



# Pohnpei State

## Biodiversity Strategic Action Plan



September 2004

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## **Acknowledgements**

This Action (Implementation) Plan, together with the FSM National Strategic Action Plan (NBSAP), provides the framework for biodiversity conservation, resource, waste, pollution and energy management in Pohnpei State for the next five years and beyond. The plan is the result of numerous consultations over two years with input from national, state, local and resource agency/organization leaders and community representatives. This Plan includes the most relevant strategies goals and actions for Pohnpei State's priority areas in biodiversity conservation, resource, waste, pollution and energy management.

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Pohnpei BSAP Meeting, August 2004

## Acronyms

AG – Attorney General	MERIP – Marine Education and Research Institute of Pohnpei
APIL – Association of Pacific Island Legislatures	MMG – Madolenihmw Municipal Government
CCO – Community Conservation Officer	MPA – Marine Protected Area
CES – Community Extension Services	NBSAP – National Biodiversity Strategic Action Plan
CEU – Conservation Enforcement Unit	NDG – Nett District Government
COM-FSM – College of Micronesia – FSM	NDL – Nett District Legislature
CRE – Cooperative Research and Extension	NGO – Non-Governmental Organization
CSP – Conservation Society of Pohnpei	NMG – Nukuoro Municipal Government
DA – Division of Agriculture	PATS – Pohnpei Agriculture and Trade School
DEM – Digital Elevation Model	PPM – Plant Protection Micronesia
DF – Division of Forestry	PRMC – Pohnpei Resource Management Committee
DIHS – Department of Health Services	PSL – Pohnpei PSL
DL&NR – DL&NR	PUC – Pohnpei Utilities Corporation
DMC – Division of Marine Conservation	SMG – Sokehs Municipal Government
DMD – Division of Marine Development	SOEA – State Office of Economic Affairs
DOE – Department of Education	SPC – Secretariat of the Pacific Community
DPL – Division of Public Lands	TC&I – Office of Transportation, Communication and Infrastructure
DPS – Department of Public Safety	TNC – The Nature Conservancy
EPA – Environmental Protection Agency	UMG – U Municipal Government
FSM – Federated States of Micronesia	UNDP – United Nations Development Program
FSMDEA – FSM Department of Economic Affairs	USDA-NRCS – United States Department of Agriculture – Natural Resources Conservation Service
GDP – Gross Domestic Product	WFR – Watershed Forest Reserve
GEF – Global Environment Facility	
GIS – Geographic Information System	
HPO – Historic Preservation Office	
KMG – Kitti Municipal Government	
LRFT – Live Reef Fish Trade	
MCT – Micronesia Conservation Trust	

## 1 Introduction

The State of Pohnpei is comprised of the island of Pohnpei and nine outlying atolls scattered over more than a hundred thousand square miles of water. The island of Pohnpei, sometimes referred to as the “Garden Island of Micronesia”, is the largest in the FSM. It is where the capital is located, hence the center of most economic activities in the FSM. Although the State may be the most potentially threatened in terms of biodiversity conservation, trends and developments in the past few years in the area of conservation show promise of Pohnpei State heading in the right direction of sustainable development.

## 2 Pohnpei State Vital Statistics

<b>Pohnpei State Statistics</b>	
Location	159 - 163 degrees East, 2-8 degrees north
Population (2000)	34,486
% of total FSM Population	32%
Population Density (per sq. mile)	261
Relevant Areas	Land area – 211.2 sq. kilometers
# of Islands	1 high island, 9 distant atolls
Land Area for Agriculture	Not Available
Intact Native Forest	2002 4,100 ha.; 1995 – 5000 ha.; 1975 – 15,000 ha.
Vegetation	35,493 ha.
Ocean area	Approximately 1,942,491 sq. kilometers
GDP (2003)	94.84 million
GDP per Capita (2003)	2,718
% Exports of Imports	Not Available
Main Exports	Sakau (kava), fish, copra, pepper, bananas, betel nut and handicraft
Rainfall	Up to 8 meters/yr. Inland

### 2.1 Government

The State Government of Pohnpei is also structurally similar to the FSM National Government with the three separate branches of government: executive, legislative, and judicial with a Constitution similar to that of the United States. The Governor heads the Executive Branch with eight (8) cabinet members heading the main government department and offices. There are also semi-autonomous agencies such as the Environmental Protection Agency, which are headed by Directors or Administrators under the guidance of Boards. The DL&NR is the primary office mandated for resource conservation and works with other agencies such as the Environmental Protection Agency in the reviewing of development projects to ensure minimum impact to the environment.

The Department oversees terrestrial as well as marine conservation and works with other

partners such as EPA, the SOEA, Municipal Governments and the Attorney Generals Office. Partnerships with traditional leaders and non-government agencies such as The Nature Conservancy and Conservation Society of Pohnpei have also been established to tackle conservation issues.

Pohnpei state is divided into eleven (11) political municipalities (Madolenihmw, U, Kitti, Sokehs, Nett, Mwoakilloa, Pingclap, Sapwuafik, Nukuoro, Kapingamarangi and Kolonia Town). The main island is ringed by 25 smaller widely scattered coral atolls, which lie on the barrier reef.

## **2.2 Cultural Values**

The traditional culture of Pohnpei, which involves strong land and resource management components, is very much alive today and is still in large a strong influence on Pohnpeians' lifestyle. The traditional system still exists within activities observed throughout the year. Despite Pohnpei being the melting pot of the FSM, where people of various races and from islands throughout FSM reside, the Pohnpei culture is very much practiced and respected by the island residents. Several languages are spoken in FSM but three main languages are native to Pohnpei with three dialects. Western influence is most evident in the capital city of Kolonia where all aspects of western life exist. This influence is less striking in the rural areas. Never the less, traditional conservation and land management practices are now being heavily challenged with the ever increasing need for cash, thus affecting the way people view and deal with land and natural resources.

## **3 Biodiversity**

### **3.1 The Marine Environment**

Primarily mangrove forests totaling up to 5,500 hectares encircling the roughly circular island of 355 sq. km as well as the smaller lagoon islands surround the main island of Pohnpei. The extensive mangroves and mudflats extend out to sea grass beds and slope down to a lagoon that goes down to approximately 250 feet in depth. Numerous patch reefs are found in the lagoon which range from small isolated pinnacles to long ridges and intricately curved and branched reefs, several kilometers or more in length, which sometimes enclose both shallow and deep secondary lagoons. The barrier reef encircling the island and other reefs are estimated to be about 143.8 sq. km, together with other marine habitats of the State house approximately 1,000 fish species and 200 coral species. All of this marine area including mangrove and shoreline reef flat is owned by the State.

The major commercial species in Pohnpei are tuna, reef fish, trochus and some aquarium species. Sea cucumbers, sponges and pearl oysters are some species being explored for commercial use. Although the law regulates some reef fish, there is an exemption for use in traditional activities.

The nine distant atolls are typical atolls with sandy beaches, reef flats with seagrass beds, lagoons, patch reefs and barrier reefs. Some of the atolls also have small patches of mangrove stands.

### **3.2 The Terrestrial Environment**

The island of Pohnpei is the largest and highest in the FSM with rugged and inaccessible mountains in the interior of the island. Numerous rivers and streams line the island running out onto relatively extensive coastal lowlands. These are fed by the rain in the interior, which can reach up to 10 meters per year. This high volcanic island is 355 sq. kilometers with the highest peak at 795 meters in height. Eight other peaks reach over 600 meters as well. The habitats include mangrove, coastal strand forest, freshwater swamp (up to 300 meters), agroforests, lowland forests, secondary forest, savanna, upland palm forests (endemic palm) upland broadleaf forest, and the cloud forest. Vegetation is the most extensive covering a large percentage of the island. Upland forest and agroforest make up close to 70% of vegetation while mangroves make up 16%. The native forest is contracting rapidly due to agricultural activities and development primarily because of commercialization of traditional crops such as sakau (kava).

About 750 plant species of which 110 are endemic, 52 bird species with 13 endemic, numerous reptiles, freshwater fish and tree snails make these habitats their homes. Thus, Pohnpei hosts the most endemic species than any other FSM state and therefore justifies the reference of Pohnpei as the Garden Island of Micronesia. Such endemic species include the Pohnpei Red Lory (*Trichoglossus rubiginosus*), the Kurum Tree (*Parkia korom*), the Pohnpei Mountain Palm (*Clinostigma ponapensis*) and several others. Like the other States, some bats, birds, turtles and plants have made it on the internationally recognized endangered species lists.

Commercial farming is minimal with most people engaged in subsistence agriculture and a variety of cottage agricultural and handicraft industries. Pohnpei's pepper for example, though expensive, is exported and regarded as the finest in the world. Some other crops, which could be explored to increase export, include kava, betel nuts and bananas.

## **4 Trends**

### **4.1 Environmental Management**

Recent developments in the area of environmental management have led to more awareness of the issues related to biodiversity conservation and relatively better management of the resources of the State.

The State recently stepped up its efforts on the protection and management of the relatively extensive watershed areas of the island of Pohnpei, most especially in the State Watershed Forest Reserve (WFR – 5,000+ hectares), which was designated in 1987. Several programs on terrestrial species conservation and monitoring supported this management initiative. These



State government agencies' efforts are implemented in close partnerships with community groups, Municipal Governments, and some prominent environment non-government organizations, namely TNC and CSP. There is also recent legislation to protect marine areas as well as programs to monitor these areas and some of the destructive activities such as coral dredging. The State regulates some of the commercially viable species and fishing methods. Enforcement and awareness raising activities are also becoming more effective.

Communities are being heavily consulted in a coordinated manner and are getting more involved and even led by some of the traditional leadership with the government agencies and NGOs providing technical and other support. Some communities are taking a more active role by enforcing regulations and undertaking activities with government agencies. There are biodiversity awareness raising activities in the communities conducted by government as well as NGOs. There are also some restoration activities being undertaken particularly in the marine environment.

Despite the above, there are still threats and discouraging trends that must still be addressed.

## **4.2 Highlighted Threats**

As is common to the other States, major threats to Pohnpei's biodiversity are:

- **over-harvesting of resources;**
- **destructive harvesting methods;**
- **habitat destruction;**
- **increasing pollution;**
- **alien/invasives species; and,**
- **lack of public awareness or ignorance**

These are exacerbated by the increase in population, the change to western lifestyle and commercialization.

One of the most pressing issues in Pohnpei is sakau/kava planting in upland forest, which has led to extensive conversion of forests to agricultural use. A 2002 survey showed 4,100 hectares of remaining untouched native forest compared to 5,000 hectares in 1995 and 15,000 hectares in 1975. Fire, dredging and solid waste disposal in mangrove areas have contributed to environmental degradation and therefore affecting biodiversity. Dredging of coral for road fill/construction and other uses is a common occurrence in Pohnpei as well

Some constraints faced in protecting biodiversity in the State include financial and human resource limitations both in government and in the communities. The legal process to review development applications is also very lengthy and seen as anti-development.

# Pohnpei Map

## POHNPEI STATE Areas of Biodiversity Significance

29. Minto Reef

30. Oroku

30-01: Oroku ABS

31. Namia

32. amoluk

28. Nomoi

28-01: Satowan Is. -  
Nontoi Flying Fox ABS

31. Nukuoro

32. Kapingamarangi

34. Pakin 36. Pohnpei

35-01: Ahnd ABS

35. And

33. Ngalik

38. Pingelap

37. Mokil

37-01: Mokil ABS

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## 5 Vision, Mission, Strategic Goals and Objectives/Actions

### 5.1 Vision

*Pohnpei State will have more extensive, diverse, and higher quality marine, freshwater, and terrestrial ecosystems, providing sustainable resources and benefits to Pohnpei's residents.*

### 5.2 Mission

*The people of Pohnpei are actively protecting their natural and cultural resources and engaging in livelihoods based on traditional knowledge and modern day sustainable development practices.*

### 5.3 Strategic Goals and Objectives/Actions

**GOAL 1: Develop a 20 Year Vision for the State of Pohnpei, and complete the community visioning process in at least two municipalities**

Strategies	Lead Agency
Gain State and Municipal Government buy-in to the visioning process through a high level workshop involving external consultants by 2005	PRMC
Develop Community Visioning Steering Committee and conduct Community Visioning in all municipalities, followed by a state-wide program and pilot long-term vision and sustainable development plans for at least 2 municipalities in Pohnpei state by 2008	Governor's Office, PSL and Municipal Governments

**GOAL 2: Establish and implement a Comprehensive Pohnpei Lagoon Conservation Area Plan, including the development of a Marine Protected Areas Network and more effective management/enforcement of existing and new marine laws**

Strategies	Lead Agency
Build awareness of biodiversity conservation and fisheries management and disseminate relevant information to the public by 2005	SOEA-DMD, CSP and the COM-FSM
Conduct a rapid ecological assessment and necessary research to improve biological information on Pohnpei's marine biodiversity by 2005	SOEA-DMD and CSP
Expand the MPA Network by establishing at least one community led MPA per municipality by 2005	DL&NR, Municipal Governments and PSL
Develop and conduct a standardized biological and socio-economic monitoring program to evaluate/cage effectiveness/impact of MPAs on adjacent communities by 2005	SOEA-DMD, DL&NR-DF, CSP and COM-FSM
Reef resilience to climate change-caused coral bleaching will	DL&NR, EPA, FSMDEA and

be integrated into the MPA network design process in Pohnpei by 2009	NGOs
Establish temporary bans on the Live Reef Fish Trade (LRFT) and export of reef fish/marine products, and conduct research to determine sustainable export levels (if any) of fish and marine products by 2005	Governor's Office and SOEA-DMD
Prohibit the import of monofilament gill nets with gaps less than three inches (3") in width by 2006	PSL and DL&NR and SOEA - DMD
Prohibit fishing with SCUBA by 2005	PSL, DL&NR and SOEA - DMD
Prohibit night spear fishing with flashlights by 2008	PSL, DL&NR and SOEA - DMD
Conduct research/resource assessment and develop a sustainable fish management plan by 2008	SOEA-DMD, CSP and COM-FSM
Identify no more than two dredging sites for the state of Pohnpei and close all other existing sites and impose a moratorium banning all new dredging sites by 2005	Governor's Office, PSL, Municipal Governments and EPA
Establish and utilize alternative land-based sources of fill material to replace coral by 2006	Governor's Office, PSL, Municipal Governments and EPA
Improve permitting and management of terrestrially based agricultural and development activities that impact the marine environment by 2005	EPA, DL&NR (Board of Trustees) and Municipal Governments
Develop a Coastal Management Plan for Pohnpei State by 2008	DL&NR and SOEA-DMD
Establish at least one environmentally sustainable pilot mariculture/aquaculture venture (i.e. sponge farms, pearl farms, etc...) as an alternative source of income to marine resource extraction/exploitation by 2007	SOEA, PATS/MERIP and NGOs

**GOAL 3: Establish effective management of Pohnpei's Watershed Forest Reserve and at least two mangrove reserves, with supporting local and state policies and day-to-day maintenance by local communities**

Strategies	Lead Agency
Delineate boundary and enforce the Watershed Forest Reserve (WFR) by 2005	DL&NR-DF, Municipal Governments and CSP
Expand and continue the Grow Low Campaign by 2005	DL&NR-DF and CSP
Continue monitoring of sakau (agriculture) forest clearings and provide findings/results to state leaders, enforcement agencies, Municipal Governments and traditional leaders for action by 2005	DL&NR-DF, CCOs and CSP
Establish and implement a municipal forest surveillance network by 2006	DL&NR-DF, Municipal Governments, CCOs and CSP
Continue and expand public awareness on the importance and long-term benefits of the WFR by 2005	DL&NR-DF, CCOs and CSP

Provide and/or promote ideas for alternate sources of income and feasible compatible development with at least one pilot project in each of the following areas (i.e. fallen trees for handicraft, local cinnamon) by 2006.	SOEA, USDA-NRCS and CSP
Clear road and development plan & construction through community consultations/hearings by 2005	DL&NR-DF (Board of Trustees), Municipal Governments, EPA and
Establish a Watershed Management Fund from public water systems revenues by 2006	Governor's Office, PSL, PUC and Municipal Governments
Establish limited access into WFR and within 50 meters around village water systems/catchments by 2007	DL&NR-DF, Municipal Governments and CCOs
Conduct aerial and/or satellite photography to update state vegetation map(s) every five (5) years by 2008	DL&NR, FSMDEA, TNC and CSP
Undertake new forest bird and fruit bat surveys on a five year rotation by 2008	DL&NR-DF, FSMDEA and NGOs
Begin reforestation in at least 50% of the state's degraded watershed areas by 2009	DL&NR-DF, Municipal Governments, CCOs and NGOs
Identify appropriate strategies to control the export of sakau grown in the uplands and implement the most feasible by 2009	DL&NR – DF and State AG's Office
Monitor at least one river/stream for water levels/health and silt flow to show impacts of terrestrial based activities/development on the river and its adjoining habitats (i.e. estuary, mangrove areas, sea grass beds and coral reefs) by 2005	DL&NR-DF, PUC and CSP
Develop land-use and zoning plan for the state of Pohnpei by 2008	DL&NR DPL (Board of Trustees), PSI and Municipal Governments
Establish and competently staff a GIS Center with nodes in key government agencies by 2007	DL&NR and TNC
Update and digitize all key natural resource information (digital elevation model (DEM), soils, vegetation, rivers, wildlife populations, etc.) for the state by 2010	DL&NR, USDA-NRCS
Update and implement a mangrove management plan by 2005	State DL&NR – DF and Municipal Governments
Establish at least one pilot community based mangrove reserve by 2006	State DL&NR – DF and Municipal Governments

**GOAL 4: Address the invasive species problem in Pohnpei state by strengthening the quarantine program and controlling and/or eradicating at least five (5) selected species**

Strategies	Lead Agency
Strengthen quarantine & prevention of introduced invasive species by 2005	SOEA, FSMDEA, SPC – PPM, CSP and COM-FSM –

	CRE
Formally establish and fund inter-agency Invasive Species Task Forces to deal with priority invasive species by 2005	Governor's Office
Establish and hire at least 2 permanent positions focusing on quarantine, invasive species control and eradication by Pohnpei State Government by 2005	SOEA
Establish training on control and identification of invasive plants for quarantine officers and relevant agency staff by 2005	SOEA, FSMDEA, SPC – PPM, COM-FSM – CRE and NGOs
Conduct education and awareness on invasive species by 2005	SOEA, SPC – PPM, COM-FSM – CRE, DL&NR-DF and NGOs
Establish an invasive species monitoring and reporting program by 2005	SOEA, SPC – PPM, COM-FSM – CRE, DL&NR-DF and NGOs
Establish a law requiring all items originating from and/or passing through Guam to be subject to inspection prior to shipping to Pohnpei (FSM) by 2005	SOEA, SPC – PPM, COM-FSM – CRE, DL&NR-DF and NGOs
Develop an Emergency Response Plan for invasives (i.e. brown tree snake, snails, etc...) by 2005	SOEA, SPC – PPM, COM-FSM – CRE, DL&NR-DF, NGOs and DPS
Eradicate and/or control five (5) selected invasive species by 2008	SOEA, FSMDEA, SPC – PPM, USDA – NRCS, CSP and COM-FSM – CRE
Update invasive plant and animal database and widely disseminated to all State resource management agencies, Municipal Governments and the private sector by 2007	SOEA and SPC – PPM
Conduct a survey and identify all invasive species in Pohnpei State by 2008	SOEA, FSMDEA, SPC – PPM, COM-FSM – CRE and NGOs

**GOAL 5: Increase awareness on proper (organic and inorganic) waste disposal and recycling, pollution control, fuel and energy reduction/alternatives, including the adoption of at least one model of effective “best practices” management in each of the areas**

Strategies	Lead Agency
Establish and implement education/awareness programs and improve dissemination of public information (i.e. water quality, restaurant grades, public/picnic areas to the local communities, etc...) by 2005	EPA, DHS, Municipal Governments, PUC and NGOs
Improve enforcement of current solid waste regulations by 2005	EPA and Municipal Governments
Create an Emergency Response Plan for Hazardous Wastes (i.e. oil and chemical spills) by 2005	EPA, DPS, Municipal Governments and NGOs
Establish a collection area for all hazardous wastes (i.e. oil, battery, chemicals, etc...) and require all repair shops and the	EPA and Municipal Governments

general public to utilize the area by 2006	
Establish and implement a Pohnpei State Organic, Inorganic and Hazardous Waste Master Plan and better enforce existing litter/waste disposal laws by 2007	EPA, DHS, TC&I, Municipal Governments and NGOs
At least one local handicraft/industry within Pohnpei designing and developing shopping bags by 2006	EPA and CSP
Ban import of Styrofoam products and plastic bags by 2006	Governor's Office and PSL
Improve recycling and establish taxes and or fees on at least one non-bio-degradable imports (i.e. plastic and aluminum products) by 2007	Governor's Office, PSL, EPA & Municipal Governments
100% of government offices are recycling aluminum, glass and paper wastes by 2008	EPA
Establish at least one working model of properly managed waste disposal site (separating hazardous wastes, plastic or other impervious liner, composting, covering with soil, etc...) in one of the state's outlying municipalities by 2009	EPA and Municipal Governments
Establish a fund financed by disposal fees on all vehicle and heavy equipment imports by 2006	Governor's Office, PSL and EPA
Tax incentives created to encourage local or foreign entrepreneurs to crush vehicles and export them to Asia for the scrap metal market by 2007	FSM National Congress, PSL and EPA
All abandoned vehicles in the state will be removed from public areas and safely disposed of by 2008	EPA and Municipal Governments
Continue to seek membership on regional (Micronesia) recycling ventures by 2005 onwards	EPA, PSL (APIL) and Municipal Governments
Establish at least one appropriate pigpen and outhouse model in each of the municipalities by 2007	EPA, Municipal Governments and USDA-NRCS
Adopt these new models in state regulations and require all new and existing pigpens and outhouses to meet these standardized models by 2008	EPA and Municipal Governments
Removal of all pigpens and outhouses from inappropriate areas (i.e. riverbanks, shorelines, etc...) by 2010	EPA and Municipal Governments
100 % of new government facilities and infrastructure designed and constructed to be "climate-proof" from 2005 onwards	Governor's Office, TC&I, EPA and Municipal Governments
At least one new public building will integrate at least one alternative energy source (solar, wind, hydro-electric) to generate 50% of its energy needs by 2009	Governor's Office, TC&I, EPA and Municipal Governments

**GOAL 6: Revive, maintain and utilize relevant Traditional Knowledge, which supports biodiversity conservation and improves community leadership and participation in conservation and development plans and initiatives**

Strategies	Lead Agency
Establish and/or strengthen cultural education, with a strong focus on traditional conservation and resource management	DOE, Municipal Governments, Council of Pohnpei Paramount

practices, in the primary and secondary schools by 2006	Chiefs, and State Office of Social Affairs, DL&NR HPO
Promote pride in traditional conservation and resource management knowledge/skills (i.e. Culture Day Celebrations, school fairs, recognitions and awards, etc...) by 2005	DOE, Municipal Governments, Council of Paramount Chiefs, State Office of Social Affairs and PVB
Establish formal and informal programs that teach traditional conservation and resource management skills by 2007	Council of Pohnpei Paramount Chiefs, Municipal Governments and State Office of Social Affairs and Micronesia Bound Inc...
Continue the Pohnpei Ethnobotany Project (herbarium and database) and disseminate and/or utilize the information in education and outreach programs by 2005	Council of Pohnpei Paramount Chiefs, DL&NR -- DF, TNC and the Municipal Governments
Establish and implement regular (quarterly) consultation process between local and state governments and Traditional Leadership Council by 2005	Governor's Office and Municipal Governments
Develop review processes with strong environmental criteria and community involvement in all municipalities by 2005	Governor's Office, Municipal Governments, EPA and DL&NR
Improve the U Municipality community resource management model and adopt lessons learned in other areas by 2005	DL&NR, Municipal Governments and CSP

**GOAL 7: Increase conservation funding by mainstreaming biodiversity conservation in government budgets as well as by establishing local/state conservation finance mechanisms and links with MCT and other donor agencies**

Strategies	Lead Agency
Continue work to establish the \$20 million Micronesia Conservation Trust (MCT) by 2005 onwards	Governor's Office, Pohnpei PSL, FSM Government and MCT
Establish an MCT sub-account of at least one (1) million dollars for Pohnpei State through fisheries violation fees and dredging royalty fees by 2009	Governor's Office, Pohnpei PSL, MCT and Pohnpei AG's Office
Continue to mainstream biodiversity conservation in government budgets by using the Compact Environment Sector fund at \$2million/yr by 2005	Governor's Office, PSL, EPA, DL&NR, Municipal Governments
Continue to work and share information with foreign aid, private funds and other regional donors to increase conservation funding opportunities by 2005	FSMDEA, Pohnpei State Government, NGOs and Municipal Government
Research and pilot at least one local user/resource fee to finance a conservation fund by 2006	DL&NR - PL (Board of Trustees) and the Municipal Governments



Launch a fund financed by a tax or fee on vehicle importers to finance the cost of removing abandoned vehicles by 2006	State Governor, PSL and EPA
Watershed Management Fund from public water system revenues established by 2006	Governor's Office, DL&NR-DF, PUC and NGOs
Tax incentive created to encourage local and foreign businesses to collect and export vehicles and other heavy equipment to Asia markets by 2008	Governor's Office, PSL and EPA
Tax incentives for disposal of all non-biodegradable items established by 2007	Governor's Office, PSL and EPA
Establish taxes or fees on certain allowable hunting and fishing equipment (i.e. air-guns, shot guns, spear guns, etc...) to support resource management by 2007	Governor's Office, PSL and DL&NR
Licensing fee established to support resource management for hunting and fishing seasons by 2007	Governor's Office, PSL and DL&NR
Impose environmental impact fees on all development by 2005	Governor's Office, PSL, DL&NR, EPA and Municipal Governments
Increase and collect penalties on certain illegal resource exploitation and unlawful importation of foreign (agricultural and marine) products and species by 2005	SOEA and DL&NR

**GOAL 8: Increase biodiversity conservation/environmental awareness and enhance the conservation and organizational practices of Pohnpeian organizations working in priority marine, coastal and terrestrial areas, including the development of highly skilled resource managers and scientists**

A national environmental curriculum featuring Pohnpei State and the FSM's unique environment and biodiversity will be developed and implemented in schools by 2010	FSM Department of HESA, DOE, EPA and NGOs
Continue improving and expanding ongoing environmental education programs (i.e. Youth-t-Youth, Green Road Show, Environmental Club, etc...) in Pohnpei by 2005	EPA, DL&NR and NGOs
Continue to organize environmental events (i.e. Earth Day, Environment Day, community cleanups, etc...) by 2005	EPA, DL&NR and NGOs

Produce annual "state of the environment" report and present to the Traditional Leaders Councils, Municipal Governments and the general public from 2008 onwards	Governor's Office, DL&NR and NGOs
Provide at least two graduate degree scholarships/year (M.Sc. or higher) in resource management/environment to deserving Pohnpei students from 2005 onwards	Governor's Office, PSL and the Pohnpei Scholarship Board
Initiate a program to track and hire at least one Pohnpeian resource management/ environment graduate by 2007	Governor's Office
Offer 2-4 in-country resource management/environment internships per year to Pohnpei students at the College of Micronesia or studying abroad from 2005 onwards	Governor's Office, PSL, the Pohnpei Scholarship Board and NGOs
Conduct institutional assessments on resource management agencies to determine areas of need/improvement and provide training from 2005 onwards	Governor's Office, the College of Micronesia- FSM and TNC
Utilize the existing Micronesians in Island Conservation Program and similar programs to develop the resource management capacity of individuals and institution from 2005 onwards	Governor's Office, the College of Micronesia FSM and TNC
Provide at least one training (i.e. monitoring skills, conservation enforcement, etc...) per year to all (government, NGOs and community volunteers) resource managers from 2005 onwards	DL&NR, AG's Office, DPS and NGOs
Increase by 25% State and Municipal Government resource management personnel by 2008	Governor's Office, PSL, Municipal Governments and DL&NR
Train 50% of all government and NGO conservation area managers in conservation area planning methodology adopted and applied for their specific sites by 2008	TNC and CSP
Establish appropriate voluntary community management or consultative groups such as local level Conservation Corps to address or bring attention to the issues of their respective community by 2005	Municipal Governments, DL&NR – DF and CSP
Establish and implement MOUs between the State Government and the Municipal Governments that clearly delineate management roles of the municipal governments on appropriate conservation laws by 2005	AG's Office and Municipal Governments
Expand the state conservation unit and house in an enforcement branch (DPS or AG's Office) of the Pohnpei State Government by 2005	Governor's Office, DL&NR, AG's Office, DPS and CSP
Train and deputize municipal police and community conservation officers (CCOs) to collaborate with state police and conservation officers on conservation enforcement by 2005	AG's Office, DL&NR, Municipal Governments, DPS and CSP

## 7 Monitoring and Evaluation

Our overall progress toward these goals will be monitored annually using eleven (11) critical outcome measures. Specific indicators for each of these measures will be identified as an integral part of this plan. In addition, annual benchmarks for each objective/action will be developed by each implementing agency and used to track progress and adapt this action plan annually. The PRMC and Department of Lands & Natural Resources will lead the overall monitoring and evaluation on the strategic goals.

- Number and size of priority areas under active conservation management; percent of total identified in Pohnpei's priority areas under the NBSAP - Eco-regional Plan
- Reduced severity and scope of targeted threats (i.e. over harvesting, invasive species, land conversion, coastal erosion) in priority areas under active conservation management compared to baseline levels and/or unmanaged areas, where possible
- Improved biological health of target systems and species in areas under active conservation management compared to baseline levels and/or unmanaged areas, where possible
- Increased annual public (Compact – Environment Sector) and private funding received and spent for conservation programs in Pohnpei
- Increased number of funding commitments, including longer term (5 years and more) programs/projects and permanent conservation funding mechanisms (i.e. MCT – state sub-account, user and environmental impact fees) established
- Increased conservation and organizational capacity of government agencies (i.e. Municipal Governments, DL&NR, Environmental Protection Agency, etc...) and cooperating partner organizations (i.e. Conservation Society of Pohnpei, The Nature Conservancy, etc...) based on facilitated self-assessments and state performance based budget
- Increased number of students receiving state and national scholarships, entering and graduating with science, environment and resource management degrees (i.e. Bachelor of Science and Masters of Science) and hired in Pohnpei resource agencies/organizations
- Increased models of practical solutions to proper (organic and inorganic) waste disposal and recycling, pollution control, fuel and energy reduction/alternatives
- Increased awareness on biodiversity conservation and resource management, with practical solutions integrating science and traditional knowledge/practices

- Increased community leadership and participation in conservation and resource management initiatives, including the establishment of models of true community led efforts and traditional knowledge and practices
- Increased prosecution of violators and rehabilitation (corrective measures) on violations

## **8 Implementation**

It is necessary to establish the appropriate legal and institutional environment and to secure the resources to ensure biodiversity conservation actions are efficiently and effectively implemented in a sustainable manner in Pohnpei State, particularly at the local level.

Lead Agencies for priority actions shall initiate actions using existing resources or, if required new and additional resources, to initiate the process to seek required funds and resources.

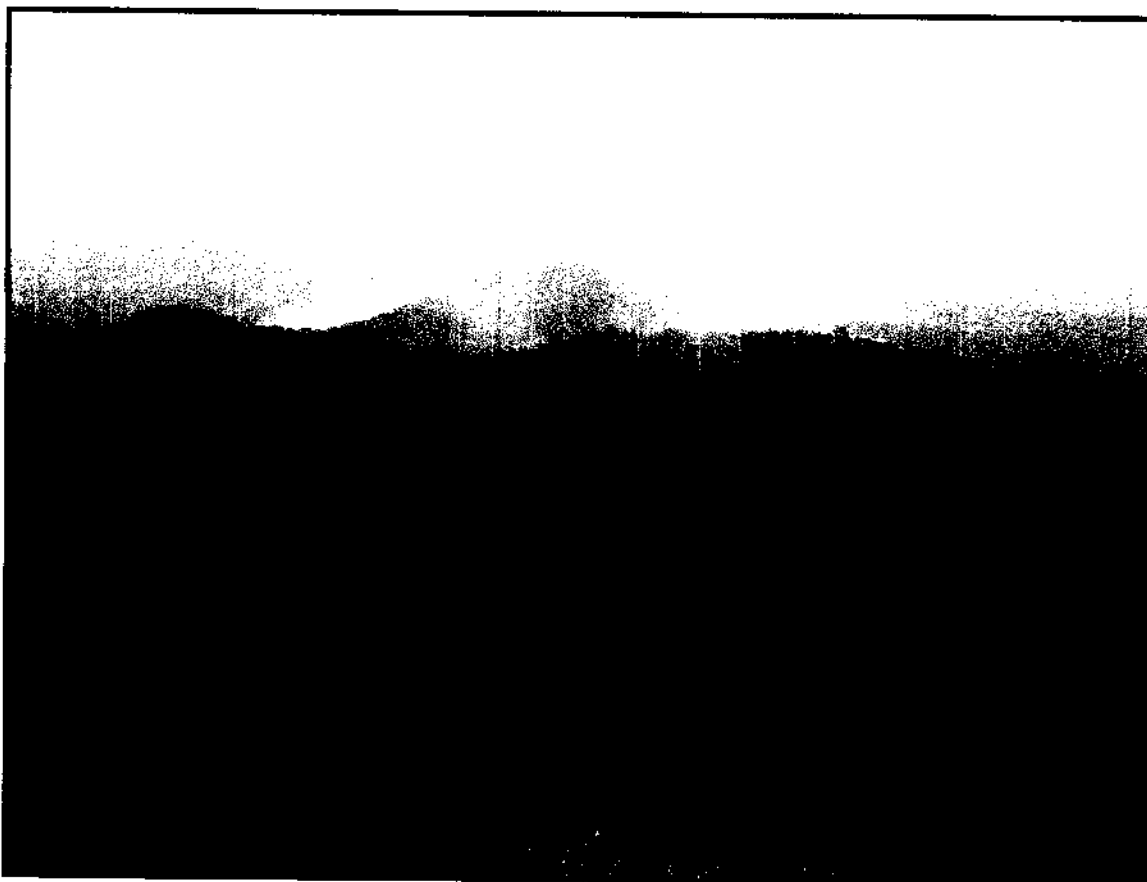
The DL&NR, in close collaboration with other member agencies of the Pohnpei Resource Management Committee (PRMC) and the Municipal Governments, shall oversee overall progress of this plan and will focus primarily on the development of the Framework and necessary resources and each lead agency shall initiate actions in the actions table assigned to them.

This State Implementation Plan will be carried out through a partnership of Government and non-government agencies and relevant groups with strong linkages to appropriate initiatives/programs to ensure sustainability and shared resources and to minimize duplication of effort. Members of the PRMC include Office of the Governor, Municipal Governments, DL&NR, Environmental Protection Agency, Departments of Education, Public Safety, Economic Affairs, Economic Development Authority, Pohnpei Visitors Bureau, Pohnpei Tourism and Parks, USDA – Natural Resource Conservation Services (NRCS), Micronesia Bound Inc. (Aramas Kapw), COM-FSM - Land Grant, FSM Department of Economic Affairs, US Peace Corp. Micronesia, The Nature Conservancy and CSP.

## **9 Financing**

The Government of Pohnpei State will initiate the implementation with major financing of actions in the State expected to be from its shares of the Environment Sector of Compact Funding and matched with external sources or supported by contributions from other government and other sources in the State (i.e. MCT). The PRMC will also review the priority areas and identify areas for possible integration into a medium sized project for the development of a single integrated project proposal. This proposal will be submitted to the Global Environment Facility for initial funding and implementation.

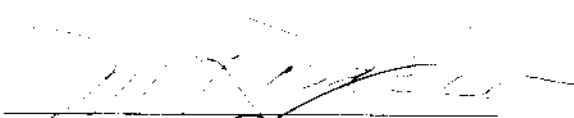
Other project proposals will be developed by each lead agency for respective priority areas for submission to other sources of funding either multilateral, bilateral or from private donors or GEF when appropriate. Furthermore, every year, each member agency or organization on the PRMC shall identify areas of focus and assess possible funding on its own or from other in-country sources (i.e. resource user or environmental impact fees).




Pohnpei's Watershed Forest Reserve

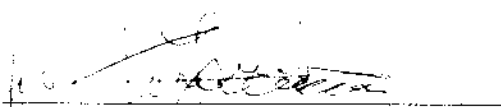
## Signatures

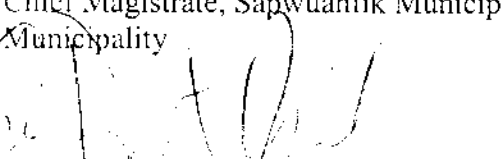
The undersigned agree to adopt this document to be the guiding framework for priority biodiversity conservation, resource, waste, pollution and energy management in the state of Pohnpei and to jointly implement the strategic goals and actions described in it.

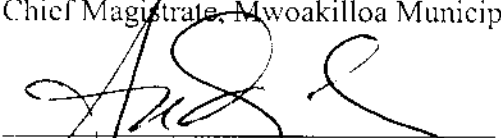
  
Honorable Marcus Rosario  
District Administrator, Nett Municipality

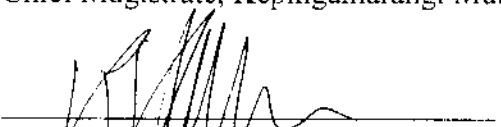
  
Honorable Richard Susaia  
Chief Magistrate, Sokehs Municipality

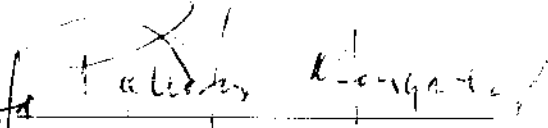
  
Honorable Petrick Ringlen  
Meninkeder, Madolenihmw Municipality

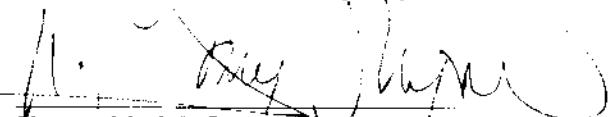
  
Honorable Robert Inek  
Chief Magistrate, Sapwuahfik Municipality  
Municipality

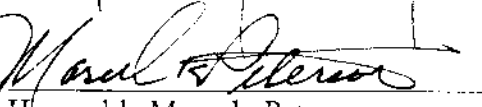
  
Honorable Gallen Joel  
Chief Magistrate, Mwoakilloa Municipality

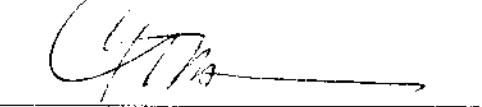
  
Honorable Andrew Lucky  
Chief Magistrate, Kepingamarangi Municipality

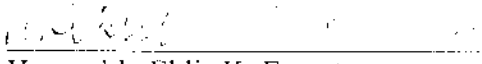
  
Mr. Rulers Philip  
Director, Public Safety

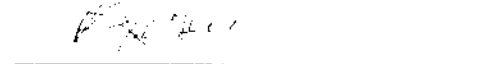
  
Honorable Enter Norman  
Chief Minister, U Municipality

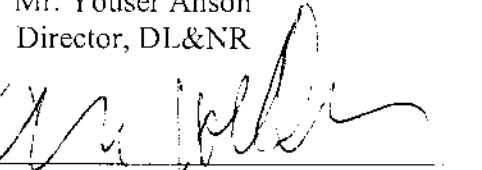
  
Honorable McGarry Miquel  
Luken Moanlap, Katti Municipality

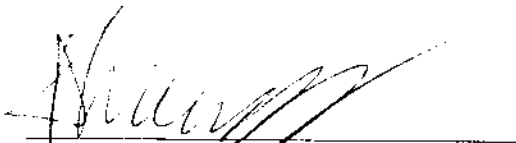
  
Honorable Marcelo Peterson  
Mayor, Kolonia Town

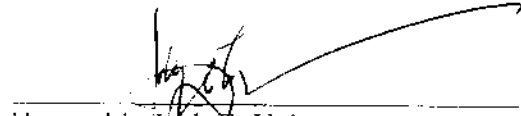
  
Honorable George Steven  
Chief Magistrate, Nukuoro

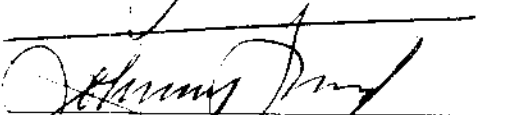
  
Honorable Ehlis K. Ernest  
Mayor, Pingelap Municipality


  
Mr. Youser Anson  
Director, DL&NR

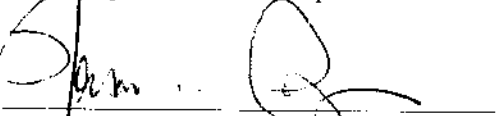
  
Mr. Elden Hellan  
Director, EPA Agency

  
Mr. Adelino Lorens  
Acting Administrator, SOEA

  
Honorable Jack E. Yakana  
Lt. Governor, PRMC Chairman

  
Honorable Johnny P. David  
Governor, Pohnpei State Government

  
Honorable Edwel Santos  
Attorney General, Pohnpei State

  
Honorable Nelson Pelep  
Speaker, Pohnpei State Legislature