refer Volume 3 of the proceedings of the Third South Pacific National Parks and Reserves This information indicates that most countries have established a limited number of protected areas. A number of countries have both marine and terrestrial reserves designated. Eaton (1985) has carried out a regional overview of parks and reserves in the South Pacific Commission region using the standardised IUCN classification He found that there were: 15 areas as national or provincial criteria. parks (Category II), 39 areas as nature reserves and sanctuaries (Category IV), 24 strict nature reserves (Category 1), 2 protected landscapes (Category V), a multiple land use management area (Category VIII), a forest reserve (Category VI) and a biosphere reserve (Category There are also a large number of other areas which have been proposed as suitable sites in need of protection.

The results from the training survey and the above information indicate that the development of protected area systems is more advanced in a few specific island countries, such as Western Samoa. Often this reflects previous assistance programmes from countries such as New Zealand, geared towards the establishment of reserve systems. Most countries however, have a very limited number of protected areas.

Despite this most countries indicated in the survey that they were likely to increase the number of protected areas. The likely increase in the number of protected areas in the region was also foreshadowed in the Action Strategy which listed the following task under objective C2.(2).

"Attempt to achieve the following targets within the next

four years:

- the establishment of at least one protected area in each country and territory of the region and to establish an additional 50 protected areas in the region as a whole, and
- an increase to 40% the number of ecosystems receiving some kind of protection".

3.2. EXISTING STAFF AND SKILL LEVELS

The managing authority, the number of staff involved in protected area management in each country and existing skill levels are as follows: (this information was derived from the Training Needs Survey)

Western Samoa (Forestry Division, Department of Agriculture, Forests and Fisheries)

5 staff, including 2 professional foresters, 1 peace corps volunteer with an environmental science degree, 1 staff member with a Diploma of Agriculture and 1 with no formal training. A number of staff attended the inaugural protected area managers training course in Apia in 1985 and one staff member has attended the national park management training course in New Zealand.

<u>Tonga</u> (Ministry of Lands, Survey and Natural Resources, Environmental Planning Section)

3 professional staff and 5 labourers.

Staff Skills:

BSc (Environmental Science), Murdock University, Western Australia B (Applied Science), Queensland Institute of Science, Queensland Staff also have general skills in the areas of

* surveying

* landscape design

* energy conservation

Cook Islands (Conservation Division, Ministry of Internal Affairs)

6 staff

Staff Skills include:

- * B(Sc) Geography Otago (New Zealand)
- * Certificate in Geology

* Draughting Certificate

* Other courses attended: Protected Area Managers Training Course, Apia 1985; Coastal Mapping Workshop; Ocean Resources Management Workshop

Marshall Islands (Environment Protection Authority, Resources and Development, Maritime Authority)

No specific staff involved in protected area management at this stage.

Staff with the authority have the following backgrounds:

* Environmental Protection Authority Manager - Biologist with background in environmental management.

* Resource and development staff - staff members with experience in commercial fisheries.

Federated States of Micronesia (Department of Resources and Development) 15 to 18 staff.

Staff Skills include:

1 with Forestry degree.

Existing staff lack academic qualifications and long term training.

Nothern Marianas (Responsibility divided between Department of Coastal Resources Management and Department of Natural Resources)

2 staff

Staff Skills include:

* College Degree - Biology and Fisheries

* 2 week course in marine parks

* SPREP Protected Area Managers Training Course (1985)

Solomon Islands (Ministry of Natural Resources)

No staff currently involved in protected area management. Still awaiting formal establishment of protected areas.

Fiji (National Trust for Fiji and Ministry of Forestry) 4 staff

Staff Skills include:

Two staff have tertiary qualifications. The other two are acquiring skills through working experience. Staff have attended various seminars and workshops to date.

<u>Niue</u> (Department of Agriculture, Forests and Fisheries)

No staff working full time on protected area management. Niue expect a student from the country will shortly undertake training at the diploma level in the marine and wildlife area.

French Polynesia (Department of the Environment - Services and Management)
No staff working full time on protected area management.

Palau (Palau Environmental Quality Board)

9 staff are employed by the Board. No staff working full time on Protected Area Management. A number of these have undertaken Bachelor of Science or equivalent degrees. Some of these staff have also undertaken training in coastal monitoring and laboratory procedures.

Vanuatu (Environment unit, Ministry of Lands, Energy and Rural Water Supply)
No staff are specifically involved in protected area management.

New Caledonia (Protected area management responsibilities divided between: Committee for Conservation of Environment; Forest Service and Natural Resources; Dept. of Mines and Energy).

20 staff are employed by the above departments. There is one person mainly employed on protected area management. Of the 20 staff, there are 8 with Tertiary qualifications (Engineering and Forestry) and 12 Technical staff.

- 3.3. IMPLICATIONS FOR PROTECTED AREA MANAGEMENT TRAINING
- 3.3.1. There are a very limited number of protected areas in the South Pacific. However, it is anticipated that both the total number of protected areas and the range of protected area types (i.e. IUCN Reserve categories) will increase in the future. There will thus be an increasing demand for appropriately trained personnel to effectively manage these areas. Relevant agencies should thus be encouraged to employ staff with relevant Protected Area Management skills.
- 3.3.2. In many countries there are no bodies with specific responsibility for protected area management. Where departments exist, specific responsibilities for protected area management are often fragmented between a number of different departments. This currently acts as a barrier to the identification and implementation of training programmes.
- 3.3.3. The survey of existing staff skills indicated that there are very few staff specifically involved in protected area management. Staff that are involved often do not have specific training in protected area management and often are trained in other disciplines, such as Forestry. In South Pacific protected area management agencies there appear to be two broad levels of staff: professional (eg scientists, foresters) and operational The distinction between these categories is often support (labourers). blurred in the South Pacific. This differs from protected area management agencies that exist in countries such as New Zealand, Australia and Canada where there are usually three levels of staff : senior headquarters (involved in policy and administration), middle range field staff (involved in field administration and supervision) and field support staff (involved in on the ground implementation of programmes). These agencies are also characterised by a high level of specialisation, in areas such as research and interpretation. The limited number of staff available in South Pacific countries means that existing staff are often called upon to undertake a wide range of duties, from mending a fence to carrying out a vegetation survey. There is not the degree of specialisation that exists within protected area management agencies in countries such as Australia and New Zealand.

The key implication is that training programmes should initially concentrate on the development of practical all round skills i.e. there should be an emphasis on producing generalists rather than specialists. Training should focus on the initial acquisition of basic skills with the subsequent development of more specialist skills.

- 3.3.4. There are a number of work areas and work environment characteristics that are particularly relevant in the South Pacific. These include the following:
 - * Protected area managers in the South Pacific must be prepared to work in isolated areas and must frequently work within or with a local community that is often unsure of the functions and responsibilities of that manager. The community is often suspicious of any development that may impinge on existing land rights.
 - * The manager will often be working with few, if any, support staff and with very little equipment and machinery. This again emphasises the need for staff to develop all round, practical skills. The need for liaison with local communities also underlines the important emphasis that should be placed on the development of communication and information skills.

Eaton (1985) suggests the following as the list of specific knowledge and skills which should be considered in establishing the objectives of any training courses:

- "(a) An understanding of national parks philosophy and organisation.
 - (b) A working knowledge of the planning of park services.
- (c) An understanding of customary land tenure and of the land administration procedures necessary to acquire land for parks.
- (d) A knowledge of relevant environmental legislation.
- (e) A working knowledge of law enforcement procedures
- relating to search, seizure, apprehension and arrest.

 (f) An understanding of the basic principles of ecology; a knowledge of the elements which make up the natural environment of the park; an ability to identify the main plant and wildlife species.
- (g) A knowledge and understanding of park interpretation, education and extension skills.
- (h) An ability to read maps, interpret aerial photographs and make simple chain and compass surveys.
- (i) An elementary knowledge of road, footpath and building construction and maintenance.
- practical knowledge of search and rescue, fire-fighting and first aid.
- (k) The ability to drive and maintain vehicles and outboard engines.
- (1) An ability to correspond with headquarters, other government departments and the public, to write reports and keep simple accounts."

This broad listing indicates the immensity of the task of training Protected Area Managers in the South Pacific. The unique circumstances of the South Pacific listed above suggest an emphasis on communication and local liaison skills is required.

TRAINING NEEDS

4.1. SURVEY RESULTS

This section outlines the results arising from the "future priorities" section of the training needs survey (Appendix A - Questions 12.1, 12.2, 12.3, 12.4 and 12.5).

Table 1 summarises the responses from countries to the question "What would be the priority for the following courses within your country?" This table outlines the priorities for the <u>Specific Subject Areas</u>, listed under this question.

TABLE 1 COUNTRY PRIORITIES FOR SPECIFIC TRAINING COURSES

SPECIFIC TRAINING AREA	NUMBER OF RESPONSES (*.**)	PERCENTAGE OF TOTAL	RANKING
Preparation of management plans for protected areas	13	12.6%	1
Environmental impact assessment	11	10.7%	2
(Documentation of natural resources (fauna and flora)	10	9.7%	3
Enforcement techniques	10	9.7%	3
Communications and public relations, covering public speaking, radio interviews etc	9	8.7%	5
Techniques for regulating visitor use of protected areas	9	8.7%	5
Preparation of materials (displays, shows, audio- visuals, slide talks)	8	7.8%	7
Facility design and construction	7	6.8%	8
Radio operation/communication	5	4.9%	9
Documentation of Social (visitor use) information.	5	4.9%	9
Small boat handling	4	3.9%	12
Safety/first aid	4	3.9%	12
Four wheel drive	3	2.9%	14
	103		

NOTES: * These responses are only for those marked "HIGH PRIORITY" next to the relevant course.

^{** 13} countries were involved in the survey

Table 2 summarises the country responses to the question "What would be the priority for the following course within your country?" This table outlines the priorities for the broad subject areas, listed under this question.

TABLE 2 COUNTRY PRIORITIES FOR BROAD TRAINING AREAS

BROAD TRAINING AREA	NUMBER OF RESPONSES (*,**)	PERCENTAGE OF TOTAL	RANKING
Protected area planning (Q12.5)	24	29.3%	1
Interpretation and Public relations (Q12.2)	17	20.7%	2
Visitor Management (Q12.4)	16	19.5	3
Documentation of the resource (Q12.1)	15	18.3%	4
Basic Courses (3)(Q12.3)***	10	12.2	5
	82	100	

^{*} These responses are only for those marked "HIGH PRIORITY" next to the relevant course.

^{** 13} countries were involved in the survey

^{***} Number of responses scaled down for Q12.3 i.e. this question had more response categories than other questions

4.2. OTHER TRAINING NEEDS

A number of other specific training courses were put forward by individual countries, in addition to those outlined in section 4.1. These are as follows:

Western Samoa

Request for short term external correspondence training in Park Management and Environmental Impact Assessment.

Federated States of Micronesia

Request for two week course on Marine Conservation and Resource Management, to be held in the country, covering the assessment of use impacts on marine resources and surveillance techniques for reserve patrolling.

Marshall Island

Baseline ecological surveys and monitoring of populations of endangered species.

Tonga

Request for park ranger training in New Zealand, including attendance for one staff member at the 16 week Centennial National Park Training course.

Cook Islands

Training on marine environment resource survey and management.

Vanuatu

Training in coastal zone management and development planning.

In addition to the above, the following countries indicated a need for training in the area of community information and education: Fiji, Guam, Northern Marianas and Wallis and Futuna.

4.3 IMPLICATIONS

- 4.3.1. The information arising from the training needs survey indicates the following highest broad priorities for protected area management training in the South Pacific.
 - 1. Protected Area planning
 - 2. Interpretation and public relations
 - 3. Visitor management
- 4.3.2. The following highest <u>specific</u> priorities for courses were identified in the Training Needs Survey.
 - 1. Preparation of Management Plans for protected areas.
 - 2. Environmental Impact Assessment.
 - 3. Documentation of Natural Resources (Fauna and Flora).
 - 4. Enforcement Techniques.

4.3.3. These priorities should be incorporated into a strategic plan for training Protected Area Managers in the South Pacific. This plan should be co-ordinated by the Protected Areas Management Officer at SPREP in consultation with the SPREP Environmental Education and Information Officer. This plan should indicate priorities for training courses, (based on the information outlined in 4.3.1. and 4.3.2.), the time frame for implementation and the likely sources of funding.

TRAINING OPTIONS

5.1. SURVEY RESULTS

This section outlines the results from the "implementation of training courses" section of the training needs survey.

(Appendix A - Question 13).

Table 3 summarises the responses from countries to the question "What would be the priority for the following training options for your country?"

TABLE 3 COUNTRY PRIORITIES FOR DIFFERENT TRAINING OPTIONS

SPECIFIC TRAINING OPTION *	NUMBER OF RESPONSES **	PERCENTAGE OF TOTAL	RANKING
Secondment of staff from island country to Australia and/or New Zealand for intensive training	9	26.5%	1
Regional	9	26.5%	1
Secondment of staff from Australia/New Zealand or SPREP to island country as trainers	8	23.5%	3
Island/local	5	14.7%	4
Sub-regional	3	8.8%	5
	34	100	+

^{*} REGIONAL refers to the region defined in terms of the South Pacific Conference area (covering 22 island countries)
SUB-REGIONAL refers to Melanesia, Micronesia and Polynesia
ISLAND/LOCAL refers to individual countries or islands within each sub-region

^{**} These responses are to the "best option" category in Question 13.

There were also a number of general comments made by island countries in response to this question.

Tonga suggested the introduction of correspondence courses on environmental matters between Australia and New Zealand.

Federated States of Micronesia suggested that training needs to be followed up by the visit of trainers to reinforce issues covered in the training course.

Marshall Islands stressed the advantages of regional training as providing the opportunity to examine successful case studies in island countries.

Cook Islands strongly emphasised that it would be most beneficial to island countries if training was held on a sub-regional or island level.

<u>Vanuatu</u> suggested that ideally staff should be trained overseas first before seconding staff from overseas to island countries. Overseas staff should work closely with local staff to maximise the value of their presence.

<u>Fiji</u> suggested that island/local courses should only be a priority when the training course is focussed on a specific issue within the country or island. Fiji also suggested that training should draw on experiences from other similar regions in the world if possible e.g. South East Asia. (Similar in terms of physical, social and cultural environment).

5.2. IMPLICATIONS

- 5.2.1. It is clear from the results in Table 3 that there is no one answer to the best option of implementing training in the South Pacific. The best strategy would appear to involve a mix of the top three priorities in Table 3: secondment of staff from island countries to Australia/New Zealand; regional training courses; and secondment of staff from Australia/New Zealand to island countries. Although there is a strong preference for regional courses these are often very expensive and local and sub regional courses are often more cost effective. For regional courses to be effective it is essential that there are sufficient participants who are actively engaged in park management and who will continue to be working in that field for some time.
- 5.2.2 There are a number of guidelines that should apply to training Protected Area Managers in the South Pacific. These include:
 - * There should be an emphasis on "follow up" of training programmes. To facilitate this SPREP should maintain a register of staff who have undergone training in the region together with their employment record.
 - * Overseas seconded staff should work closely with local island staff.
 - * Where possible experiences from regions of the world with similar issues should be used in training.

ASSISTANCE REQUIRED FOR ISLAND COUNTRIES

6.1. SURVEY RESULTS

All countries indicated they would require funding for all participants who would attend courses at the Regional and Sub-regional level. The assistance required includes travel and per diem payment. Some of the countries indicated that they would be able to provide limited funding for courses which were held at the island and local level. The costs for attending training courses are hard to estimate. The key costs of travel and per-diem vary according to the location of the training course and the total number of participants. Some training courses will also require equipment and other back up aids.

6.2. SAMPLE COSTS OF TRAINING COURSES

Training courses and meetings in the South Pacific suffer from a common problem: that of high costs. Some examples of course/meeting costs that have been administered by SPREP are as follows:

Fourth Meeting of Experts on a Convention for the Protection and Development of The Natural Resources and Environment of the South Pacific Region.

Travel for one participant per country/territory

 (20 participants)
 \$19,010.00 (US)

 Per diem for 20 x 17 days
 \$24,878.00 (US)

 TOTAL
 \$43,888.00 (US)

The total costs of the Third South Pacific National Parks and Reserves Conference (1985) was \$50,670 (US) which covered fares and per diem expenses for participants, consultant fares and per diem, incidentals, photocopier hire, entertainment, transport, freight and documents. Although these conferences represent the extreme end of the budget range they provide an indication of the high costs of travel and participant living expenses in the South Pacific.

6.3 IMPLICATIONS

6.3.1. The main implications from the above sections are that funding will be required from external (non island) sources for training courses and also that costs associated with training in the South Pacific are very high. These two factors underline the need for protected area management training in the South Pacific to be cost effective, both in terms of benefits to individual participants and also in terms of the relevance and utility to countries who send participants. In view of the high costs that are involved in training in the South Pacific, there should be an emphasis on reducing costs wherever possible. Options to address this could include:

* reduction in participant per diem (for example, by camping and/or use of existing accommodation rather than by payment of direct per diem)

* investigation of cheaper training options where possible, such as the implementation of relevant correspondence courses for protected area managers. The high cost of regional courses suggest that the emphasis should be placed on island/local training courses where possible.

6.3.2. Specific proposals for funding must be a key element of any training programme for protected area managers in the South Pacific. Training programmes will not succeed unless they are serviced with the requisite resources.

Thus potential avenues for funding should be identified and approached. Possible sources include:

* bilateral aid programmes from Australia and New Zealand. (The 1976 Apia Convention should provide a lever for obtaining funding, for this and other purposes).

* Direct assistance from National Parks Agencies in Australia and New

- Zealand.
- * WWF/IUCN
- * SPREP
- * World Heritage Fund of UNESCO

It is essential that adequate planning and documentation precede approaches to potential funding organisations. Training proposals must be presented as clearly defined packages which identify objectives (what is to be achieved) and strategies (how it is to be achieved). This pre-planning should facilitate the most cost effective use of resources and also increase the likelihood of funding success.

It is also considered that the existing SPREP allocation to training should be increased. This is considered justified in terms of the high priority accorded to this area in the Action Strategy.

EXISTING TRAINING COURSES IN THE SOUTH PACIFIC

These are a number of training courses for protected area managers that exist within the South Pacific, Australia and New Zealand.

7.1 ACADEMIC INSTITUTIONS WITHIN THE SOUTH PACIFIC

There are a number of academic institutions within the region that have an environmental theme. However, there is no one course in the South Pacific that deals specifically with protected area management. This no doubt reflects that limited current demand for such a course in the South Pacific. As noted previously these are very few staff involved in this area in the South Pacific; there is thus limited justification for a course devoted to this topic. Existing South Pacific protected area managers that have been trained in the region have generally been trained in a related discipline, such as forestry. Courses that are currently available within the region and that have relevance to protected area management are as follows:

7.1.1. Papua New Guinea

The Forestry College at Bulolu offers two or three year courses leading to either a certificate or Diploma in Forestry. This course has provided a major source of training for most park rangers in Papua New Guinea. The University of Papua New Guinea offers a one year Diploma in Land Administration, which stresses management skills and knowledge relevant to land management and the optimum use of terrestrial resources. The University of Papua New Guinea also offers specific environmental units as part of the Bachelor of Science and Bachelor of Arts degrees.

The <u>Papua New Guinea University of Technology</u>, LAE provides education and training in areas of Technology required for island development. The University has incorporated environmental training into all its courses rather than establish it as a separate programme.

7.1.2. Fiji

The University of the South Pacific in Fiji offers a range of degree and diploma courses devoted to environmental management training. The most relevant courses are a 4 year Bachelor of Science in Environmental Studies and a Bachelor of Arts in Social Science. Both of these courses concentrate on Pacific Island resources and natural environments. The University of the South Pacific also organises short, in-service courses on environmental issues which can be provided on request and tailored to specific regional or national needs.

7.1.3. Guam

The University of Guam provides environment oriented associate and Bachelor of Science degrees in agriculture, biology and general sciences. There is a strong emphasis on marine ecosystem management at the University.

7.1.4. Overview of Regional Academic Courses

There are a number of courses in the region that cover broad environmental issues. These courses have the major advantage of being oriented towards the unique environmental circumstances of South Pacific countries. However there are no courses that are specifically oriented to training protected area managers in the South Pacific. It is considered that the best academic training option in the long term should be for the establishment of specific academic training courses within the region relating to protected area management. This need was identified by a number of countries in the training needs survey. For example,

Vanuatu specifically requested that a course oriented to the needs of protected area managers in the region should be developed. The role of universities in the region in the area of short term intensive training for protected area managers should also be promoted.

In the short term other options should be considered. These include attendance of South Pacific protected area staff at courses in Australia and New Zealand. There are a number of courses which are relevant and these are detailed in section 7.2. These courses have the advantage of focusing specifically on protected area management. However, this option has the disadvantage of the lack of specific relevance to South Pacific conditions. Although trainees/students are encouraged to often relate the courses to the situation in their own country, they usually have to work in very different conditions and face different problems when they return.

The trainees/students often have to be away from their home countries for a long period of time. This means that the protected area management agency, which in most cases is already short of staff, is further depleted of competent personnel. The long period overseas can also cause domestic problems as staff are not usually able to take wives and children with them. (Eaton 1985)

7.2. ACADEMIC INSTITUTIONS IN AUSTRALIA AND NEW ZEALAND

There are a number of courses in Australia and New Zealand that are oriented to the management of national parks and protected areas. These courses are summarised in Table 4. below.

RELEVANT ACADEMIC COURSES AVAILABLE IN AUSTRALIA AND NEW ZEALAND FOR PROTECTED AREA MANAGERS

TABLE 4

INSTITUTION	AWARD	COURSE	PREREQUISITES	COMMENTS
Canberra College of Advanced Education (CCAE) PO Box 1, Belconnen, ACT 2616	Bachelor of Applied Science	3 years full time Up to 10 years Part time	3 years full time New South Wales Higher Up to 10 years School Certificate or Part time equivalent	* Entry requirements may be varied by the College, especially in the case of mature, experienced applicants. * This course has a strong emphasis on land and reserve management
CCAE	Graduate Diploma in Resource Management	1 year full time Up to 4 years part time	Graduate degree or comparable award	* Short, intensive course * Has been undertaken by a number of overseas students. * Entry requirements may be varied. * Allows for specialisation in a number of areas. * Graduate diploma in recreation management is also offered.
CCAE	Master of Applied Science in Resource Management	2 years full time	Completion of Graduate Diploma in Resource Management or appropriate Honours undergraduate degree	years full time Completion of Graduate * One year Thesis in addition to Diploma in Resource Completion of Graduate Diploma in Resource Management. Resource Management. Resource Management. * Combinations of course work and Thesis can be adopted. * This course can be undertaken externally.
	T			

RELEVANT ACADEMIC COURSES AVAILABLE IN AUSTRALIA AND NEW ZEALAND FOR PROTECTED AREA MANAGERS TABLE 4 cont...

INSTITUTION	AWARD	COURSE	PREREQUISITES	CUMMENTS
Macquarie University, Balaclava Road, North Ryde, NSW Australia	Diploma of 2 years Environmental Studies Masters Degree 2 years in Environ- mental Studies		part time Degree or prior work experience full time Degree	
New England University, Armidale NSW	Bachelor of Natural Resources	4 years full time	full time New South Wales Higher School Certificate	
Murdoch University, Murdoch, 6153 Bachelor of Western Australia Science	Bachelor of Environmental Science	Full time 3 years Part time 6 years	3 years University admission 6 years	
Riverina College of Advanced Education, Albury Wodonga Campus PO Box 789, Albury NSW 2640	Associate Diploma in Park Manage- ment	4 years part time correspondence study	part time NSW Higher School Certificate or equiva- lent, Work experience is taken into account for admission of mature age students	* It is anticipated that this course will shortly be upgraded to a degree course. * This course has been developed specifically to provide training for protected area managers.

CONT... RELEVANT ACADEMIC COURSES AVAILABLE IN AUSTRALIAN AND NEW ZEALAND FOR PROTECTED AREA MANAGERS TABLE 4

INSTITUTION	AWARD	COURSE DURATION	PREREQUISITES	COMMENTS
Queensland Agricultural College, Lawes, Queensland 4343		4 semestors of study over a two year period		* This course has been designed to provide training for rangers in the Queensland National Parks and Wild-life service. * A wilderness reserves and wildlife course is run at the QAC as part of the College's Associate Diploma Course of Rural Techniques.
Lincoln College, Canterbury New Zealand or Contact: Director, Department of Conservation, Head Office Private Bay, Wellington, New Zealand	Diploma in Parks and Recreation	34 years	For the Diploma course the college requires overseas students to complete the certificate in National Park Training as a prerequisite to the Diploma Course	* The Lincoln for designed specification of rand overseas.Toriented and hother training of the training of the Diploma 1987.

TABLE 4 CONT... RELEVANT ACADEMIC COURSES AVAILABLE IN AUSTRALIAN AND NEW ZEALAND FOR PROTECTED AREA MANAGERS

INSTITUTION	AWARD	COURSE DURATION	PREREQUISITES	COMMENTS
Lincoln College	Certificate in 2 years Parks and Recreation	2 years	Available for overseas students only	Available for overseas This programme combines: * the certificate in National Park Training (refer below) * 4-6 months practical work in parks and reserves * 1 Academic year at Lincoln College.
				The practical work experience is undertaken at at least two separate locations under the supervision of experienced rangers.
Lincoln College	Certificate in 26 to 29 National Park Training	26 to 29 weeks		* This course is a practical, operations level training course * Course is based at the Department of Conservation's training centre at Turangi.
Lincoln College	Special purpose study tours	As required		* These tours are tailored to individual needs and provide an opportunity for an overseas office to examine Park Management activities in New Zealand * Study tours are usually restricted to Senior/Experienced Officers.

There are a large number of academic courses that relate to the environmental and natural resource area in Australia and New Zealand. A deficiency that most of the courses has is the lack of relevance to South Pacific conditions. However, two of these courses appear to have particular relevance and merit for application in the South Pacific: The Associate Diploma in Park Management at the Riverina Campus in NSW, Australia and the training Programmes offered at Lincoln College in New Zealand. The Lincoln College training courses have a strong emphasis on the training of overseas park managers. The courses are practically oriented and can be combined in different ways to meet the individual needs of an overseas parks or protected areas officer.

To date there has been some liaison between SPREP and the Lincoln College to ensure that the training courses adequately reflect South Pacific region training needs. It is considered that the Lincoln College courses have the greatest potential to meet South Pacific training needs and SPREP should continue their liaison with the College.

The <u>Riverina CAE</u> course has the advantage of being practically oriented: largely undertaken by correspondence and having been designed specifically for the training of protected area managers. Discussions with the course co-ordinator at the <u>Riverina CAE</u> have indicated that they are interested in future involvement in the training of protected area managers in the South Pacific. It is considered that the <u>Riverina CAE</u> should be approached by SPREP to obtain information on the possibility of developing an appropriate correspondence course geared specifically to South Pacific conditions. Such a course could either be a "stand alone" course or it could be part of the overall accredited course at the Riverina CAE.

7.3. RELEVANT SHORT COURSES IN AUSTRALIA AND NEW ZEALAND There are a number of courses in the area of park management that provide intensive short term training and would be relevant for South Pacific managers. The main relevant courses are:

- * The Summer School of Park Management, Canberra College of Advanced Education. This is a one week residential course held each year in Canberra in the January/February period. The course is attended by staff working in the field of park and reserve management and attendance is usually drawn from each Australian state and overseas countries. Contact: Summer School of Park Management, c/- CCAE, PO Box 1, Belconnen, ACI, Australia, 2616.
- * Council of Nature Conservation Ministers (Concom) Course for Senior Field Managers, Australia. This course is offered for Australian and overseas park managers. This course is modelled after the International Short Course in Park Management in North America and would be particularly relevant for middle to senior level management staff in South Pacific countries. Course contact: Concom Training Course, c/- Australian National Parks and Wildlife Service, PO Box 636. Canberra ACT.
- * New Zealand National Parks and Protected Areas Operational Training Course for overseas park officers. This course has been organised by the Department of Conservation and will be run in New Zealand from 19 August to 4 December, 1987. This course will provide the major training opportunity for South Pacific Protected Area Managers in 1987

and maximum participation should be encouraged from island countries. The New Zealand Government is providing assistance for expenses for island delegates. Course contact: Director, National Parks and Reserves, Department of Lands and Survey, Private Bag, Wellington, New Zealand.

Each of the above courses is particularly relevant to the area of Protected Area Management. Course Co-ordinators for each of the above should be approached by SPREP to ascertain course details and assistance available.

8. RECOMMENDATIONS

- Protected area management agencies in the South Pacific should be encouraged to employ staff with relevant protected area management skills. (3.3)
- Training programmes in the South Pacific should initially concentrate on the development of practical all round skills in protected area management. (3.3)
- 3. A strategic plan for training protected area managers should be prepared by SPREP, under the co-ordination of the Protected Area Management Officer. This plan should be based on the priorities outlined in Section 4 of this report. (4.3)
- 4. The best strategy for implementing training courses in the South Pacific should involve a mixture of: secondment of staff from island countries to Australia/New Zealand; regional training courses; and secondment of staff from Australia/New Zealand to island countries. (5.2).
- 5. There are a number of guidelines that should apply to training Protected Area Managers in the South Pacific. These include:
 - * There should be an emphasis on "follow up" of case studies.
 - * Overseas seconded staff should work closely with local island staff.
 - * Where possible experiences from regions of the world with similiar problems should be used in training. (5.2).
- Options for reducing training costs, such as outlined in 6.3.1., should be investigated. (6.3)
- Specific sources for external funding should be identified by SPREP and approached. (6.3)
- 8. The existing SPREP allocation for training should be increased. (6.3)
- A specific training course for protected area training should be developed within the South Pacific region. Existing institutions listed in 7.1 should be approached by SPREP with a view to initiating such a course. (7.1)
- 10. The role of universities in the region in the area of short term intensive training for protected area managers should be investigated. (7.1).
- 11. SPREP should continue their liaison with the Lincoln College in New Zealand to ensure that their training courses adequately reflect the requirements of South Pacific countries in the Protected Area Management area.
- 12. The <u>Riverina CAE</u> in NSW, Australia should be approached with a view to developing a correspondence course for protected area managers in the South Pacific. (7.2).
- 13. Course co-ordinators for relevant short courses in Australia and New Zealand should be approached by SPREP to ascertain course details and assistance available. (7.3).

REFERENCES

- Eaton, P. (1985): <u>Training for Conservation Area Management in the South Pacific Region</u>

 Paper to Third South Pacific National Parks and Reserves Conference.
- Thorsell, J. (1985): Options for Training of Protected Area Managers in the Pacific
 Paper to Third South Pacific National Parks and Reserves Conference.

APPENDING A

TRAINING NEEDS SURVEY FORM EXAMPLE OF COMPLETED FORM

BASIC COUNTRY INFORMATION

١.	COOK ISLAN'S
2.	Name of principal body(s) responsible for protected area management: CONSERVATION FIVISION, MINISTRY OF INTERNAL AFFAIRS
3.	Name and position of contact person(s): -IPECTOR OF CONSERVATION
4.	CONSERVATION VIVISION, MINISTRY OF INTERNAL AFFAIRS
-106	P.O. BOX 98, RAPOTONGA, COOK ISLANUS
5.	Phone number:29370
6.	
7.	SUWARROW ISLANI NATIONAL PARK, LANY AREA 168 HECTAFFO
	(INCLUTING LANT APPA 13350 KM

^{*} For the purposes of this survey, protected area refers to a marine or terrestrial area set aside and primarily managed for nature conservation purposes.

EXISTING STAFF AND SKILL LEVELS

8.	How many staff are involved in protected area management in your country? 3 IN PAROTONGA, 1 IN ATIU, 1 IN MAUFF AND 1 IN SUWAPROW A TOTAL OF 6
9.	What type of skills do these staff have? (list tertiary and technical qualifications):
	PROFESSIONALLY QUALIFIED IN GEOGRAPHY, GEOLOGY, LAND DEVELOPMENT AND SEMI-QUALIFIED PARK MANAGEMENT
	Too on the contract of the con
	BSC, OTAGO, GEOGRAPHY: CEPTIFICATE IN GEOLOGY VICTORIA AND USP, DRAFTING CEPTIFICATE; HONIAPA TECHNICAL INSTITUTE; NZCE, NZ

	PRIMARY AND SECONDARY SCHOOLS
10.	Please list additional training undertaken e.g. short courses attended, staff secondments, etc.:
	PARK MANAGEMENT TRAINING FOF RANGERS - APIA COASTAL MAPPING
	WORKSHOPS (CCOP/SOPAC); OCEAN PESOUPCES MANAGEMENT WORKSHOP - TONGA.
11.	Do you have any other comments about existing skills of staff within your organisation?
	EXISTING SKILLS WITHIN THE DIVISION COVERS A WIDE RANGE. YOUTH AND
	COMMUNITY ORGANISATION OF PROJECTS: SURVEYING TECHNIQUES WHICH INCLUDES
	COASTAL MAPPING, GEOLOGICAL MAPPING, BATHYMETRIC MAPPING USING DATA
	ANALYSIS OF MARINE GEOPHYSICAL DATA; MANAGEMENT OF HISTORIC SITES, IN
	CLUDING SURVEYING, RESTORATION AND STABILIZATION; DRAFTING; PUBLIC
	RELATIONS AND OTHER ACQUIRED KNOWLEDGE ON FISHERIES AND FORESTRY FROM
	EXPERIENCE.

FUTURE PRIORITIES FOR TRAINING PROTECTED AREA MANAGERS

There are a number of training courses that could be organised for protected area managers in the South Pacific. The following questions attempt to obtain your views on the priorities for training within your country. Please mark accordingly.

- 12. What would be the priority for the following courses within your country?
- 12.1 Documentation of the resource (covering techniques for collecting and using information and applications)

	High priority (1986/1987)	Medium priority (1988/1990)	Low priority (1990/1994)
- Natural resources (fauna and flora)			
- Social (visitor use information)			
12.2 Interpretation and public relations			
- Preparation of materials (displays, shows, audio- visuals, slide talks)			
 Communications and public relations, covering public speaking, radio interiews etc. 	(¥		
12.3 Basic courses			
- Search and rescue			1
- Small boat handling		0	V
- Four wheel drive	1.1		~
- Radio operation communication	4		
- Enforcement teanniques	1		
- Safety/first aid		V	

12.4 Visitor management		
- Facility design and construction (including tracks and signs)		
- Techniques for regulating visitor use of protected areas	Daniel II	
12.5 Protected area planning		
- Preparation of management plans for protected areas		
- Environment impact assessment		
12.6 Other		
Please indicate any other training areas particularly in relation to marine reserves	that are not	covered above
MARINE RESERVES, ENFORCEMENT		
Vica me	1 14 1	20°

IMPLEMENTATION OF TRAINING COURSES

There are various ways in which training courses could be implemented in the South Pacific. SPREP is interested in your opinions on the following options.

13. What would be the priority for the following training options for your country?*

	Best Option	Neutral	Worst Option	
			TY.	
- Regional				
- Sub-regional				
- Island/local	The second			
 Secondment of staff from your country to Australia and/or New Zealand for intensive training 	F			
- Secondment of staff from Australia/New Zealand or SPREP to your country as trainers				
- Other options? Please comment				
SECONDMENT OF STAFF FROM	MY COUNTRY	TC AUSTRA	ALIA	

^{*}REGIONAL refers to the region defined in terms of the South Pacific Conference area (covering 22 island countries)

^{*}SUB-REGIONAL refers to Melanesia, Micronesia and Polynesia

^{*}ISLAND/LOCAL refers to individual countries or islands within each sub-region

GENERAL

14.	What as: staff a							try require	for
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				*****	• • • • • •				•••••
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	REGIONAL	OF IS	SLAND/LO	CAL LE	EVEL.				
						x discra		*******	CPARCON CONTROL
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