South Pacific Regional Environment Programme

Regional Environment Technical Assistance (RETA) 5403

Strengthening Environment Management Capabilities in Pacific Island Developing Countries

Federated States of Micronesia

Review of Environmental Law

by Elizabeth Harding

1992

With assistance from the Asian Development Bank, IUCN - The World Conservation Union and the Australian Centre for Environmental Law

USP Cataloguing-in-Publication Data

South Pacific Regional Environment Programme
Review of Environmental Law in the Federated States of Micronesia.
(Strengthening environment management capabilities in Pacific-Island developing countries)

1. Environmental law - Federated States of Micronesia I. South Pacific Regional Environment Programme. Regional Technical Assistance Project II. Title III. (Series)

344.04609966
ISBN 982-04-0049-X

Prepared for publication by the Australian Centre for Environmental Law, Faculty of Law, University of Sydney, Australia.

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IUCN
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ACEL
AUSTRALIAN CENTRE FOR ENVIRONMENTAL LAW

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FOREWORD

This Review of Environmental Law in the Federated States of Micronesia has been implemented as an important component of the Regional Environment Technical Assistance (RETA) Project. The RETA project has been developed to address environmental issues in a number of Pacific countries. It has been funded by the Asian Development Bank and carried out with technical assistance from IUCN - the World Conservation Union. The RETA project is an important regional initiative, which reflects the need for careful management of the Pacific environment.

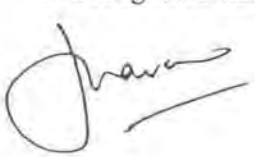
Pacific Islanders have lived in close harmony with their island environments for thousands of years and are well aware of its importance to their way of life. Pacific peoples face the complex challenge, in common with many other countries of the world, of integrating economic development with the need to protect the environment. This is the primary aim of sustainable development, and must be addressed if the Pacific way of life is to survive.The introduction of appropriate legislation represents one important means by which sustainable development can be achieved in the Pacific. A fundamental first step is the identification and review of existing environmental legislation in each Pacific country.

The Review of Environmental Law of the Federated States of Micronesia contained in this publication is indeed timely. It has identified the principal laws relating to the environment and to natural resource management. These laws have then been reviewed in terms of their effectiveness in addressing the major environmental issues existing in the country. The research has had a particular focus on the development of practical recommendations that build on the findings of the Review.

This Legal Review is an important step along the road to improved environmental management in the Pacific region. It is important to build on this base and to ensure that environmental law reflects the unique needs and circumstances of each Pacific country. It is also important that this law reflects, and where appropriate, incorporates, customary laws and practices that relate to environmental protection.

The Review forms part of a series of five Legal Reviews; the other countries reviewed are the Republic of Marshall Islands, the Cook Islands, the Kingdom of Tonga and Solomon Islands.

This and the other four Legal Reviews have been supported by the Environmental Law Centre of the IUCN - the World Conservation Union. I would like to thank the Centre for its financial and technical assistance. I would also like to pay tribute to Ms Elizabeth Harding, who prepared this Review and the Review for the Republic of the Marshall Islands. In addition, the work of Ms Mere Pulea, who prepared the Reviews of Environmental Law in the Cook Islands and the Kingdom of Tonga, and Professor Ben Boer, who prepared the Review of Environmental Law in Solomon Islands, and who was responsible for coordinating and editing the five Reviews, should be recognised here.



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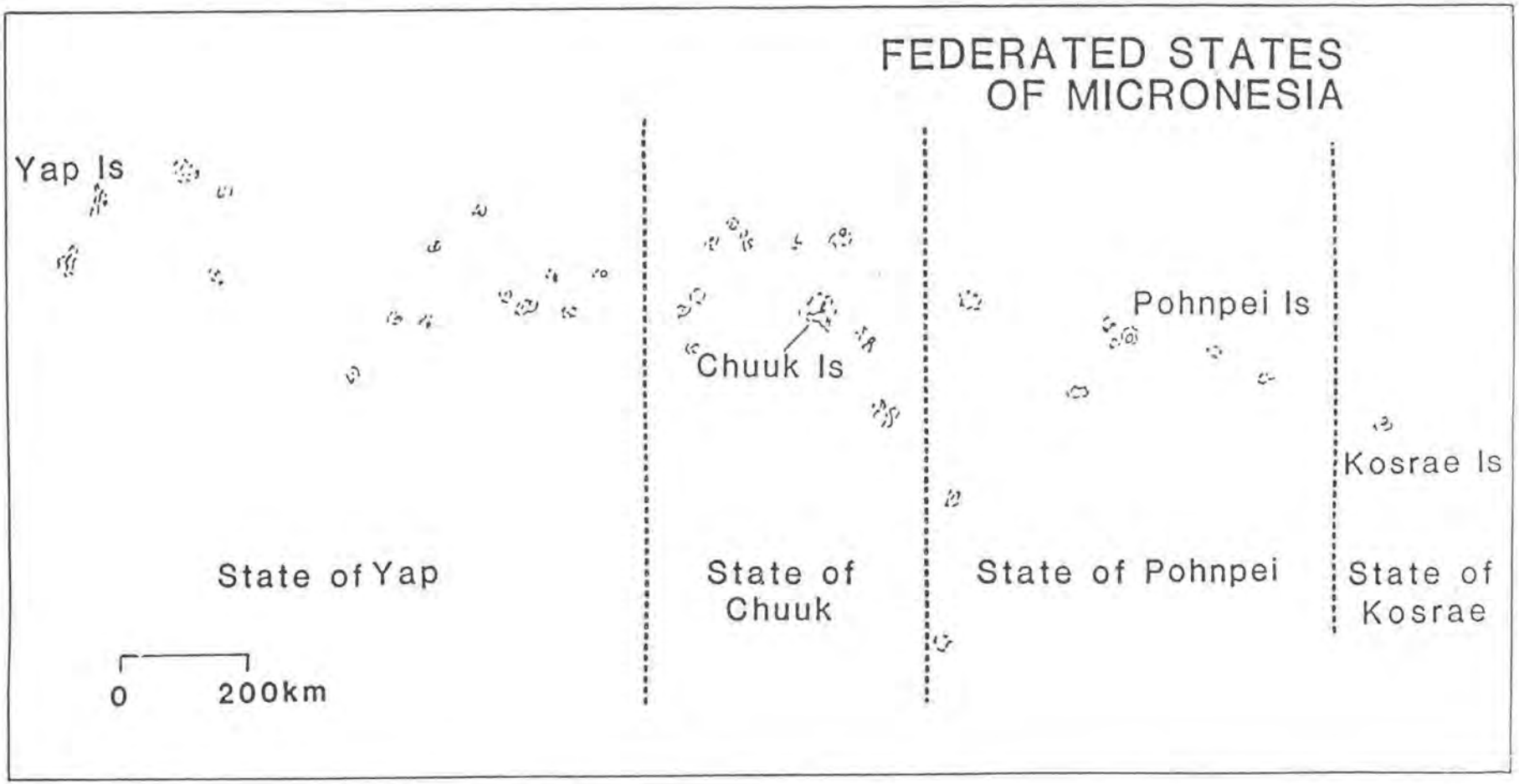
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Contents

PART 6 STATE OF YAP

SUMMARY

This Legal Review was drafted in February and April of 1992, as a component of the National Environmental Management Strategy for the Federated States of Micronesia (FSM). The legal aspect of this Strategy, as envisioned by the Regional Environmental Technical Assistance Project (RETA), is designed to offer an overview of existing environmental legislation in FSM and a summary of draft legislative initiatives not yet enacted. Further, the Review is constructed to offer suggestions for future legal and administrative initiatives in a number of specific environmental areas.

Following the Introduction, this Review sets forth the international environmental Conventions and treaties to which FSM is a party. Given the nation's cultural diversity and tradition of independent State action, the Review is then divided into Chapters that focus attention first on the National Government, and then on the four States, ordered geographically from east to west: Kosrae State, Pohnpei State, Chuuk State and Yap State.

The Chapter on National Government is divided into four Sections. A brief survey of FSM's national constitutional and administrative structures is followed by a discussion of environmental health protection, including pollution controls, water quality, waste management and legislation pertaining to zoning, earthmoving and environmental impact assessment. An overview of natural resource protection follows, including discussion of legislative efforts in the fields of fisheries, agriculture, forestry, mining, biodiversity conservation and tourism. A Section on cultural heritage completes the Chapter.

The State Chapters generally follow the National format, with an additional analysis of traditional and statutory systems of land tenure placed after the discussion of pertinent constitutional and administrative structures. The importance of customarily-held lands, both to the Micronesian people and in the arena of environmental regulation, cannot be overemphasized. Communal land ownership in custom is a Micronesian birthright; the conflict between that birthright and government attempts at land management remains a potent issue.

Whenever possible, each area of environmental inquiry within each Chapter is divided into Subsections. An analysis of existing legislation in the field is followed by a Subsection setting forth key legal and administrative issues. Recommendations and proposals are then offered in the final Subsection. Project time limitations ensure brevity in discussions of many important environmental issues; the consultant wishes to emphasize the preliminary nature of this offering, and recommends further exploration of many areas only touched upon in the present Review.

As this Review contemplates an initial survey of environmental legislation in FSM, it provides a foundation for future legislative drafting efforts rather than prematurely offering specific draft language. New legislative initiatives frequently require a readjustment of existing administrative structures; this Review attempts to place analyses of legislative needs in the environmental sector within an appropriate administrative framework. Suggested legislative and administrative changes naturally require FSM Governmental acceptance before specific language proposals are appropriate. Every effort has been made to incorporate principles of sustainable development and respect for traditional and customary practices within the Federated States.

A significant body of environmental law is already in legal effect or in draft form in the Federated States. The existence of such law in a newly-independent developing country is creditable. Although much of the environmental law cited has been drawn from adopted Trust Territory legislation, FSM exhibits a growing legislative commitment to environmental protection. Efforts to fill in regulatory gaps and to make former Trust Territory legislation responsive to present FSM needs will aid establishment of a comprehensive legal framework in defense of the fragile FSM environment.

Conflicting and often competing environmental management responsibilities are now dispersed between different government agencies and embodied in widely varied legislative instruments. Good faith efforts toward common conservation goals are sometimes overshadowed by gaps or overlaps in areas of environmental responsibility. Jurisdictional questions also hamper effective regulatory development and environmental enforcement. The National and State Attorney-General Offices have already initiated a process to disentangle competing environmental oversight claims. National and State governmental agencies charged with environmental responsibilities may wish to clarify functions and interact with greater frequency, so that knowledge may be shared on a more regular basis.

The protection and management of the environment is a uniquely interdisciplinary endeavor, but suffers on occasion in FSM from narrow catagorization as a public health discipline. The field further suffers from lack of public awareness regarding the profound consequences of environmental degradation. This perspective is entirely natural in a developing country such as FSM, whose overwhelming beauty and natural abundance is only now encountering processes that may lead to significant environmental decay. Development, and its attendant environmental impacts, is inevitable, and in many cases desirable. Only broad public education will effect a change from uncontrolled to sustainable development. The drafting and enforcement of environmental protection legislation, and education about that legislation, assists the process whereby an informed public may wisely manage its resources.

LIST OF RECOMMENDATIONS

PART 2 NATIONAL GOVERNMENT

Environmental Health Protections

CHAPTER FOUR

Pollution Control - National

1. For more effective environmental enforcement, clarify National and State constitutional jurisdictional issues through issuance of a Joint Attorney-General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in 15 separate areas of environmental law. For discussion of the issues surrounding the National Constitution's allocation of powers see section 3.2, Chapter Three .

2. For more effective administrative oversight and prevention of duplicative efforts, place administration of all environmental controls in a central agency, either within the National Government or linked to the Government by statute. The benefits of placing this entity within Government include continuity (especially if the Department of Human Resources is retained as the responsible agency) and access to Government resources. An independent statutory agency offers the benefits of a separate legal status from Government, useful when Government is itself an environmental violator, plus the ability to move quickly and without burdensome bureaucracy in response to environmental degradation.

   In either event, this agency could be funded to operate as a much-needed clearing-house for the gathering and dissemination of environmental materials, a forum for the development, oversight and enforcement of national minimum environmental standards, and a focus of training and assistance to the States as required by the 1991 National Constitutional Amendment to Article IX, Section 2.

3. For more effective legal oversight of National environmental provisions, establish a position for an environmental attorney, either in the Attorney-General's Office if administrative control is within the National Government, or as Legal Counsel to an independent statutory agency, if one is authorized. A National Government environmental legal officer could:

   * review and redraft *Trust Territory Environmental Regulations*, including air and pesticides standards;

   * draft new environmental legislation as needed;

   * prepare model provisions for use by State Governments, and train State environmental officers in their use;

   * conduct a study of those United States environmental protection laws which contain standards applicable to FSM, and make recommendations as to any necessary modifications of those laws in light of the particular circumstances of FSM, pursuant to Compact Section 161(b) as required by FSMEPA Section 11(8);

   * enforce present environmental legislation.

4. To better liaise with State Governments and allow more local voice in National environmental decision making, reinstate the concept of the Federated States of Micronesia Environmental Protection Board originally envisioned in FSMEPA. As is suggested in the *Nationwide Environmental Management Strategies for the Federated States of Micronesia*, such a Board could be called the Nationwide Board on Environment and Sustainable Development, and be comprised of three National, four State and two community representatives. Representation at the National level could include the National Planner, the Secretary of Human Resources and the Secretary of Resources and Development.

5. To respond to current national and world concerns regarding sea level rise and global warming, continue interaction with other developing Pacific countries through the South Pacific Forum (SPF), South Pacific Commission (SPC), South Pacific Regional Environmental Programme (SPREP), and the Alliance of Small Island States (AOSIS). For technical assistance, interaction might include environmental as well as external affairs officers.

CHAPTER FIVE

Water Quality - National

6. Revise the *Trust Territory Public Water Supply Systems Regulations* to create FSM-specific criteria, including, but not limited to, expanding the definition of "public water supply" and requiring well-drilling permits to insure uncontaminated supplies of water.

7. Revise the *Trust Territory Marine and Fresh Water Quality Standard Regulations* to create FSM-specific criteria, including, but not limited to, enhancing groundwater protection and pollution prevention and control measures.

8. Fund technical and laboratory assistance programs to enable further testing of public, coastal and offshore marine waters .

CHAPTER SIX

Waste Management - National

9. Develop a comprehensive national waste management plan to include National Government policies and priorities, as well as State-specific projects for rural sanitation, wastewater treatment and solid waste disposal.

10. Revise the *Trust Territory Solid Waste Disposal Regulations* to make them FSM-specific, including, but not limited to, simplification of the permitting process, enhanced protection and procedures concerning the disposal of hazardous wastes.

11. Revise the *Trust Territory Toilet Facility and Sewage Disposal Regulations* to make them more reflective of FSM needs, including, but not limited to, inclusion of simple septic tank and pit latrine designs, and incorporation of adequate standards for septic tank and pit latrine materials and installation.

CHAPTER SEVEN

Zoning, Earthmoving and Environmental Impact Assessment - National

12. Clarify which aspects of environmental planning and control are within National and State jurisdictions and identify areas of concurrent jurisdiction. Areas of municipal

jurisdiction also need to be identified. Clarification of this issue may well require policy decisions in addition to legal interpretation of the Constitution. Once jurisdictional issues are resolved, attention may be given to the development of National and State legislation which is appropriate, clear and enforceable.

13. Even if there are no legislative changes made, there is a need for improved administrative structures and systems to co-ordinate, implement and enforce existing legislation and regulations. Consistency and uniformity of National and State environmental controls should be encouraged.

14. There is a clear need for all projects, both private and government, to be subject to environmental impact assessment (EIA) reviews.

15. Physical planning, including building controls, should be addressed by legislation and regulation.

Natural and Cultural Resources

CHAPTER EIGHT

Fisheries - National

16. Once marine resources management plans have been developed to ensure sustainable development, there is a need to introduce standardized marine resources management legislation and regulations to be implemented by both National and State governments.

17. Under Title 24, the Micronesian Maritime Authority has extensive regulation-making powers which have not yet been employed. There is scope to enact Regulations to facilitate harvest management and monitoring, for instance. Illegal fishing practices could also be dealt with by Regulation. The *Plant and Animal Quarantines and Regulations* do not address marine life at all. This omission needs to be resolved, particularly in the light of aquaculture development and the introduction of new marine species.

18. There is an urgent need for the enactment and implementation of EIA legislation which would require feasibility studies to be carried out prior to the commencement of any marine development. Land use planning policies and legislation need to be developed to protect the marine environment and its resources. Resource management legislation should be enacted to ensure sustainable development. Legislation and regulations should be introduced to control pollution of marine areas.

CHAPTER NINE

Agriculture - National

19. Draft legislation and regulations requiring soil conservation and erosion control. Consistent State legislation should be encouraged. Enactment of appropriate and enforceable EIA legislation is also necessary to regulate problems associated with agro-forestry developments and practices.

20. Improve communication and coordination between National and State administrative bodies on agricultural matters.

CHAPTER TEN

Forestry - National

21. Extend the EIA process to forestry activities. Draft legislation for protection of forests, mangroves, watershed areas and land use planning. Harvesting and use of forest products should also be regulated in accordance with sustainable development principles. Development of agro-forestry and forestry industries in Federated States of Micronesia must occur in conjunction with EIA and conservation legislation.

CHAPTER TWELVE

Biodiversity Conservation - National

22. FSM presently requires more comprehensive nature preservation legislation, both in regard to species preservation and protected areas. Legislation for the administration and protection of marine and terrestrial areas should incorporate several concepts, including:

* the establishment of a protected areas agency, either as part of a Government Department or as an independent authority, and preferably the same entity that oversees environmental health protections;

* the setting out of certain areas as protected, with distinctions for differing uses;

* the development of advisory bodies, including customary landowner participation;

* enforcement powers; and

* the power to make regulations.

Any system of protected areas must maintain traditional rights and practices. All protection must first be recognized as appropriate and desirable by customary landowners. Because of the innovation of governmental regulatory control over private, customarily-held lands and waters, public hearings, public education, and close interaction between National and State Departments is the proper starting point for a comprehensive network of protected areas.

Conservation of living resources

23. Provide additional funding and training to promote effective management and enforcement of living resources legal protection.

24. Coordinate legislative efforts to conserve living resources.

25. Revise the *Endangered Species Act*. At present, the Act is inadequately specific and insufficiently inclusive. Include an expanded listing of FSM endangered and threatened species.

26. It is recommended that FSM become a signatory to the *Convention on International Trade in Endangered Species Convention* (CITES).

CHAPTER THIRTEEN

Tourism - National

27. Create a National Tourism Development Plan, in consultation with the four States, including an emphasis on small-scale, low impact eco-tourism.

28. Enact legislation providing for tourism development coupled with effective, enforceable controls, including EIA requirements, so as to limit cultural and environmental impacts.

29. Introduce licensing or permit systems for tourism development so that proposal proponents pay for development of infrastructure necessary for their projects.

CHAPTER FOURTEEN

Cultural Heritage - National

30. Enhance legislative protections. Amend Title 26 to prohibit the movement of cultural and historic artifacts for non-commercial purposes. This would alleviate the current practice of removing certain artifacts from their sites for research purposes.

31. Revise, enact and enforce the Draft Regulations. Amendments to the Regulations might address the need for recording and interpretation of those sites which are destroyed by necessary development. The penalties for violation of Title 26 and the Regulations must be commensurate with the great National importance of historic and cultural conservation. The current fines of between $200 and $1,000 are not adequate.

32. Reinstate the Advisory Panel to advise the Director of Administrative Services and the National HPO. Such a Panel is a useful instrument for the integration of cultural protection with other Government efforts. As noted earlier, the full spectrum of environmental and cultural protection is now splintered among various Departments and agencies. The Advisory Panel could work as an effective educational body for the transmission of cultural and historic concerns.

PART 3 STATE OF KOSRAE

Environmental Health Protections

CHAPTER SEVENTEEN

Pollution Control - Kosrae

33. Devise legislation for a statutory environmental oversight authority with full regulatory and permitting power in regard to the environmental health and natural resource protection and management. Such legislation should include specific environmental impact study requirements, cultural heritage protections, establish a Board, Commission, or Committee with interdisciplinary membership and regulatory power, and should specify a broad spectrum of required environmental health and natural resource regulatory instruments.

34. Issue a Joint Attorney-General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in all areas of environmental oversight.

CHAPTER EIGHTEEN

Water Quality - Kosrae

35. Fund technical and laboratory assistance programs to enable further testing of public, coastal and offshore marine waters.

36. Draft marine, fresh and public drinking water standards with standards appropriate to Kosrae (but not less than Constitutionally-mandated national standards); or, enter into a written cooperative agreement with the National Government Department of Human Resources to administer National standards.

CHAPTER NINETEEN

Waste Management - Kosrae

37. Develop a State-specific project for rural sanitation, wastewater treatment and solid waste disposal.

38. Draft solid waste and toilet facilities regulations with standards appropriate to Kosrae (but not less than Constitutionally-mandated national standards); or, enter into a written cooperative agreement with the National Government Department of Human Resources to administer National standards.

CHAPTER TWENTY

Zoning, Earthmoving and Environmental Impact Assessment-Kosrae

39. Pass legislation providing for (a) land use planning; (b) analysis of earthmoving activities' effects on reef, cultural and coastal zones; and (c) specific environmental impact assessment requirements to be provided by development project proponents before construction commences.

Natural and Cultural Resources

CHAPTER TWENTY ONE

Fisheries - Kosrae

40. Approve the proposed Kosrae Island Resource Management Program; extend resource management beyond coastal areas to include full interior and marine jurisdictions. Draft legislative instruments, preferably after National/State environmental jurisdictional issues are settled, for the protection and management of fisheries, mangrove areas, coastal and ocean areas and reefs.

CHAPTER TWENTY TWO

Agriculture and Forestry - Kosrae

41. Coordinate with the Division of Environmental Health and Sanitation, or a statutory environmental oversight authority, regarding development and enforcement of *State Pesticides Regulations*, preferably to be drafted after National/State environmental jurisdictional issues are settled.

42. Draft statutory instruments, or subsidiary regulations pursuant to legislation creating a statutory environmental oversight authority with power regarding natural resource protection and management, regarding protection of watersheds and mangrove forests.

CHAPTER TWENTY THREE

Biodiversity Conservation - Kosrae

43. Consolidate and expand species protection legislation; increase penalties; include fruit bat protections; create related habitat protection.

44. Draft legislation relating to the protection of marine and terrestrial areas, perhaps as State parks or preserves, in consultation with affected State Department, Divisions, Boards and Commissions.

CHAPTER TWENTY FOUR

Tourism - Kosrae

45. Establish a Tourism Review Board that includes environmental protection advisors.

46. To better protect the environment, focus tourism efforts on small-scale village tourism and eco-tourism.

47. Include legal environmental protection requirements in all handouts and pamphlets to visitors.

CHAPTER TWENTY FIVE

Cultural Heritage- Kosrae

48. Draft a State Act and Regulations for the protection, classification, and disposition of prehistoric and historic land and marine cultural heritage; define "cultural heritage" broadly, including oral traditions and non-tangible heritage; establish research and scholarship guidelines; coordinate efforts with the National HPO and other interested State agencies.

49. Establish a trust or other legal entity on behalf of the landowning families associated with the series of basalt ruins and structures on Lela; negotiate a long-term lease arrangement with the trust or other entity for the rehabilitation and preservation of the structures.

PART 4 STATE OF POHNPEI

Environmental Health Protections

CHAPTER TWENTY EIGHT

Pollution - Pohnpei

50. Modify and reintroduce a bill for a *Pohnpei Environmental Protection Act*.

51. Issue a Joint Attorney-General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in all areas of environmental oversight.

52. Enter into a "written cooperative agreement" with the National Government Department of Human Resources to avoid duplication of regulatory and permitting efforts. This agreement should include provisions on pollution, water quality, waste management, zoning, earthmoving and EIAs.

53. Fund a position for a State environmental legal officer, either within the Department of Health Services or within the newly-created Pohnpei Environmental Protection Authority, with authority to draft regulatory instruments and enforce them. This office could draft legislation covering all aspects of environmental health and natural resource protection.

54. If Pohnpei State is granted or delegated authority to enact and enforce pollution regulations, re-draft *Trust Territory Air Pollution and Pesticides Regulations* to update them and make them Pohnpei-specific.

CHAPTER TWENTY NINE

Water Quality - Pohnpei

55. Fund technical and laboratory assistance programs to enable further testing of public, coastal and offshore marine waters.

56. If Pohnpei State is granted or delegated authority to enact and enforce pollution regulations, re-draft *Trust Territory Public Water Supply and Marine and Fresh Water Quality Standards Regulations* to update them and make them Pohnpei-specific.

CHAPTER THIRTY

Waste Management - Pohnpei

57. Develop a State-specific project for rural sanitation, wastewater treatment and solid waste disposal.

58. If Pohnpei State is granted or delegated authority to enact and enforce pollution regulations, re-draft *Trust Territory Solid Waste and Toilet Facilities and Sewage Disposal Regulations* to update them and make them Pohnpei-specific.

CHAPTER THIRTY ONE

Zoning, Earthmoving, and Environmental Impact Assessments-Pohnpei

59. Draft Pohnpei-specific Environmental Impact Assessment Regulations.

60. In conjunction with State and Municipal planning officials and other affected Department officials, State environmental officers should participate in the development of more comprehensive zoning standards, especially regarding the fragile and often over-utilized coastal zone.

CHAPTER THIRTY TWO

Fisheries - Pohnpei

61. Liaise more closely with National marine protection officers.

62. Fund additional positions for marine resources surveillance and environmental enforcement.

63. Draft a Coastal and Ocean Management Statute for the protection and management of renewable resources.

CHAPTER THIRTY THREE

Agriculture - Pohnpei

64. Initiate liaison efforts between the Division of Agriculture and the Division of Environmental Protection to achieve goals of sustainable development. Liaison between National and State agricultural programs is also desirable.

CHAPTER THIRTY FOUR

Forestry - Pohnpei

65. Redraft and resubmit for public hearing *Forest Management Act* and *Pohnpei Watershed Forest Reserve and Mangrove Protection Act Subsidiary Regulations*.

66. It would be advisable to revise the *Forest Management Act* and *Pohnpei Watershed Forest Reserve and Mangrove Protection Act* to transfer nature park language and species protections to the appropriate authority, once the following matters are determined:

* which environmental control powers belong to the National Government and which belong to the State Governments (by issuance of a National-State Joint Attorney-General Opinion);

* whether State environmental efforts will be confined to the Department of Health Services or placed in an Environmental Protection Agency:

* whether oversight of the Environmental Department or Agency will be broadened to include oversight of natural resource protections. If authority for parks, preserves, and conservation of living resources is retained within the Division of Forestry, it may be advisable to create a program specifically for the environmental protection of those species and reserve areas identified.

67. Fund environmental education officers and programs, with particular emphasis on developing programs for primary, secondary and adult extension courses.

CHAPTER THIRTY FIVE

Biodiversity Conservation - Pohnpei

68. Enact legislation to create an umbrella environmental protection organization, with power to establish controls regarding natural resources conservation and environmental health areas. This would eliminate duplicative efforts and administrative confusion by defining environmental protection responsibility in one organization. If no umbrella organization is desired, then create an environmental advisory body, comprised of representatives from all government Departments, to coordinate biodiversity and environmental health efforts.

69. If no umbrella environmental organization is desired, enact original legislation for the creation of State parks or nature preserves, or create parks under the *Public Lands Act*, the *Forest Management Act*, or the *Pohnpei Watershed Forest Reserve and Mangrove Protection Act*.

70. If no umbrella environmental organization is desired, and if species protection is considered a State function pursuant to a Joint National-State Attorney-General Opinion, enact comprehensive legislation for the consolidation of species protection and introduction of related habitat protection at the State level.

71. Additional funding and training is required to promote effective management and enforcement of current living resources legal protections; legislative efforts to conserve living resources should be coordinated with National and municipal Governments and updated.

CHAPTER THIRTY SIX

Tourism - Pohnpei

72. Include environmental protection advisors within the Pohnpei State Tourism Commission.

73. To better protect the environment, focus tourism efforts on small-scale village tourism and eco-tourism.

74. Include legal environmental protection requirements in all handouts and pamphlets to visitors.

CHAPTER THIRTY SEVEN

Cultural Heritage - Pohnpei

75. State legislation should be enacted immediately to preserve and protect the actual site and surrounding environment of Nan Madol.

PART 5 STATE OF CHUUK

Environmental Health Protections

CHAPTER FORTY

Pollution Control - Chuuk

76. Develop and enforce state pollution control policies, regulations and standards, with special emphasis on prevention of petroleum spills and the dumping of hazardous wastes.

CHAPTER FORTY ONE

Water Quality - Chuuk

77. Fund technical and laboratory assistance programs to enable the State to conduct appropriate levels of water testing.

78. Draft marine, fresh and public drinking water standards with standards appropriate to Chuuk (but not less than Constitutionally-mandated national standards).

CHAPTER FORTY TWO

Waste Management - Chuuk

79. Delineate responsibility for all aspects of waste management, and consolidate these responsibilities within one department.

80. Develop a State-specific project for rural sanitation, wastewater treatment and solid waste disposal.

81. Draft solid waste and toilet facilities regulations with standards appropriate to Chuuk (but not less than Constitutionally-mandated national standards)

CHAPTER FORTY THREE

Zoning, Earthmoving, and Environmental Impact Assessments-Chuuk

82. Establish an independent state environment agency pursuant to Article XI, Section 1 of the Chuuk State Constitution.

83. Allocate the following tasks to the newly-created State environment agency:

* examining State needs for environmental protection legislation and regulation, and advising the State Government accordingly,

* liaising with the National Government to determine which environmental protection functions the State should administer;

advising the State government as to the operation and implementation of National environmental laws and regulations within the State.

84. Strengthen physical planning within the State Department of Commerce and Industry.

85. Review and amend the National-Chuuk State Memorandum of Understanding to detail more clearly which environmental protection functions are the State's responsibility and which are the functions of the National Governments.

86. Institute Environmental Impact Assessment requirements.

Natural and Cultural Resources

CHAPTER FORTY FOUR

Fisheries - Chuuk

87. If it is determined, by issuance of a National-State joint Attorney-General opinion, that 23 FSMC does not apply to Chuuk State, then the State must enact its own legislation: prohibiting the use of chemicals, poisons and dynamite for fishing; controlling trochus harvesting; controlling the taking of turtles; and stipulating acceptable fishing methods for artisinal and commercial purposes. The issue of the taking of turtles might be more appropriately addressed under separate marine species protection legislation.

88. The State Government may wish to use its Constitutional powers to legislate and regulate for the management and protection of in-shore areas. The complex traditional reef tenure systems may be a capable foundation for creating satisfactory environmental regulatory controls. The increasing problems of in-shore water pollution, and the massive damage caused by dynamiting and overfishing, necessitate some level of State Government legislative and regulatory intervention.

89. Educate local communities regarding the importance of marine resource management and conservation. Local communities must be involved in decisions regarding management of marine resources. Traditional reef ownership and traditional fishing practices could be incorporated into legislation regulating in-shore areas.

90. Place conditions on fishing permits which stipulate methods to be used and the imposition of certain restrictions.

91. Apply rigorous EIA standards so as to ensure sustainable development of marine resources.

92. Transfer responsibilities regarding marine resources to the Department of Marine Resources, from the Department of Commerce and Industry in order to avoid duplication of effort.

CHAPTER FORTY FIVE

Agriculture - Chuuk

93. Examine agricultural practices, to identify future legislative and regulatory needs in areas such as mitigation of soil erosion, appropriate use of fertilizers and pesticides, and safe disposal of resultant waste. Regulate piggery and poultry operations to control appropriate waste disposal and processing methods.

94. Examine land use patterns to identify the most appropriate areas for agricultural development so as to minimize deleterious environmental impact, including clearing of important forest areas for agricultural purposes. Educate landowners regarding practices which are least harmful to the environment.

95. Establish land use guidelines.

CHAPTER FORTY SIX

Forestry - Chuuk

96. Review and assess forest resources and forest management priorities.

97. Develop appropriate programs and legislation to ensure sustainable development.

98. Develop practical management and conservation plans for use of mangrove areas.

99. Draft regulations to protect and manage mangrove areas, to prevent erosion in forest areas created by agro-forestry practices, and to protect watershed areas.

CHAPTER FORTY SEVEN

Mining and Minerals - Chuuk

100. Introduce an enforceable permit system incorporating comprehensive EIA provisions for all mining and extractive activities.

101. Designate appropriate areas for mining and dredging.

CHAPTER FORTY EIGHT

Biodiversity Conservation - Chuuk

102. Develop policies, administrative structures, legislation and regulatory controls regarding biodiversity conservation. Accumulate resource assessment data. Appropriate policies and controls may not be formulated if knowledge of the resources to be protected is inadequate.

103. If a State EPA is established, extended its powers to encompass biodiversity conservation. Such an agency could spur conservation measures by coordinating efforts between government departments and agencies whose activities have an impact on biodiversity conservation.

104. Develop EIA processes to address the impact of a development project or proposal upon endemic flora and fauna, their habitat, and upon the natural terrestrial and marine environment. Any approvals granted for development should include conditions to minimize impact and ensure rehabilitation whenever possible.

105. Undertake physical planning and zoning to control development and divert it away from environmentally sensitive areas. Zoning could also be used to designate and limit activities within protected areas such as watershed areas and in-shore reefs.

106. Regulate the reasonable use of traditional tidelands.

107. Draft legislation to protect native flora and fauna with particular emphasis on protection of endangered species, following a decision between the State and National Government regarding the appropriate jurisdiction for the protection and control of native flora and fauna.

CHAPTER FORTY NINE

Tourism - Chuuk

108. Review and broaden functions and responsibilities of the Visitor's Bureau. Transfer the responsibility for garbage collection to one of the government bodies already concerned with waste management and disposal, such as the Department of Health Services or Public Works. The Bureau's activities should include long-range tourism development planning.

109. While marine-based tourist activities predominate, the terrestrial natural environment and Chuuk's rich cultural and historic heritage should be examined for their tourism potential. Chuuk's natural environment lends itself particularly well to low impact eco-tourism. It is necessary and advisable to link eco-tourism with biodiversity conservation through the creation of protected areas such as reserves or parks.

110. Liaise with municipal governments and local landholders to minimise the impact of tourism on the lives of local residents. Local communities may participate in tourism promotion by making private areas with natural or cultural conservation values accessible to tourists. Financial returns from tourism might encourage local communities to accept protection of areas with high natural or cultural heritage conservation values.

111. As tourism is one of Chuuk's growth industries, its development must be subject to rigorous environmental impact assessment so that impact on the natural and social fabric of the State is benign. Proponents of development projects aimed at tourists should be required to assess the impact of their projects on existing infrastructure, as well as on natural and cultural resources. Developers' payment for the provision of the infrastructure and services necessary for their projects may be an effective method of improving Chuuk's existing infrastructure without resort to government funding.

CHAPTER FIFTY

Cultural Resources - Chuuk

112. The draft *Chuuk State Historic Preservation Act of 1991* should be reviewed and submitted to the Legislature. Amend the Bill to ensure that the HPO or the Review Board is involved in all projects or developments affecting cultural or historic heritage. Increase fines proposed for breaches.

113. Administer and enforce the diving permit system for Chuuk Lagoon. Attach rigorous permit conditions prohibiting damage and removal of artifacts. Undertake a comprehensive study of the wrecks in the lagoon to provide a basis for regulations and to indicate the most appropriate methods to protect these items of historic heritage. An effective EIA process will ensure that the impact upon cultural and historic heritage from minor and major development projects will be addressed, mitigated, and avoided where possible.

PART 6 STATE OF YAP

Environmental Health Protections

CHAPTER FIFTY THREE

Pollution Control - Yap

114. Issue a Joint Attorney-General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in all areas of environmental oversight.

115. Enter into a "written cooperative agreement" with the National Government Department of Human Resources to avoid duplication of regulatory and permitting efforts. This agreement should include provisions on pollution, water quality, waste management, zoning, earthmoving and EIA's.

CHAPTER FIFTY FOUR

Water Quality - Yap

116. Fund technical training and laboratory assistance programs to enable further testing of the water supply.

CHAPTER FIFTY FIVE

Waste Management - Yap

117. Develop a State-specific project for rural sanitation, wastewater treatment and solid waste disposal.

CHAPTER FIFTY SIX

Zoning, Earthmoving and Environmental Impact Assessments - Yap

118. Amend the draft Regulations for Earthmoving and Sedimentation in accord with the 1991 reviews of the Regulations by the Office of the Attorney-General. Enact the regulations as soon as practicable.

119. Enact Environmental Protection Agency Regulations offering specific environmental impact assessment controls and requirements for all development projects pursuant to Yap State Code Title 18, Section 1509. This effort should be coordinated and merged, if possible, with a proposed new system of development review recently submitted by the University of Oregon Micronesia Program.

120. Although the University of Oregon proposal suggests that part of the cost of the development review process could be met by the developer's application fees, additional State funding for increased staff and training costs will be required before effective review could be accomplished.

121. This proposed coordinated development review process seems both sensible and worthwhile. It would however, need to be coordinated with the environment impact assessment system established under the *Yap Environmental Quality Protection Act.* Extensive consultation with the Departments and agencies responsible for implementation of this proposal is essential, as is the considered development of clearly worded and easily understood procedures.

122. Code provisions regarding the issuance of building permits remain silent on specific assessment criteria or environmental zoning requirements. The provisions refer to the Yap Islands Proper Master Plan Area, an area not yet defined. Guidance for the Commission is required, perhaps in the form of Regulations. Proper planning criteria and guidelines for both the public and the Commission are desirable. Coordination with the Environmental Protection Agency is also necessary.

CHAPTER FIFTY SEVEN

Fisheries - Yap

123. Assess the status of reef fish stocks and their availability to the local market; amend the *State Fishery Zone Act* to address possible restrictions on the export of reef fish.

124. Pass State legislation restricting gillnet fishing.

125. Assess reef owners' desire to control spear fishing. Consider prohibiting spear fishing with scuba equipment or flashlights on certain overused reefs.

CHAPTER FIFTY NINE

Coastal Zone, Marine and Reef Protection - Yap

126. The recently drafted Marine Resources and Coastal Management Plan should be reviewed by all State conservation and environmental departments and agencies, and should be considered for final drafting and implementation.

127. The wording used in the customary fishing exemption to the reef damage Code provision allows FSM citizens to cause damage to reefs and other adjacent areas provided they are exercising traditional rights. This provision should be strengthened by delineating which specific traditional rights are covered by the exemption. A further amendment should limit the complete exclusion of persons who have submitted environmental impact assessment documents. Provision of environmental documentation regarding a development project should not prevent enforcement of this Section if excessive reef damage is still incurred.

128. Both National and Yap State environmental leaders have recently been assessing the benefits and appropriateness of using traditional enforcement systems, including Chiefs and community leaders, rather than the western judicial system of enforcement. Preliminary consensus favors using the western judicial system for oversight of larger-scaled, non-traditional activities. Smaller-scaled traditional activities should be subject to the traditional system of enforcement.

129. Create "fisheries committees" for oversight of reef fisheries management. One committee could be established for Yap Proper, and a second could be established for the Outer Islands. This proposal increases the likelihood of both effective enforcement of conservation measures and increased public awareness of environmental issues.

CHAPTER SIXTY

Biodiversity Conservation - Yap

130. In conjunction with the National Government, and pursuant to jurisdictional requirements set forth in the Joint Opinion of the Attorney-Generals of FSM and of the four States, enact comprehensive legislation for the consolidation of species protection and introduction of related habitat protection at the State level.

131. Redraft and expand the Code provisions relating to the protection of turtles. The draft Yap State Marine Resources Coastal Management Plan offers the following drafting suggestions in its September 1991 working paper:

- define the species involved, using the scientific, common English and vernacular names;
- ban the commercial sale of turtle products;
- ban the collection of turtle eggs;
- protect hatchlings ;
- set out appropriate turtle capture methods and seasons;
- protect turtle nesting and feeding habitats;
- discourage the use of non-traditional vessels, including government vessels, to facilitate turtle hunting; and
- regulate customary usage and control.

Note: The Marine Resources Management Division is currently working with the two Councils of Chiefs to develop suitable recommendations for new legislation in this area.

ACKNOWLEDGEMENTS

The varied cultural, political and legal framework within which the Federated States of Micronesia (FSM) rests required the development of this Review to be a uniquely cooperative endeavor. A number of people graciously offered their time, attention, and considerable expertise to this effort, without which the present document could not have been accomplished. This consultant is most grateful for the commitment and enthusiasm exhibited by Vivienne Ingram, Principal Legal Officer to the New South Wales National Parks and Wildlife Service. Ms. Ingram's draft submissions are the basis for the Chapter on Chuuk State, as well as the National Government sections regarding environmental impact assessments, natural resource protection, and cultural heritage. Ben Boer, Corrs Chambers Westgarth Professor of Environmental Law and Director of the Australian Centre for Environmental Law (Sydney) in the Faculty of Law at the University of Sydney, was likewise of great assistance to the present Review. The draft submissions of Professor Boer and his Research Associate, Mr John Delany, formed the foundation for the Chapter on Yap State.

Further, the Consultant is grateful for the infrastructure assistance and wise counsel provided by the staff of the National Office of the Attorney-General, the National Department of Human Resources, and most particularly for the reasoned legal assessments offered by Assistant Attorneys-General Maureen Phelan and Nancy Murray, as well as the valuable environmental knowledge contributed by Donna Scheuring, RETA Local Consultant.

During this consultant's time in Pohnpei, FSM National and State legal officers convened an unprecedented meeting, chaired by Ms. Phelan, concerning the legal implications of various environmental and jurisdictional matters. Sincere thanks are offered to the following State counsellors for their erudition and insight into the status of environmental law in FSM:

Dennis Bolcourt, Legal Counsel, Kosrae State Legislature
Larry Goddard, Legal Counsel, Pohnpei State Legislature
Russ Marsh, Chief of Litigation, Yap State Attorney-General's Office
Lloyd Mashita, Special Counsel to the Governor, Pohnpei State
Daniel Mosier, Legal Counsel, Pohnpei State Legislature
Jim O'Brien, Attorney-General, Kosrae State
Martin Pankove, Acting Attorney-General, Chuuk State

In addition, the following people offered the consultant valuable assistance in the course of this Review, both through the contribution of relevant materials and by the gracious donation of time and attention to the Review document:

Christopher Dahl, Extension Agent, Sea Grant at the Community College of Micronesia
Joses Gallen, State Attorney, Department of Justice, Pohnpei State
Doug Juergens, Acting Attorney-General, FSM
Carole Nervig, Nan Madol Foundation
Lyn Beth Neylon, Staff Attorney, Health and Environment Committee, FSM Congress
Camillo Noket, Assistant Attorney-General, FSM
Dr. Eliuel Pretrick, Secretary of Human Resources, FSM
Neil Rutledge, Chief Justice, High Court of the Marshall Islands
Dave Sheppard, RETA Team Leader, South Pacific Regional Environment Programme
Nachsa Siren, Environmental Health Co-ordinator, Department of Human Resources, FSM
Dirk Spennemann, Staff Archaeologist, Ministry of Interior and Outer Islands Affairs, RMI
James T. Stovall, Counsel, Embassy of the Federated States of Micronesia
Robert Thistlethwaite, RETA International Consultant, National Environment Management Strategy
Hal White, Assistant Attorney-General, FSM

PART 1

INTRODUCTION

CHAPTER ONE

INTRODUCTION TO THE LEGAL REVIEW

1.1 Geography and people

The Federated States of Micronesia consists of 607 high volcanic islands and low-lying coral islands and atolls extended over more than one million square miles of the Tropical Western Pacific Ocean. Part of the east-west Caroline Archipelago, the nation's Exclusive Economic Zone spreads from approximately 1 degree south to 14 degrees north latitude and 135 degrees to 166 degrees east longitude. FSM's total land area, however, encompasses a mere 270.8 square miles. Approximately 65 islands are inhabited by a population of just over 100,000.

A federation of four highly autonomous States (Chuuk, Kosrae, Pohnpei, and Yap), FSM hosts a wide variety of island types and groupings, as well as a diverse population and cultural heritage. The easternmost State of Kosrae consists of five closely-situated mountainous islands comprising just over 40 square miles of land, and hosts a 1990 population of 7,369. Pohnpei State, with a population of over 33,000, claims the highest mountain peak in FSM (791 meters) on its single, large volcanic island. Twenty five smaller islands within a barrier reef and 137 coral atolls complete the total land area of 133 square miles. Chuuk is the most populous State, with 49,163 people in residence in 1990. Chuuk includes seven major island groups comprising a land mass of 49 square miles. Yap State has a population of just over 10,000 and a land area of 48 square miles, including 44 large high islands, seven smaller islands, and approximately 134 outer islands (First National Development Plan (1stNatDevPlan); pages 7-9; Scheuring 1991; Table 3.1.1.)

The people of the Federated States share with all peoples of the Pacific a deep and abiding respect for the land and the sea, elements of which have provided them daily sustenance for thousands of years. This fragile natural environment has been well-tended in customary practice, providing a basis for subsistence living and for economic, social and cultural well-being. FSM now faces threats to this natural resource base, including rapidly increasing population, rising material expectations, demands for economic growth, and the depletion or degradation of natural resources. A pressing need for comprehensive environmental management has arisen to ensure that FSM's island resources are used in ways that can be sustained and to further ensure that significant resources are adequately protected.

1.2 The RETA Project

A Regional Environment Technical Assistance (RETA) Project was therefore initiated in 1990 to strengthen the capabilities of FSM and other Pacific countries in the area of environmental management. Implemented under the umbrella of the South Pacific Regional Environment Programme (SPREP), RETA reaches out to five Pacific nations: Federated States of Micronesia, Republic of the Marshall Islands, Cook Islands, Solomon Islands and the Kingdom of Tonga.

RETA objectives in FSM include:

(1) developing a National Environment Management Strategy;

(2) implementing relevant environmental training and projects;

(3) strengthening the FSM capability to achieve national and regional environmental goals; and

(4) increasing community awareness of the need for environmental protection.

The National Environmental Management Strategy (NEMS) addresses these areas and identifies the main environmental problems and issues confronting FSM. This Legal Review is one component of the NEMS, and is designed to offer an overview of the present status of environmental legislation in FSM and delineate future legal and administrative needs in particular environmental areas.

1.3 The review of environmental legislation

The specific objectives of the Environmental Legislation Review are to:

(1) review existing legislation and associated administrative structures in FSM relating to environmental management;

(2) critically evaluate the effectiveness of this legislation in addressing current environmental issues; and

(3) recommend amendments to existing legislation and, where appropriate, recommend new legislation and structures, to more effectively address environmental issues in FSM.

Environmental legislation is devised to help ensure that natural and cultural resources may be sustained, for the sake of the evolving ecosystem as well as for effective use of that system by human beings. This generation and future generations deserve to live and work in a safe, healthy, diverse and uncontaminated environment. Recently, FSM has joined many nations in its attempt to implement strategies for "sustainable development", which can be defined as using resources to improve the quality of human life while living within the carrying capacity of supporting ecological systems.

1.4 Sustainable development

Under principles of sustainable development, a comprehensive system of environmental law should cover: land use planning and development control; sustainable use of renewable resources, and non-wasteful use of non-renewable resources; prevention of pollution; efficient use of energy; control of hazardous substances; waste disposal, and conservation of species and ecosystems through land-use management, safeguarding vulnerable species and a comprehensive framework of protected areas (Caring For The Earth; page 68). FSM environmental law presently addresses many aspects of these world-wide goals; the challenge to present and future generations is to protect FSM's fragile ecosystem by addressing them all.

CHAPTER TWO

ENVIRONMENTAL CONVENTIONS AND TREATIES

2.1 Introduction

Many intriguing legal questions have arisen over the last 15 years surrounding FSM's gradual emergence as a free and independent nation from its former status as three of the six districts within the Trust Territory of the Pacific Islands (TTPI); (refer to Chapter IV, National Government, Section A.1; for a listing of FSM independence dates.) One of the more fascinating concerns surrounds consideration of United States treaties which bound FSM during the United States' TTPI administration. Which bilateral and multilateral treaties bound FSM, when did those bonds dissolve, and to which treaties ought FSM now accede?

FSM has maintained that the United Nations TTPI Trusteeship terminated on November 3, 1986, with the coming into force of the Compact of Free Association between the United States and FSM (discussed below at para 2.3). In late 1986, therefore, FSM filed a notice of Treaties succession with the Secretary General of the United Nations to accede to certain international treaties that were extended to the former TTPI. The United Nations Legal Advisor's Office objected at that time, claiming the Trusteeship was not legally terminated until the Security Council had so decided. As FSM has been admitted recently as a full member of the United Nations, the point is now moot. A draft "Declaration Regarding Treaties Formerly Applied" is therefore currently being formulated for Presidential approval and submission to the United Nations.

In late 1987, FSM's Presidential Order No. 5 created a "Working Group on Treaty Succession and International Organizations" to review the 268 United Nations treaties and other international agreements made applicable to the TTPI prior to November 3, 1986. The Working Group was to make recommendations as to whether the bilateral treaties should be continued, modified or terminated, as well as recommend whether FSM should confirm termination, confirm succession, or accede or adhere to the multilateral treaties. Following FSM's acceptance as a member nation of the United Nations, the Working Group has been revitalized and shall now begin the arduous task of treaty reviews.

2.2 Formerly applicable treaties

Until such time as a complete treaty review is accomplished, the draft "Declaration Regarding Treaties Formerly Applied" may state that:

* FSM considers the application of all international agreements entered into by the United States and made applicable to FSM by the United States pursuant to the TTPI Trusteeship to have ceased; and

* with regard to bilateral treaties applied to FSM, that FSM shall examine each treaty and communicate its views, and in the meantime, FSM will continue to observe the terms of each treaty, provisionally and reciprocally, when not inconsistent with the letter or the spirit of the FSM Constitution; and

* with regard to multilateral treaties previously applied, during the period of FSM review, any party to the treaty may rely on the terms of such treaty as against FSM, reciprocally, when not inconsistent with the letter or the spirit of the FSM Constitution.

A review of the 268 U.S. treaties and other international agreements made applicable to the TTPI, and hence FSM, reveal a number of environmental accords. Among the more prominent:

* *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter*, with Annexes and Protocol of November 2, 1973. Done at London, Mexico, Moscow, and Washington, December 29, 1972;

* Protocol of 1978 relating to the *International Convention for the Prevention of Pollution from Ships, 1973*, with Annexes and Protocols. Done at London, February 17, 1978;

* *Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof.* Done at Washington, London, and Moscow, February 11, 1971;

* *Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques*, with Annex. Done at Geneva, May 18, 1977;

* *Agreement relating to the Conduct of a Joint Program of Marine Geoscientific Research and Mineral Resource Studies of the South Pacific Region*, with Annexes. Signed at Suva March 12, 1982 with Related Agreement signed at Washington, September 19, 1984;

* *International Plant Protection Convention*, with Annex. Done at Rome, December 6, 1951;

* *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, with Appendices. Done at Washington, March 3, 1973;

* *Convention on Long-Range Transboundary Air Pollution.* Done at Geneva, November 13, 1979.

The Federated States of Micronesia is signatory in its own right to a number of international Conventions and treaties relating to environmental concerns.

2.3 Compact of Free Association

The preeminent international document in FSM is the Compact of Free Association between the Government of the United States and the Government of the Federated States of Micronesia (the Compact). The Compact defines the relationship between the two sovereign nations following the termination of the July 18, 1947 United Nations Trusteeship administered by the United States. On October 1, 1982, the Government of the United States and the Government of the FSM concluded the Compact, establishing a relationship of Free Association between the two governments. The people of FSM approved free association status in accordance with their constitutional processes, and in a United Nations-observed plebiscite on June 21, 1983. The United States Congress passed the agreement on January 14, 1986 (Public Law 99-239, 99 Stat. 1770). The Compact went into full force and effect on November 3, 1986.

The Compact broadly empowers FSM to join the community of independent nations in the conduct of its domestic and foreign affairs, while the United States is given responsibility for external military defense and security matters. The United States further agreed to provide annual financial grants to FSM during the fifteen year period of the Compact for certain stated purposes. The grants are distributed through a separate "Memorandum of Understanding with Respect to the Division of Grant Assistance" between the National and four State Governments, with apportionment to the States reflective of population distributions. Annual grants totalled approximately $90 million for the first five year Compact period; the second five year period amount dropped to approximately $70 million at the beginning of the 1991-92 fiscal year. A further drop in funding levels will occur in October, 1996, ushering in the final five year Compact grant period.

Under Title One, Article VI of the Compact, the United States and FSM Governments have pledged to "promote efforts to prevent or eliminate damage to the environment and biosphere and to enrich understanding of the natural resources of the Marshall Islands." To carry out this policy, the United States agreed to:

* Continue to apply the environmental controls in effect on the day preceding the effective date of the Compact to its continuing activities, until those controls are modified. (Compact Section 161(a)(1))

* Apply the *United States National Environmental Protection Act* to its activities in FSM as if the Federated States of Micronesia were the United States. (Section 161(a)(2))

* Apply environmental standards that are substantively similar to those required in 6 enumerated United States environmental statutes when conducting activities requiring the preparation of a United States Environmental Impact Statement. (Section 161(a)(3))

* Develop appropriate mechanisms, including regulations or other judicially reviewable standards and procedures, to regulate its activities governed by Section 161(a)(3). The alternate standards must account for the "special governmental relationship" between the FSM and the United States, technical support from appropriate United States environmental agencies is required in the development of the standards, and FSM must be given the opportunity to comment during their development. (Section 161(a)(4))

Reciprocally, the Federated States, under Section 161(b) of the Compact, has an obligation to develop and enforce environmental protection standards and procedures substantively similar to those of the United States for those activities substantively equivalent to United States activities. Such standards shall take FSM's particular environment into account.

2.4 *SPREP Convention*

As a member government and active participant in the South Pacific Regional Environment Programme (SPREP), FSM was among the first countries to ratify the *Convention for the Protection of the Natural Resources and Environment of the South Pacific Region* (*SPREP Convention*) and its two related protocols:

* Protocol for the Prevention of Pollution of the South Pacific Region by Dumping; and

* Protocol concerning cooperation in Combating Pollution Emergencies in the South Pacific Region.

Ratification of the *SPREP Convention* occurred on November 29, 1988, as did the ratification of the Protocol on Pollution Emergencies. Ratification of the Protocol on Dumping occurred one year earlier, November 29, 1987. The Convention's goals are to prevent, reduce and control pollution resulting from vessels, land-based sources, sea-bed activities, discharges into the air, disposal of toxic and non-toxic wastes, testing of nuclear devices and mining. Further protection for fragile ecosystems and endangered species are contemplated.

2.5 Driftnet Prohibition

On June 14, 1990, the Congress ratified the Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific, including the Protocols and associated instruments to the Convention (Congressional Resolution 6-90). The Convention entered into force in FSM on November 9, 1990 with the deposit of the ratification instrument in Wellington, New Zealand.

The Convention prohibiting long driftnet fishing was developed as a result of recent marine protection concerns voiced by a number of independent Pacific countries. The Convention was formulated during a series of international meetings, and was adopted in Wellington, New Zealand on November 29, 1989.

2.6 *United Nations Convention on the Law of the Sea*

This Convention provides a focus for international ocean-related activities and for marine affairs in general. It has exerted an immense and ever-widening influence on countries' conduct of marine affairs. Across the globe, states are increasingly resorting to the seas and oceans to supplement their developmental needs. This increased maritime activity has led to a marked trend towards the establishment of maritime regimes consistent with the norms embodied in the Convention. Those norms include jurisdictional statements regarding the territorial sea, the contiguous zone, the Exclusive Economic Zone (EEZ), continental shelf and the areas of mid-ocean archipelagic states. The adoption by the Convention of a 12-mile territorial sea constitutes a major contribution to international maritime law.

A number of Articles speak to the protection and preservation of the marine environment. Pursuant to Article 202 of the Convention, States are required to provide appropriate assistance, directly or indirectly, to developing States concerning the preparation of environmental impact assessments. International aid organisations have focussed attention recently on the development of environmental impact assessment requirements in the developing world and on appropriate implementation and enforcement schemes. International discussions and agreements concerning pollution from ships, pollution from radioactive substances, ocean dumping, and marine pollution research and monitoring have all benefited from the framework established by the *Law of the Sea Convention*.

FSM deposited its instrument of ratification of this important maritime Convention with the United Nations on April 29, 1991.

2.7 Anticipated Ratifications

FSM is still a very young country, and has therefore not yet ratified a number of proposals of interest to its environmental community. Informal discussions in government circles have indicated some political interest in ratification of the following agreements:

* *Convention on International Trade in Endangered Species* (*CITES Convention*);
* *Convention on Conservation of Nature in the South Pacific* (*Apia Convention*).

PART 2

NATIONAL GOVERNMENT

CHAPTER THREE

CONSTITUTIONAL AND ADMINISTRATIVE STRUCTURE

3.1 Brief History of Governance

Over 3000 years ago, Micronesian and Polynesian sailors and navigators arrived and settled in what is now referred to as the Federated States of Micronesia. The origins of the settlers is as diverse as the varied cultural groups and eight major indigenous languages now present on the islands collectively called FSM. Government structures emerged, based on the traditional rights and obligations of extended family and clan systems. These social and governance systems were frequently based on discussion, consensus, and shared work toward a common goal under the guidance of traditional leadership. The unique Pacific customary system of non-confrontational decision making and dispute resolution continues to this day alongside FSM's more recent, Constitutionally-mandated system of democratic governing principles.

European colonial and legal control over FSM can be traced to the *Treaty of Tordesillas* between the Kingdoms of Spain and Portugal in 1494, in which Spain was ceded ownership of Micronesia in its entirety. Four centuries later, as the German government expanded its trading interests, disputes in the region between Spain and Germany culminated in a settlement by Pope Leo XIII. The 1885 settlement divided the Micronesian region, placing the "Caroline Islands" (now FSM) in Spanish possession, and offering up the present-day Marshall Islands to the Germans. The dispute was finally settled after the Spanish-American war of 1898, when the German government bought the remainder of the Spanish possessions in Micronesia (Spennemann; 1992).

European social and cultural influences on FSM can be traced back to explorations of the 16th century. But because FSM was not in the path of early colonial trade routes across the Pacific, it was spared substantial western cultural contact until the 19th century, when American and European traders, whalers and missionaries began visiting and settling on some of the Caroline Islands (Scheuring 1990; Section 2.3.2.2).

In 1914, at the beginning of World War I, Japan invaded the Caroline Islands and Germany withdrew. In 1920, the League of Nations gave Japan a Mandate to administer the islands as the occupying power. Japan administered the islands of what is now the Federated States of Micronesia until the outbreak of World War II in the Pacific, during which United States military forces captured FSM from Japan.

The United Nations and the United States Congress approved a Trusteeship Agreement in 1947 creating the Trust Territory of the Pacific Islands (TTPI), integrating present-day FSM with the Northern Marianas, the Marshall Islands and Palau. The Agreement entrusted the Micronesian Islands previously administered by the Japanese under the 1920 Mandate to the United States as Trustee. The United States Department of the Navy administered the Trust Territory from 1947 to 1951, at which time administration was transferred to the United States Department of Interior.

In 1965, in a first step toward self-government, the Congress of Micronesia was formed, comprising elected representatives from all island groups of the Trust Territory. Although the Congress exercised broad legislative authority over the TTPI, its actions were subject to veto by the United States, as Administering Authority. In short time, preliminary negotiations with the United States concerning "Free Association" were undertaken.

On July 12, 1978, voters in the four TTPI districts that now comprise FSM ratified a Constitution drafted by an elected constitutional Convention. On May 10, 1979, following national elections,

the National and State Governments of FSM were installed and the Constitution of the Federated States of Micronesia took effect. The Government of the Federated States of Micronesia was established on that date as a distinct, self-governing political entity.

FSM has been a fully free and sovereign nation since the Compact of Free Association between the Government of the United States of America and the Government of the Federated States of Micronesia (Compact) came into effect on November 3, 1986. The United Nations Security Council terminated FSM's Trusteeship status on December 22, 1990 (considered by FSM as a legal recognition of established fact). On September 17, 1991, the General Assembly of the United Nations at its 46th Session adopted a Resolution admitting FSM as a member nation.

FSM is now a newly-independent constitutional democracy. The fundamental law of FSM is contained in its Constitution, effective May 10, 1979. The Constitution sets forth a democratic system of government that contains aspects of both Western and traditional governing structures.

3.2 National Constitution

3.2.1 General Overview

The Constitution of the Federated States of Micronesia was established, like all constitutions, as an act of inherent sovereignty. The people of Micronesia therein affirmed their wish to make one peaceful nation of many islands, to respect the diversity of their cultures, to preserve the heritage of their past, and, having been ruled by other nations, to become the proud and permanent guardians of their own islands (Preamble, Constitution of the Federated States of Micronesia (hereafter: National Constitution)).

The National Constitution, as an expression of the supreme law of FSM, establishes a system of democratic governance at the national, state, and municipal levels. Each of the four States is required to have its own democratic constitution (National Constitution, Article VII); those Constitutions shall be reviewed at the start of each State Chapter in the present document.

The National Constitution delineates territory and citizenship rights of FSM, sets forth civil liberties protection under a "Declaration of Rights" akin to the United States Bill of Rights, and envisions three separate branches of government: Legislative, Executive, and Judicial. To the extent that this Constitution is modelled on the U.S. Constitution, FSM case law presumes identical phrases to have the same meaning given to them by the U.S. Supreme Court (*FSM v. Jonathan*, 2 FSM Intrm. 189, 193-94 (Kos.) 1986)) (*Tammow v. FSM*, 2 FSM Intrm. 53, 56-57 (App. 1985)). Concurrently, it is presumed that differences in language reflect a conscious effort by the framers to travel a different path (*FSM Development Bank v. Estate of Nanpei*, 2 FSM Intrm. 217, 219 (Pon. 1986)).

Environmental declarations include:

* Prohibition of testing, storing, using, or disposing of radioactive, toxic chemical, or other harmful substances within FSM, without the express approval of the National Government (National Constitution, Article XIII, Section 2);

* requirements that net revenue derived from ocean floor mineral resources exploited under the National Government's power to regulate exploration and exploitation of marine resources beyond 12 miles from shore be divided equally between the National Government and the appropriate State Government; and

* transitional provisions keeping statutes of the former Trust Territory in effect, including environmental statutes and subsidiary regulations, except to the extent three such statutes are inconsistent with this Constitution, or amended or repealed (National Constitution, Article XV, Section 1). Amendment or repeal may be implicit (*FSM v. Albert*, 1 FSM Intrm. 14, 16 (Pon. 1981)).

3.2.2 Traditional Aspects of the Constitution

While installing western concepts of individual rights and freedoms, the National Constitution equally recognizes traditional aspects of governance. The deep Micronesian respect for and recognition of traditional management structures is embodied throughout the National Constitution. Frequently this recognition coexists in the developing Pacific with an historic respect for the traditions of the people regarding protection and conservation of the land, sea and air. Indeed, Article V not only honours the function of traditional leaders "as recognized by custom and tradition", but in Section 2 permits the traditions of the people of FSM to be protected by statute. If challenged as violative of civil rights protection embodied in Article IV, the "protection of Micronesian tradition shall be considered a compelling social purpose warranting such governmental action" (National Constitution, Article V, Section 2).

Strong protective language continues in Article V, Section 3, which allows the establishment of a "Chamber of Chiefs" consisting of traditional leaders and elected representatives. Resolution No. 32 of the *Micronesian Constitutional Convention*, adopted October 24, 1975, further states that the clear intention of Delegates was not to affect adversely any of the relationships which prevail between traditional leaders and the people of Micronesia, nor to diminish the honour and respect due to them.

Finally, traditional land alienation protection is embodied in Article XIII. Non-citizens may not acquire title to land or waters in FSM; lease agreements for the use of land for an indefinite term by a non-citizen, a corporation not wholly owned by citizens, or any government, is prohibited (National Constitution, Article XIII, Sections 4 & 5 (as amended in 1991)). Again, constitutional support for traditional and communal land tenure systems often translates into increased regard for sustainable use and customary protection of the environment.

3.2.3 Executive Powers

The nation's executive power is vested in the President. Elected by Congress for a four year term and limited to no more than two consecutive terms, he or she is head of state and is charged with a number of duties consequent to that office. The President appoints all judges, ambassadors, and principal officers of executive departments in the National Government. Executive departments are established by statute; Subsection 3 of this Section sets forth all national executive departments and offices (National Constitution, Article X).

3.2.4 Judicial Powers

National Government judicial power is vested in a Supreme Court and inferior courts established by statute. The Supreme Court consists of the Chief Justice and not more than five associate justices. The investiture of the first Micronesian Supreme Court Associate Justice occurred in late January, 1992.

Appointed by the President, the Chief Justice is the chief administrator of the national judicial system, and may make, publish and amend rules governing the national courts. In deference to custom, Court decisions are constitutionally required to be consistent with Micronesian customs and traditions, and the social and geographical configuration of Micronesia. In a 1991 Constitutional amendment, the FSM populace, in an endorsement of national sovereignty and maturity, chose to require the Court to consult and apply case law from the Federated States of Micronesia when rendering a decision (National Constitution, Article XI (as amended)).

3.2.5 Legislative Powers

The legislative power of the National Government is vested in the Congress of the Federated States of Micronesia. The Congress includes one member elected at large from each of the four States, and additional members elected from congressional districts in each State apportioned by population. Any State may provide that one of its seats is set aside for a traditional leader

instead of one representative elected on the basis of population. Members elected at large on the basis of State equality serve a four year term; all other members serve a two year term (Public Law 4-44, proposing to amend the Constitution by providing a four year term for all members was defeated in a general election held March 3, 1987).

Each member of Congress may cast one vote, except on the final reading of Bills. To become law, a Bill must pass first reading with a two-thirds vote of all members, and then pass final reading on a two-thirds vote of all State delegations, each delegation having cast one vote. A further example of the strength and independence of the federated States is the ability of Congress to override a Presidential veto by not less than a three-quarter vote of all the state delegations, each delegation casting a single vote (National Constitution, Article IX).

3.2.6 Allocation of Powers

Constitutional jurisdictional questions have become a major stumbling block to the establishment of effective environmental controls in FSM. One of the central legal questions to emerge concerns the delegation of powers between State and National Governments to regulate the environment.

Article VIII of the National Constitution defines a national power as a "power expressly delegated to the National Government, or a power of such an indisputably national character as to be beyond the power of a state to control". Powers not expressly delegated to the National Government or prohibited to the states are considered state powers (National Constitution, Article VIII, Section 2). The framers believed that State officials would have greater knowledge of use, local custom and expectations concerning land and personal property, for example, and they therefore would be better equipped to control and regulate those matters (*In re Nahnsen*, 1 FSM Intrm. 97, 107, 109 (Pon. 1982)).

Article IX, Section 2 expressly delegates a long list of powers to Congress, including such environmentally-related powers as the regulation of interstate commerce, navigation and shipping, and the regulation of the ownership, exploration, and exploitation of natural resources within the marine space of the FSM *BEYOND* 12 miles from island baselines. Regulation of natural resources within the marine space from island baselines out to 12 miles has traditionally been considered the province of the States. This jurisdictional split has created a situation with no end of legal entanglements and jurisdictional impediments to National and State enforcement efforts in the protection of marine resources.

To further muddy the waters, the regulation of the "environment" is not expressly mentioned in the National Constitution. By past practice and policy the National Government has defined the term "environment" narrowly, considering the power to regulate the environment enveloped within the power "to promote education and health" (National Constitution, Article IX, Section 3 (before 1991 amendment)). Indeed, the National Department of Human Resources does presently regulate education, health, and environmental concerns of a public health and sanitation nature. The power to regulate education and health has, by a Constitutional Amendment in 1991, been moved from its former place as a power which may be exercised concurrently by Congress and the States, to its new resting place as an exclusive power, expressly delegated to the national Congress. Article IX, Section 2, has now been amended to expressly require Congress "to promote education and health by setting minimum standards, coordinating state activities relating to foreign assistance, (and) providing training and assistance to the states...."

If indeed, "education and health" includes the complete concept and definition of environmental protection, State environmental regulations are now imperilled. Proponents of State authority, however, assert that as the power to regulate the "environment" is not expressly delegated to the National Government, such power falls within State control. Defenders of an interpretation favouring national jurisdiction counter that Article V, Section 2, allowing protection of Micronesian tradition by national statute, Article VIII, Section 1, permitting a national power to be defined as a power of indisputable national character, and Article XIII, Section 1, recognizing

the National Government's obligation to provide education and "health care", may all be used by the National Government to regulate the environment, despite any exclusive jurisdiction claimed by the States.

Legal concerns regarding these constitutional ambiguities may well be satisfied by future Court determinations. Until that time, however, the legal uncertainties regarding appropriate National and State jurisdiction have dovetailed with administrative uncertainty regarding Departmental authority and reduced funding to limit the development of a comprehensive environmental policy within FSM.

Further, the lack of certainty regarding the appropriate venue for environmental management controls has created both under and over-regulation. In some instances, two sets of very similar regulatory instruments control the same behaviour, one at the National and one at the State level. In other instances, no law is created, or no jurisdiction enforces the law (Phelan; 1992).

The lack of current constitutional clarity concerning conservation is most appropriately addressed by FSM legal counsel and policy makers. To that end, a Working Group called the "Legal Task Force on a Joint Attorney General's Opinion" was convened during the FSM National Seminar on Environmental Planning and Management for Sustainable Development, held on February 5-7, 1992 in Palikir, Pohnpei. In an unprecedented meeting between legal representatives of the National and four State Governments, preliminary work was begun on the formation of a Joint Attorney General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in 15 separate areas of environmental law.

If such a document of first impression is issued, it will be based on careful examination of comments by Constitutional framers found in the Journals of the First and Second Constitutional Conventions, and will not include statements of policy. It is the hope of the Working Group that a fresh, joint analysis of the appropriate legal placement of government environmental protection powers would assist both State and National planners in the formation of future policy decisions (Phelan; 1992). It is the belief of this consultant that such a document would be a remarkable first step toward building a coherent legal framework of environmental controls.

3.3 Administrative Structures

As environmental issues reach across a broad spectrum of governmental concerns, most of the national Departments touch at least tangentially upon conservation matters. At the present time, the Department of Human Resources has followed the National Government lead in environmental protection, linking it to health and sanitation efforts. The term "environment", however, has come in the past decade to include many areas in addition to public health protection. A broad array of differing environmental concerns, therefore, now crop up within other Departments in a relatively unstructured fashion. With little linkage between Departments regarding these emerging environmental issues, and little funding available to start new programs and Divisions, a coherent National Government response to varied environmental issues has been difficult to formulate.

Leadership on environmental protection concerning nature conservation, biodiversity, tourism, sanitation and cultural heritage is currently split between Departments. The Office of Administrative Services hosts the Division of Archives and Historic Preservation. The Office of Planning and Statistics prepares development plans and goals, often without reference to the conservation and long-term sustainable management of natural resources. The Department of Resources and Development has been granted oversight of marine and land-based resources. The Department of External Affairs often represents FSM at regional and international intergovernmental meetings concerning environmental issues such as global warming and biodiversity. Additionally, the Department of Human Resources must stretch its budget to include attention to the nation's pressing educational and medical needs as well as establishment of a system of environmental controls.

In the desire to explicate the full present national administrative structure regarding environmental oversight, and in the understanding that bits and pieces of environmental concern float within and between numerous Departments, this Review now briefly describes all National Government Departments and Offices.

Section 203 of Title 2 of the Code of the Federated States of Micronesia (FSMC) establishes the departments and offices which constitute the Executive Branch of the Government of the Federated States of Micronesia. Section 206 of Title 2 provides that the President shall, by administrative directive, establish the duties, responsibilities and functions of the Executive Branch. Presidential Order No. 1 (as amended), taking as its authority the Constitution and the Code, sets forth the duties, responsibilities and internal organization of executive departments and offices.

The Executive Branch is divided into ten Departments, each of which is then divided into Divisions. Presidential Order #1 describes the national departments and offices as detailed in the following paragraphs.

3.3.1 Department of External Affairs

Responsible for the establishment and conduct of national relations with foreign governments and other entities, this Department establishes missions abroad as necessary upon consultation and approval of the President, as well as advising State and National officials of policies to be observed in the international arena. The Department includes:

* the Division of United States Relations, which serves as a channel for diplomatic and trade relations between the FSM and the United States; and

* the Division of International Affairs, which establishes and conducts relations with foreign governments, regional and international organizations, and quasi-governmental organizations other than the United States.

3.3.2 Department of Finance

This Department is responsible for the receipt, custody and expenditure of funds and for advising the President and other officials on financial matters. The Department is further responsible for negotiations with national and international financial institutions concerning grants, loans and financial aid of any description to the FSM National Government or to the States. All financial aid requests generated by the National Government or constituent States, including requests to the Asian Development Bank, the International Monetary Fund, and the World Bank, are processed by this Department. The Department includes:

* the Division of Accounting, which maintains accounting records, manages the National Treasury, and establishes financial management policies and procedures;

* the Division of Revenue, which assesses and collects taxes on incomes and local revenues;

* the Division of Data Processing, which produces and maintains records and other accounting documents;

* the Division of Investment Management, which manages all funds eligible for investment within the National Treasury; and

* the Division of Customs, which administers the FSM customs laws, collects import duties, controls importation of prohibited substances, and conducts agriculture quarantine inspections at ports of entry.

3.3.3 Department of Resources and Development

This Department supports and regulates the development of the national economy and the use of natural resources, including human resources, to the extent that the National Government controls these functions. The Department advises the President and other officials on economic policies strengthening the National economy. All functions and duties are offered within the limits of available resources. Divisions include:

* the Division of Agriculture, which, upon request, provides technical and other assistance to the States in their agricultural development services, liaises with international agricultural bodies, conducts agricultural research and development projects, and establishes national agricultural quarantine regulations;

* the Division of Marine Resources, which provides technical, advisory, and support services to the States and the National Government in their fisheries development services;

* the Division of Commerce and Industry, which encourages foreign investment and tourism, regulates insurance companies, regulates foreign business and foreign investment, registers corporations, and provides technical assistance to the States; and

* the Division of Labor, which issues permits to non-resident workers and analyzes national human resources needs.

3.3.4 Department of Transportation and Communications

Responsible for the regulation of interstate and international sea and air transportation, this Department further controls operations of vessels and aircraft belonging to the National Government and is responsible for the regulation of the radio frequency spectrum in accordance with national and international law. The Department includes the following subdivisions:

* the Division of Marine Transportation and Communication Affairs, which coordinates a nationwide sea transportation system, manages the day-to-day administration of all National Government vessels except those used for marine surveillance, inspects all marine equipment, and assists State Governments with marine transportation needs;

* the Division of Communications, which controls and licenses radio communications in the FSM, discharges treaty obligations, including application of the provisions of the *International Telecommunications Union Conventions, Regulations and Recommendations*, and participates in regional and international meetings concerning the development and administration of telecommunications; and

* the Division of Civil Aviation, which develops and regulates air navigation and civil aviation operations, and promotes adequate air services in the FSM through close coordination with contract carriers.

3.3.4 Office of the Attorney General

This Office serves as legal counsel to the Executive Branch, provides law enforcement services and issues passports. Subsidiary divisions include:

* the Division of Law, which advises the President and other Executive Officials in interpretation and application of laws, issues formal legal opinions on questions raised by the President, members of Congress, and Heads of the Departments and Offices of the National Government, drafts legislation, prepares a code of

public regulations, and reviews and makes recommendations on bills passed by the Congress;

* the Division of International Law, which advises the Department of External Affairs, reviews international agreements and treaties, and drafts legislation and other Executive Branch documents relating to foreign affairs;

* the Division of Litigation, which represents the National Government and its agencies in civil and criminal litigation, and advises on appeals, settlements, and other litigation;

* the Division of Security and Investigation, which enforces laws dealing with offences against national jurisdiction and, jointly with State authorities, with major crimes, maintains a central record of identification, liaises between State public safety agencies and police agencies of outside jurisdictions for training, extradition, identification, the location of missing persons, provides executive protection services for the President and other executives, provides security services at the National Capitol, and provides assistance, when possible, to the State public safety services;

* the Division of Marine Surveillance, which enforces laws governing activities with the Exclusive Economic Zone, enforces the, conducts search and rescue operations, operates patrol vessels, provides technical assistance to State marine surveillance and conservation programs, search and rescue units, and drug enforcement agencies, and, in coordination with the Department of External Affairs, maintains liaison with foreign governments to exchange information and facilitate the extradition of foreign violators of laws governing the Exclusive Economic Zone and the *Controlled Substance Act*; and

* the Division of Immigration, which regulates entry of aliens into the FSM.

3.3.5 Office of Budget

This Office prepares and reviews the executive budget, plans management improvements, provides budgetary controls, monitors the administration of all foreign assistance, and advises the Executive Branch regarding budgetary and management matters. Subdivisions include:

* the Division of Budget Preparation, which compiles budgetary estimates and prepares apportionment and allotment schemes, and prepares supplementary budgetary and appropriation requests and other material related to the budget process;

* the Division of Administrative Management, which evaluates and makes recommendations for improving the structure, procedures and work methods of National Government agencies, and drafts the administrative manual of the National Government; and

* the Division of Grants Management, which establishes and maintains budgetary controls on the administration of all foreign assistance, and compiles information on all funds received by the FSM for economic and social development.

3.3.6 Office of Administrative Services

This Office is responsible for administering the personnel system, advising executives on employment and pay policies, serving as custodian of National Government personal property, maintaining the National Archives, and providing leadership for efforts to preserve Micronesian culture and history. Internal subdivisions include:

* the Division of Personnel Administration, which administers the National Public Service System;

* the Division of Training, which identifies training needs of the National Public Service and organizes such training;

* the Division of Property and Supply, which procures supplies for the use of the National Government, establishes regulations for procurement, maintains inventory records, administers the program providing housing for qualified employees, and provides for the upkeep of National Government property and routine office services;

* the Division of Archives and Historic Preservation, which microfilms governmental records, keeps such records safe, and exercises the powers of the National Government regarding historic and cultural preservation; and

* the Division of Maintenance, which provides maintenance and motor pool services to the FSM Capital physical facilities.

3.3.7 Office of Planning and Statistics

This Office is responsible for drafting and monitoring the implementation of national and sectoral development plans. Subdivisions include:

* the Division of Planning, which prepares development plans, goals and objectives;

* the Division of Statistics, which collects statistical data and conducts population censuses; and

* the Division of Construction Review, which inspects National Government construction projects.

3.3.8 Department of Human Resources

This Department promotes education and health. Educational functions include setting national education standards, ensuring teacher training, issuing teacher certificates, encouraging the teaching of vernacular languages and assisting the States and the FSM Board of Education. Health functions include oversight of programs to improve and maintain environmental and sanitation conditions, providing a comprehensive health plan, managing health training and setting health care standards. Internal subdivisions include:

* the Division of post-Secondary Educational Development, which establishes administrative guidelines, publishes data, assists the administration of the Compact Scholarship Program administers the National Student Loan Revolving Fund Program, and provides various post-Secondary student services;

* the Division of Educational Program Development and Research, which coordinates education programs, provides data on the conditions of education in the FSM, develops minimum curriculum standards, certifies teachers and provides technical services to the States;

* the Division of Medical Care, which provides support and specialty services to State hospitals, manages medical consultation team visits, provides epidemiologic services to the States, compiles medical and health status reports and licenses health professionals and medical practices;

* the Division of Preventive Health, which provides immunization, nutrition, health education and handicap services, coordinates and manages environmental, sanitation, and water activities, assists the States with community health initiatives, and coordinates United States and other foreign assistance health programs; and

* the Division of Community Services, which provides technical assistance to the State Departments of Education regarding all educational assistance programs, and oversees special community health, geriatrics, food services, and other social programs.

3.3.9 Office of Public Defender

This Office is responsible for legal representation in criminal and specified civil cases. Attachment to the Executive Branch is only for purposes of administrative support.

Such a permitting system may be found in regulations either drafted pursuant to the FSMEPA parent Act, or saved under FSMEPA from former Trust Territory legislation. Transition provisions within FSMEPA ensure continuity between FSMEPA and the former *Trust Territory Environmental Quality Protection Act* (Title 25, Federated States of Micronesia Code (FSMC)), including a requirement for continued compliance with its subsidiary regulations until such time as they are amended or repealed. All references to Trust Territory officials and boards are transferred to the functionally equivalent entity of the National Government (FSMEPA, Section 19 and 19(4)).

Indeed, the present system of environmental control within FSM rests heavily on regulations promulgated during the Trust Territory era; of eight subsidiary regulations to FSMEPA, six of them are adopted Trust Territory legislation. The eight subsidiary environmental instruments to the FSMEPA are summarized in paragraphs 4.1.2-3.1.3, below.

* *Trust Territory Air Pollution Control Standards & Regulations* (Trust Territory Code (TIC) Title 63, Chapter 13, Subchapter VIII), Pollution Control, at paragraph 4.1.2, below.

* *Trust Territory Pesticides Regulations* (TIC Title 63, Chapter 13, Subchapter IV), At Subsection 1, Pollution Control, at paragraph 4.1.3, below.

* *Public Water Supply Systems Regulations* (TIC Title 63, Chapter 13, Subchapter II), at Water Quality - National, Chapter 5, paragraph 5.1.2, below.

* *Marine and Fresh Water Quality Standard Regulations* (TIC Title 63, Chapter 13, Subchapter VII), at Water Quality - National, Chapter 5, paragraph 5.1.3, below..

* *Trust Territory Solid Waste Regulations* (TIC Title 63, Chapter 13, Subchapter VI), at Waste Management, National, Chapter 6, paragraph 6.1.2, below.

* *Toilet Facilities and Sewage Disposal Regulations* (TIC Title 63, Chapter 13, Subchapter V), at Waste Management, National, Chapter 6, paragraph 6.1.3, below..

* *FSMEPA Earthmoving Regulations*, at Zoning, Earthmoving, and Environmental Impact Assessments - National, Chapter 7, paragraph 7.1.1, below.

* *FSMEPA Environmental Impact Assessment Regulations*, at Zoning, Earthmoving, And Environmental Impact Assessments - National, Chapter 7, paragraph 7.1.2, below.

Two other general aspects of FSMEPA, State liaison and enforcement measures, merit attention before specific areas of environmental protection are enumerated. National Government efforts at State liaison take many forms in the environmental arena, including National Constitutional amendatory language (See paragraph 3.1.1 above) and scattered language in the FSMEPA. Section 12 of FSMEPA authorizes the Secretary of Human Resources to enter into written cooperative agreements with the States or State agencies for the purposes of providing funds to the States, collecting data on local needs, and transferring authority to the States to act as agents of the National Government in implementing environmental programs at the State level. Such delegations of function may be reassumed by the Secretary of Human Resources by written notice, if the delegation results in termination of any financial grant (FSMEPA, Section 12(2)).

Ample enforcement powers are authorized pursuant to Section 15 of the Act. Any person violating any provisions of FSMEPA or its promulgated regulations, permits, or orders is subject to enforcement action by the Secretary. Such action may include:

* An order to cease and desist from the violation;
* An order to clean up or abate the effects of any pollutant;
* Imposition of a civil penalty up to $10,000 for each day of the violation, to be paid to the National General Fund;
* Commencement of a civil action in the Trial Division of the FSM Supreme Court to enjoin the violation;
* Commencement of a civil action in the Trial Division of the FSM Supreme Court to collect damages; and
* Conducting a public hearing, with adequate notice, to determine the authenticity of the facts upon which the alleged violation is based.

4.1.2 FSMEPA Subsidiary Regulation - Air Pollution

FSMEPA requires the Secretary of Human Resources to abate pollution of the air (FSMEPA, Section 11(4)), establish criteria for classifying air accordance with present and future uses (FSMEPA, Section 11(5)), and administer a permitting system for the discharge by any person of any pollutant into the air (FSMEPA, Section 11(6)). *Trust Territory Air Pollution Control Standards & Regulations*, promulgated June 25, 1980, have therefore been saved as good law, pursuant to FSMEPA Section 19.

The purpose of these regulations is to control the quality of air by setting clean air quality standards and by preventing or controlling the emission of air contaminants at their source. The regulations specify monitoring, recordkeeping and reporting requirements for operators of air contaminant sources.

Open burning is not allowed, except for certain approved exceptions. The regulations incorporate USEPA National Emission Standards for Hazardous Air Pollutants as they existed in June, 1980. They also set standards for control of particular emission from incinerators, control of visible emission of particulates for stationary sources, control of odours in clean air, control of sulphur dioxide emissions and motor vehicle pollution control.

A Permit to Construct is required before any person may construct or modify any stationary source of air contaminants. A Permit to Operate is required before any person may cause or allow the operation of a new stationary source. Exemptions include: installation of air contaminant detectors, air conditioning systems, mobile internal combustion engines, and lab equipment used only for chemical or physical analyses.

4.1.3 *FSMEPA Subsidiary Regulation* - Pesticides

Again, former *Trust Territory Regulations* are in current use in FSM for the control of pesticides. *Trust Territory Pesticides Regulations*, in effect since August 1, 1980, establish a system of control over the importation, distribution, sale, and use of pesticides by persons within the Federated States of Micronesia.

Under the Regulations, persons desiring to import a pesticide into FSM must submit a notice of intent to the "Administrator", or Secretary of Human Resources, before the arrival of the pesticide shipment. Upon arrival of the shipment, the Secretary's representative shall inspect and may release the pesticide.

Use of a pesticide may be restricted "when misuse by non-certified applicators has produced or is deemed likely to produce substantial adverse effects on human health or the environment." Part

13 of the Regulations lists 36 such "Restricted Use Pesticides." Pesticides producing substantial adverse effects on human health and the environment may also be banned.

The Regulations require Permits in two circumstances: Every person engaged in the sale or distribution of restricted use pesticides and every person importing restricted use pesticides who is not a certified applicator must obtain a permit; and every person wishing to conduct small scale laboratory or field tests of an unregistered pesticide use must obtain an experimental use permit before conducting such tests. Additionally, the Regulations establish a system to certify private and commercial pesticide applicators.

4.2 Global Warming Resolution

June 5, 1991, the Seventh Congress of FSM, at its First Regular Session of 1991, passed Resolution No. 7-24, a Resolution expressing serious concern over the threat to FSM posed by the effects of global warming. The Congress states that continued unrestricted release of carbon dioxide, methane, nitrous oxide and other greenhouse gases into the Earth's atmosphere will accelerate the process of global warming and climate change, with possible catastrophic consequences to FSM. By this legislative declaration, FSM joins many other low-lying and high island nations in the developing Pacific in the attempt to influence and educate the world community regarding the specific dangers to island states of unregulated harmful atmospheric emissions.

Resolution 7-24 gives warning that FSM citizens stand to be among the first on Earth to become victims of sea-level rise, intensified storms, salt water invasion and destruction of marine life as a consequence of industrial and agricultural activities in other nations. It urges the President, the Department of Human Resources and the Department of External Affairs to work with the newly-formed "Alliance of Small Island States" to encourage broader expression of island views during the United Nations-sponsored negotiations toward the global *Framework Convention on Climate Change*. This Convention was opened for signature in June, 1992, at the United Nations Conference on Environment and Development in Brazil.

4.3 Key Issues

4.3.1 General

FSM shares the fate of many developing Pacific nations in its present inability to control increasing land and sea pollution. Increasingly, FSM inland and coastal areas are becoming spoiled by urban wastes. Overcrowding and poor sanitary conditions on the more populated islands and atolls exacerbate this problem.

Implementation and enforcement of environmental goals in the Federated States is no easy task. Micronesian geography mitigates against enforcement; far-flung islands and atolls create difficult communication problems. A further constraint is the oft-mentioned strong cultural tradition of customary landowning that resists governmental control of land use through environmental regulation. Stronger local participation in environmental decision-making, coupled by increased conservation funding and facilities, will go far toward creating an FSM pollution control policy that links customary controls with modern preservation practices.

4.3.2 Environmental Regulation

As with all forms of control of human behaviour, a system of environmental oversight requires consistency and coherence for maximum efficacy. An umbrella parent Act, hosting numerous Regulations that set forth specific standards on various areas of concern, therefore, is an effective method of environmental control. Regulations are a widely accepted and quite a useful form of environmental oversight. Flexible and responsive regulations are "agency statements of general applicability that establishes policy, implements, interprets or prescribes law or describes the organization, procedure, or practice requirements of any agency and which has the force and effect of law" (*Federated States of Micronesia Administrative Procedures Act*, Section 101(9)).

Generally more reflective of local concerns and pragmatic limitations than statutory proclamations, regulations may also be more easily modified than statutes in order to respond to changes in government policy or environmental conditions.

Regulation development serves as a useful educational tool, as well. The *FSM Administrative Procedures Act* requires widespread publication and dissemination of proposed Regulations before adoption, including radio announcements in English and indigenous languages. Opportunities for public comment and public hearings are also incorporated in the Act (*Federated States of Micronesia Administrative Procedures Act*, Section 102).

4.3.3 FSMEPA

Present FSM national environmental law contains the beginnings of an umbrella system of regulatory control. The FSMEPA is administered by the Department of Human Resources, and contains eight subsidiary regulations, six of which are documents saved from Trust Territory times. Appointment and funding of a lead agency responsible for all aspects of oversight, and committed liaison and enforcement efforts remain essential for the realization of a fully effective system of legal controls.

National Government efforts at administrative streamlining have abolished the FSMEPA Board and replaced it with the Secretary of Human Resources, as noted in paragraph 4.1.1 above. The Board, however, comprised representatives from the four States who could fulfil needed liaison functions. Environmental control and resource management is uniquely interdisciplinary; the more voices that are present during decision making, the more likely it will be that effective and sensible controls which are responsive to local requirements are initiated.

As well as suffering from the lack of an interdisciplinary advisory body, the current Act also incorporates outmoded *Trust Territory Regulations*. FSM, as a newly-independent nation, deserves a body of environmental law which reflects its unique place in the world community. Decade-old Trust Territory pronouncements may not adequately reflect new FSM environmental concerns.

Trust Territory savings provisions include efforts to retain old advisory bodies. FSMEPA transition provisions referred to in paragraph 4.1.1 above save not only subsidiary regulations from Trust Territory times, but also preserve District Advisory Boards for each State (25 FSMC Chapter 4). This preservation has created some confusion in recent years, as some State Boards are superseded by later legislative instruments, and others remain, often in legal name only. A further question has arisen concerning the correct identity of the State entity to whom the Board offers advice.

Liaison efforts also suffer because of lack of legal clarity in the relations between State environmental boards and national environmental representatives. The effort at National delegation of its environmental functions to the State, embodied in FSMEPA Section 12, has had mixed results. Upon FSMEPA's enactment, the National Government offered Memoranda of Agreement to the four States, modelled on the "Agreement Between The Trust Territory Environmental Protection Board and the Bureau of Health Services (Headquarters and District Levels)." Some States claimed inherent authority to enact environmental controls, and thus disregarded the offered Memoranda. Chuuk was the sole State signatory to a delegatory Memorandum of Agreement (Scheuring; 1992).

A further claim of delegation was recently made and disallowed in *Damarlane v. Pohnpei Transportation Authority, et. al.* (Civil Action No. 1990-075, FSM Supreme Court Trial Division - State of Pohnpei, Opinion, page 7, issued January 21, 1991). A case concerning Mesenpal dredging activities in Pohnpei State and currently on appeal, *Damarlane* raised a peripheral issue concerning National Government delegation of its earthmoving permitting authority to Pohnpei State. In his Opinion issued January 21, 1991, Chief Justice King opines that, although FSMEPA does seem to contemplate some power of delegation, "(it) is by no means clear that the Secretary would be permitted, as a matter of law, to delegate his permit-granting authority

under the regulations to some other person or official" (*Damarlane*, page 7). In specific reference to FSMEPA Section 12, Justice King remains unsure whether statutory authorization of "written cooperative agreements" could justify abdication of National responsibilities assigned under the Act (*Damarlane*, page 8). Whether or not such delegation is permissible, Justice King found that the failure to produce any document conforming to a "written cooperative agreement" was fatal to the National Government's contention that a lawful delegation may have occurred (*Damarlane*, page 10).

4.3.4 Air pollution

The current *Trust Territory Air Pollution Regulations* highlight the need for FSM-specific environmental regulations. Although drafted a decade ago by the United States with the developing Pacific in mind, these standards are now out of date and often inappropriate for FSM's particular circumstances. In certain instances, clean air quality standards may be tightened to preserve the often pristine air of many regions of FSM (the standards currently mimic 1980 U.S. National Secondary Ambient Air Quality Standards). In other instances, controls may be unnecessarily or unenforceably severe, as with motor vehicle pollution controls.

Although elaborate air quality controls may be premature for FSM's present level of industrialization, updated national emission standards for hazardous air pollutants may well be currently advisable. FSM is downwind and downstream of the Johnston Atoll Chemical Agent Disposal System (JACADS), a United States military disposal and incineration site for extremely hazardous war-related chemicals and toxins.

4.3.5 Pesticide pollution

National and State Agriculture Departments, wholesalers, retailers, and agricultural workers require education concerning the potential hazards of unregulated pesticide distribution, sale and use. Agricultural workers need additional training to protect their own health, as well as the natural environment, from the insidious, often unseen environmental destruction caused by unbridled use of pesticides. Liaison between environmental staff and distributors of pesticides is critical.

The *Trust Territory Pesticide Regulations* require re-drafting, with FSM-specific provisions incorporated. The Restricted Use Pesticide List should be expanded to include updated hazardous materials and concentration levels. Given the toxic nature of many pesticides, drafters of new legislation may well wish to require warning and use labels in both English and the indigenous language of each area of FSM in which certain pesticides are in use.

4.4 Recommendations

1. For more effective environmental enforcement, clarify National and State constitutional jurisdictional issues through issuance of a Joint Attorney General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in 15 separate areas of environmental law. For discussion of the issues surrounding the National Constitution's allocation of powers see section 3.2, Chapter Three.

2. For more effective administrative oversight and prevention of duplicative efforts, place administration of all environmental controls in a central agency, either within the National Government or linked to the Government by statute. The benefits of placing this entity within Government include continuity (especially if the Department of Human Resources is retained as the responsible agency) and access to Government resources. An independent statutory agency offers the benefits of a separate legal status from Government, useful when Government is itself an environmental violator, plus the ability to move quickly and without burdensome bureaucracy in response to environmental degradation.

In either event, this agency could be funded to operate as a much-needed clearing-house for the gathering and dissemination of environmental materials, a forum for the development, oversight and enforcement of national minimum environmental standards, and a focus of training and assistance to the States as required by the 1991 National Constitutional Amendment to Article IX, Section 2.

3. For more effective legal oversight of National environmental provisions, establish a position for an environmental attorney, either in the Attorney General's Office if administrative control is within the National Government, or as Legal Counsel to an independent statutory agency, if one is authorized. A National Government environmental legal officer could:

   * review and redraft *Trust Territory Environmental Regulations*, including air and pesticides standards;

   * draft new environmental legislation as needed;

   * prepare model provisions for use by State Governments, and train State environmental officers in their use;

   * conduct a study of those United States environmental protection laws which contain standards applicable to FSM, and make recommendations as to any necessary modifications of those laws in light of the particular circumstances of FSM, pursuant to Compact Section 161(b) as required by FSMEPA Section 11(8);

   * enforce present environmental legislation.

4. To better liaise with State Governments and allow more local voice in National environmental decision making, reinstate the concept of the Federated States of Micronesia Environmental Protection Board originally envisioned in FSMEPA. As is suggested in the *Nationwide Environmental Management Strategies for the Federated States of Micronesia*, such a Board could be called "the Nationwide Board on Environment and Sustainable Development", and be comprised of three National, four State and two community representatives. Representation at the National level could include the National Planner, the Secretary of Human Resources and the Secretary of Resources and Development.

5. To respond to current national and world concerns regarding sea level rise and global warming, continue interaction with other developing Pacific countries through the South Pacific Forum (SPF), South Pacific Commission (SPC), South Pacific Regional Environmental Programme (SPREP), and the Alliance of Small Island States (AOSIS). For technical assistance, interaction might include environmental as well as external affairs officers.

CHAPTER FIVE

WATER QUALITY - NATIONAL

(NOTE: Please see Pollution Control Chapter 4, for general discussion of the *Federated States of Micronesia Environmental Protection Act* (FSMEPA), subsidiary regulatory provisions, and issues and recommendations regarding National and State environmental obligations.)

5.1 Existing Legislation

5.1.1 *Federated States of Micronesia Environmental Protection Act 1984*

FSMEPA is the controlling legal document for the protection of marine waters, fresh waters and public water systems within FSM. FSMEPA Section 10 gives the Secretary of Human Resources general power to protect the environment and prohibit pollution or contamination of waters within the Federated States. FSMEPA Section 11(2) specifically empowers the Secretary of Human Resources to "(a)dopt, approve, amend, revise, promulgate, and repeal primary and secondary drinking water regulations".

"Primary drinking water regulation" is defined at FSMEPA Section 5(5) as a regulation which applies to public water systems, specifies contaminants which may adversely affect human health, specifies maximum allowable contaminant levels, and contains criteria and procedures to assure a safe drinking water supply. Maximum contaminant levels shall only be ascertained if it is economically and technologically feasible to check the levels in public water systems; otherwise, treatment techniques leading to a reduction in the level of the contaminant shall be specified (FSMEPA, Section 3(5)(c)). Assurance of a safe drinking water supply includes implementing quality control and testing procedures to ensure both contaminant level compliance and proper operation of the delivery system. Controls over proper operation of the system include requirements regarding the minimum quality of water which may be taken into the system, and requirements regarding siting for new public water facilities (FSMEPA, Section 3(5)(d)).

"Secondary drinking water regulation" is defined at FSMEPA Section 5(6) as:

> a regulation which applies to public water systems and which specifies the maximum contaminant level which in the judgment of the Board is requisite to protect the public welfare. Such regulations may apply to any contaminant in drinking water: (a) Which may adversely affect the odour or appearance of such water and consequently may cause a substantial number of persons served by the public water system providing such water to discontinue its use; or (b) Which may otherwise adversely affect the public welfare. Such regulations may vary according to geographic or other circumstances.

Two FSMEPA subsidiary Regulations controlling marine, fresh and drinking water are in present effect in FSM. Both are Trust Territory regulations saved as good law by FSMEPA Section 19 transition provisions.

5.1.2 *FSMEPA Subsidiary Regulation - Public Water Supply Systems*

The *Trust Territory Public Water Supply Systems Regulations* in current use in FSM were promulgated on February 1, 1983. The purpose of the Regulations, technical provisions and specifications is to establish certain minimum standards and requirements to insure that water supply systems are protected against contamination and pollution and do not constitute a health hazard.

The Secretary of Human Resources must approve any laboratory which determines compliance with the maximum contaminant levels allowed by these Regulations. Water suppliers must comply with specific reporting, public notification and record maintenance requirements.

Approval is required for any new construction or change of any public water supply system. The Secretary of Human Resources may grant emergency permits whenever an emergency affecting the safety or adequacy of a public water supply requires modifications or additions. The Secretary may grant a variance from these regulatory requirements or an exemption respecting maximum contaminant levels or treatment techniques.

5.1.3 *FSMEPA Subsidiary Regulation - Marine and Fresh Water Quality*

The *Trust Territory Marine and Fresh Water Quality Standard Regulations* were promulgated March 31, 1986. The purpose of these Regulations is to identify the uses for which the various waters of FSM shall be maintained and protected, to specify the water quality standards required to maintain the designated uses, and to prescribe requirements necessary for implementing, achieving and maintaining the specified water quality.

Any person who initiates any project which may represent a new or increased source of pollution, either point source or non-point source, must first obtain written approval. Any person who wishes to store, dispose of or allow any hazardous substances to accumulate any hazardous substances in a manner that the substances may enter the surface or ground waters of FSM must first obtain written approval from the Secretary of Human Resources.

In the event of an accidental spill or discharge of hazardous materials, the responsible person must immediately notify the Secretary and take all reasonable measures to contain the material so that it will not contaminate the surface or ground waters of the Federated States.

Any point source of discharge is in violation of these standards unless it has received a discharge permit under the National Pollutant Discharge Elimination System (NPDES) from the United States Environment Protection Agency.

5.2 Key Issues

5.2.1 Public Water Systems

The current Regulations rely on a narrow definition of a public water supply system, which does not authorize environmental oversight of systems smaller than 15 service connections, private hotel or housing development systems, or bottled water. Many systems of water delivery to the public are available in FSM; during times of drought the public may rely on private water delivery systems which are not currently overseen by environmental personnel.

Further, the Regulations contain no protective provisions restricting polluting activities near bodies of water or aquifers which provide water for public consumption. Neither do they contain provisions protecting the public's water supply by regulating the digging, construction and abandonment of wells.

Although FSMEPA recognizes geographic and other differences as a factor in development of secondary drinking water standards, these Trust Territory Regulations do not. Economic and technological difficulties are also referred to in the parent Act, but the present standards do not reflect this concern or permit flexibility in its performance standards.

5.2.2 Marine and Fresh Waters

Marine waters play a vastly important role in the traditional FSM lifestyle and in the National Government's economic plans for the future. Additional drafting and enforcement efforts may control environmental degradation before pollution becomes an impediment to local subsistence

and foreign fishing ventures. Further technical and monetary assistance is required to accomplish this goal.

The current *Trust Territory Regulations* provide inadequate groundwater protection, especially essential in atoll communities. Further, pollution control requirements are scant, and oil pollution prevention measures are wanting.

5.3 Recommendations

6. Revise the *Trust Territory Public Water Supply Systems Regulations* to create FSM-specific criteria, including, but not limited to, expanding the definition of "public water supply" and requiring well-drilling permits to insure uncontaminated supplies of water.

7. Revise the *Trust Territory Marine and Fresh Water Quality Standard Regulations* to create FSM-specific criteria, including, but not limited to, enhancing groundwater protection and pollution prevention and control measures.

8. Fund technical and laboratory assistance programs to enable further testing of public, coastal and offshore marine waters.

CHAPTER SIX

WASTE MANAGEMENT - NATIONAL

(NOTE: Please see Pollution Control Chapter Four for general discussion of the *Federated States of Micronesia Environmental Protection Act* (FSMEPA), subsidiary regulatory provisions, and issues and recommendations regarding National and State environmental obligations.)

6.1 Existing Legislation

6.1.1 *Federated States of Micronesia Environment Protection Act 1989*

Title 41 of the FSM Code controls the disposal of human excreta (41 F.S.M.C. 601) and rubbish (41 F.S.M.C. 602), but the primary legislative instrument regulating solid and liquid wastes is *FSM's Environmental Protection Act* and its subsidiary Regulations. Both waste management Regulations are of Trust Territory origin, and have been saved as good law by FSMEPA Section 19 transition provisions.

6.1.2 FSMEPA Subsidiary Regulation - Solid Waste

Trust Territory Solid Waste Regulations were promulgated on April 12, 1979. The purpose of the *Solid Waste Regulations* is to establish minimum standards governing the design, construction, installation, operation, and maintenance of solid waste storage, collection and disposal systems.

"Solid waste" is defined as "garbage, refuse, and other discarded solid materials", not including substances in water sources, but including such liquid waste materials as waste oil, pesticides, paints, solvents, and hazardous waste. A "disposal system" means the entire process of the storage, collection, transportation, processing and disposal of solid waste by any person or authority.

Any person operating a solid waste disposal facility must apply for a permit. Private waste disposal systems, including systems on the premises of a one or two family residential property, a farm, or a private landfill site for non-decomposable material, do not require a permit, but do require written approval.

6.1.3 *FSMEPA Subsidiary Regulation - Toilet Facilities and Sewage Disposal*

Trust Territory Toilet Facilities and Sewage Disposal Regulations were promulgated on January 31, 1977. The purpose of the Regulations is to establish minimum standards for toilet facilities and sewage disposal to reduce environmental pollution, health hazards, and public nuisance from such facilities. It is generally required that all public buildings or any buildings which may be used for dwellings must have toilet and sewage facilities in accordance with these Regulations. Standards are established for the following types of toilet and sewage facilities:

Type 1: A toilet flushed with water and connected to a sewerage system available to the public;

Type 2: A toilet which is flushed with water and connected to a septic tank;

Type 3: A pit privy or outside benjo.

No building construction, public or private, may be initiated without first obtaining a permit from the Secretary of Human Resources providing that the toilet disposal facilities intended to serve that building will be in compliance with these Regulations. Further, it is unlawful to dispose of treated or semi-treated sewage into any body of water in FSM, unless it is clearly shown that such activity is necessary for economic and social value or research, and that the activity poses no public health hazard.

6.2 Key Issues

6.2.1 Solid Waste

Increasing population pressures and increasingly available non-biodegradable materials have exacerbated FSM's solid waste disposal problems. Hazardous wastes, such as PCB's, are insufficiently contained, thereby contaminating both land and coastal waters. Additional government attention to public landfills and community attention to littering problems are necessary. Landfills are not presently guarded so as to prevent the haphazard disposal of hazardous wastes into them. Solid waste issues differ between localities; municipal governments must play a primary role in the development of waste management strategies. Private and communal land ownership systems require active landholder participation in any government-initiated solid waste reduction proposals.

6.2.2 Toilet Facilities and Sewage Disposal

Sewage facilities remain inadequate in most areas of FSM, despite recent improvements in sewerage systems in some localities. Like solid waste issues, sewage disposal issues vary from locale to locale, requiring significant State and municipal participation in efforts to avoid environmental degradation.

Regulatory revisions are necessary at the National Government level, again requiring significant State and municipal input. Present Regulations, saved from Trust Territory times, are not adequate to address the burgeoning problem of sanitary and environmentally safe sewage disposal in FSM. The present Regulations offer few practical standards for septic tank and pit latrine materials and installation, and insufficient flexibility regarding the type of toilet and sewage facility that is desirable in a given situation. The inclusion of simple septic tank and pit latrine designs would also be most helpful.

6.3 Recommendations

9. Develop a comprehensive national waste management plan to include National Government policies and priorities, as well as State-specific projects for rural sanitation, wastewater treatment and solid waste disposal.

10. Revise the *Trust Territory Solid Waste Disposal Regulations* to make them FSM-specific, including, but not limited to, simplification of the permitting process, enhanced protection and procedures concerning the disposal of hazardous wastes.

11. Revise the *Trust Territory Toilet Facility and Sewage Disposal Regulations* to make them more reflective of FSM needs, including, but not limited to, inclusion of simple septic tank and pit latrine designs, and incorporation of adequate standards for septic tank and pit latrine materials and installation.

CHAPTER SEVEN

ZONING, EARTHMOVING AND ENVIRONMENTAL IMPACT ASSESSMENT - NATIONAL

(NOTE: Please see Pollution Control Chapter Four, above for general discussion of the *Federated States of Micronesia Environmental Protection Act* (FSMEPA), subsidiary regulatory provisions, and issues and recommendations regarding National and State environmental obligations.)

7.1 Existing Legislation

7.1.1 *FSMEPA Subsidiary Regulations - Earthmoving*

The *FSMEPA Earthmoving Regulations* became effective on November 7, 1988. These Regulations and the Environmental Impact Assessment Regulations described below are new regulatory instruments enacted by FSM pursuant to FSMEPA.

The Regulations provide that "no person shall release funds, equipment or materials or building permit to those engaged in earthmoving activities requiring a permit until the Secretary has issued the permit or determined that no permit is required".

Further, the Regulations state that any person engaging in an earthmoving activity within the FSM must obtain a permit from the Secretary of Human Resources.

Earthmoving is defined to include activities of a continuous nature such as dredging or quarrying which disturb or alter the surface of land, including reefs and lagoons. Earthmoving also applies to subdivision and development of land, and the moving, depositing or storing of soil, rock, coral or earth.

7.1.2. *FSMEPA Subsidiary Regulation - Environmental Impact Assessment (EIA)*

These Regulations were effective on February 1, 1989, and are the most recently enacted of the FSMEPA regulatory instruments. They require the National Government and its agencies to submit an Environmental Impact Statement (EIS) to the Secretary of Human Resources prior to taking any major action significantly affecting the quality of the human environment.

The Regulations define "effects" to be considered in an EIA very broadly to include indirect, direct and cumulative effects in areas such as: land use, population density, air, water, and natural systems including ecosystems. Effects may be ecological, aesthetic, cultural, historical, economic, social or health-related. The issuing of permits or the releasing of funds for a project require the prior approval of the EIS by the Secretary.

The Regulations provide for a two tier EIA process. An Initial Assessment is conducted for projects which do not appear to have significant environmental impact. A standardized check-list is appended to the Regulations at Appendix B to facilitate the evaluation. If the project proponent concludes that there will not be a significant impact and the Secretary agrees then the EIA process is completed.

If, however, there is a significant impact, then a Comprehensive EIA is required. Appendix A lists examples of impacts designated as significant. This process requires consultation with all public agencies responsible for resources affected by the project or having jurisdiction with respect to the project, and with any person or organization that may be concerned with the impacts of the project.

A draft EIA Statement must be made available for public review and comment. The proponent and the Secretary evaluate comments received on the EIS or as a result of a public hearing prior to the preparation of a final EIS. Final EIS must be supplied to agencies from whom funding, authorizations or other approvals are sought. If an agency proposes to accept a significant

impact it must provide reasons. The Secretary must approve the final EIS before project approvals are granted.

7.1.3 *Foreign Investment Act*

It should be noted that the *Foreign Investment Act* (32 FSMC) provides for an indirect, peripheral EIA function. Under this Act the Secretary of Resources and Development when considering whether or not to grant a foreign investment permit must take into account whether the proposed activity will have an adverse environmental impact.

7.2 Key Issues

7.2.1 Zoning

Increasing development and population pressures highlight the urgent need to address the complex issue of land use regulation and physical planning. Associated matters such as mapping, survey, delineation of boundaries and registration of land titles need to be examined in light of traditional land tenure which greatly inhibits physical planning regulation and control.

In the future, zoning could play a significant role in identifying, creating and managing protected areas such as watershed, historic sites and the critical habitat of endangered species. Physical planning and zoning requires a coordinated, cooperative approach by the National Government with the States and municipal authorities.

7.2.2 Earthmoving

The *Earthmoving Regulations* appear to require all persons, including government bodies who engage in earthmoving activities in the FSM, to obtain a permit from the National Government. However, the practical application of the Regulations is not widely understood. The Department of Human Resources receives a few applications for earthmoving permits from Pohnpei State and very few from the other three States.

The application of the Regulations needs to be clarified to ensure appropriate enforcement and to avoid duplication at the State level. In practice there appears to be very limited application and enforcement of the Regulations.

7.2.3 Environmental Impact Assessment (EIA)

The FSMEPA applies its EIA provisions only to projects of the National Government or its agencies or to projects funded wholly or in part by the National Government. The Act does not provide EIA planning guide-lines for projects and activities at a State or municipal level. Accordingly, there is no legislative structure for a coordinated and consistent method of EIA at these levels.

Administrative systems are inadequate to properly implement and enforce the Regulations. Coordination between Government agencies at the National level is often on an unplanned, case-by-case basis.

7.3 Recommendations

12. Clarify which aspects of environmental planning and control are within National and State jurisdictions and identify areas of concurrent jurisdiction. Areas of municipal jurisdiction also need to be identified. Clarification of this issue may well require policy decisions in addition to legal interpretation of the Constitution. Once jurisdictional issues are resolved, attention may be given to the development of National and State legislation which is appropriate, clear and enforceable.

13. Even if there are no legislative changes made, there is a need for improved administrative structures and systems to coordinate, implement and enforce existing legislation and regulations. Consistency and uniformity of National and State environmental controls should be encouraged.

14. There is a clear need for all projects, both private and government, to be subject to environmental impact assessments (EIA) reviews.

15. Physical planning, including building controls, should be addressed by legislation and regulation.

CHAPTER EIGHT

FISHERIES - NATIONAL

8.1 Existing Legislation

8.1.1 Federated States of Micronesia Code (FSMC) Title 23 - Resource Conservation

Resource conservation relates to marine species preservation and prohibits the use of explosives, poisons and chemicals for fishing. This title will be more fully addressed in Subsection 5. Biodiversity Conservation, below.

8.1.2 Title 24 - *Marine Resources*

The stated purpose of this title is to promote conservation, management and development of the marine resources of the FSM, to generate the maximum benefit for the Nation from foreign fishing, and to promote the development of a domestic fishing industry.

The title creates the Micronesian Maritime Authority (MMA) and defines its role and powers. The MMA regulates the management and exploitation of marine resources within the 200 mile Exclusive Economic Zone, negotiates and enforces foreign fishing agreements, issues foreign fishing permits, and administers the fishing permit system for commercial and non-commercial fishing. The MMA participates in fisheries development ventures in which FSM has a proprietary interest.

The title sets a comprehensive framework for the issuing of permits for commercial and non-commercial fishing. The terms and conditions for the issuing of foreign fishing permits for entering foreign fishing agreements are itemized by the title, together with enforcement powers. Provision is also made to authorize the States to establish entities to promote, develop, support and regulate commercialisation of living marine resources within their jurisdictions.

The National Fisheries Corporation (NFC) is also created by the title, with powers to enter joint ventures and other agreements in relation to fisheries and to develop the fishing industry by fostering economic activities and providing technical assistance for fisheries projects. The NFC is governed by a Board consisting of representatives from all States and is the commercial arm of the National Government fisheries administration.

It should also be noted that there are indirect external regulations and controls imposed on the FSM by nations with which it trades. For example, American quality and labelling controls must be observed if FSM wishes to export to the United States.

8.1.3 Title 18 - *Territory, Economic Zones and Ports of Entry*

This title establishes the 200 mile extended fishery zone of the National Government and the 12 mile exclusive fishery zones of the States, their islands and atolls. Section 106 states that traditionally recognized fishing rights in submerged reef areas whenever located within FSM fishery zones shall be preserved and protected.

8.2 Key Issues

The vital importance of fishing and marine resources to FSM cannot be over-emphasized. Accordingly, while existing legislation does provide quite detailed controls, particularly through the permit and licensing system, the emphasis is more on commercial and economic return than on resource conservation and management. There is little evidence of consistent and stringent application of existing environmental legislative controls.

The principles of sustainable development should be rigorously applied if FSM is to continue to reap benefit from its marine resources. Both National and State Governments appear to have

concentrated their efforts in the area of development of marine resources rather than on resource assessment, management and conservation. At present there is evidence that there has been over-exploitation of in-shore species, particularly reef and deep bottom species. In-shore and reef areas which are more accessible are prone to over-fishing and fishing in these areas requires monitoring and regulation which does not occur in any structured form at this time. Very little State regulation of in-shore fishing occurs. Resource data collection and assessment is at a very early stage; steps should be taken to control fishing and protect marine resources until adequate resource assessment data is available.

There is inadequate coordination and communication between the National administrative bodies responsible for fisheries and between the National bodies and their State counterparts. Further, traditional tenure of reefs recognized in Title 18 must be addressed at both National and State levels when developing management and conservation strategies.

No attention has been directed to the issue of responsibility for marine pollution disasters. Present case law suggests that control over marine areas and species within the 12 mile zone belongs to the States, and control over marine areas and species from 12 miles to 200 miles from terrestrial baselines belongs to the National Government (*FSM v. Sylvester Oliver*; 1 FSM Intrm. 469 (Pon. 1988)). If there is no coordination between State and National jurisdictions, marine species protection and emergency response to marine oil spills are severely compromised. Agreement on a coordinated National/State approach to this issue must be reached.

The *Disaster Relief Assistance Act 1989* (41 FSMC) partially recognizes this issue by providing for National assistance to States in the event of natural or man-made disasters which are beyond the State's resources to control. However, the Act does not properly address the management of environmental disasters and is limited to disasters affecting people and property.

8.3 Recommendations

16. Once marine resources management plans have been developed to ensure sustainable development, there is a need to introduce standardized marine resources management legislation and regulations to be implemented by both National and State governments.

17. Under Title 24, the Micronesian Maritime Authority has extensive regulation-making powers which have not yet been employed. There is scope to enact regulations to facilitate harvest management and monitoring, for instance. Illegal fishing practices could also be dealt with by Regulation. The *Plant and Animal Quarantines and Regulations* do not address marine life at all. This omission needs to be resolved, particularly in the light of aquaculture development and the introduction of new marine species.

18. There is an urgent need for the enactment and implementation of EIA legislation which would require feasibility studies to be carried out prior to the commencement of any marine development. Land use planning policies and legislation need to be developed to protect the marine environment and its resources. Resource management legislation should be enacted to ensure sustainable development. Legislation and regulations should be introduced to control pollution of marine areas.

CHAPTER FOUR

POLLUTION CONTROL - NATIONAL

4.1 Existing Legislation

4.1.1 *Federated States of Micronesia Environmental Protection Act (FSMEPA) 1984*

On December 27, 1984, the Congress enacted this sweeping legislative statement to provide for the protection and enhancement of the environmental quality of the air, land and water of FSM. The Act recognizes "the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth and redistribution, cultural change, resource exploitation, and new expanding technological advances", and recognizes further "the critical importance of restoring and maintaining environmental quality for the overall welfare and development of man" (FSMEPA, Section 2(1)). To that end, the Act declares a continuing policy to work in close cooperation with State and municipal governments to "foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfil the social, economic, and other requirements of present and future generations" (FSMEPA, Section 2(1)).

These goals are broad and profound; the Act includes a ringing recognition that each person within the Federation has a responsibility as a trustee to succeeding generations to contribute to the preservation and enhancement of the environment (FSMEPA, Section 2(2)). In contrast to the present national administrative structure, the concept of "environment" here includes reference to "important historic, cultural and natural aspects of our Micronesian heritage" (FSMEPA, Section 2(2)(d)), and assures safe, healthful, productive, and aesthetically and culturally pleasing surroundings (FSMEPA, Section 2(2)(b)).

FSMEPA is the preeminent legal instrument for the control of pollution in FSM. A "Pollutant" is broadly defined as "one or more substances or forms of energy which, when present in the air, land, or water, are or may be harmful or injurious to human health, welfare, or safety, to animal or plant life, or to property, or which unreasonably interfere with the enjoyment by the people of life or property" (FSMEPA, Section 3(4)).

To implement environmental degradation controls on such "substances or forms of energy", FSMEPA established an Environmental Protection Board within the Office of the President. In keeping with the National Government's recognition of the strong, federated State system, the Board was composed of five members: "one member from each of the four States of the Federated States of Micronesia and one member to be appointed by the President" (FSMEPA, Section 4(1)). On November 6, 1987, however, as part of the Act to Reorganize the Government of the Federated States Of Micronesia, the "Board" was redefined to mean "the Secretary of Human Resources or his or her designee." (Public Law No. 5-21, Section 10). All powers and functions of the Board, therefore, were transferred in 1987 to the administrative head of the National Department of Human Resources (the Secretary).

The Secretary is given sweeping general powers to protect health, welfare and safety, and "to abate, control, and prohibit pollution or contamination of air, land, and water" (FSMEPA, Section 10). Specifically, the Secretary is authorized to adopt, approve, amend, revise, promulgate, repeal and enforce environmental protection regulations. Further, in the control of pollution, as well as in the control of other environmental degradations, the Secretary is to administer a regulatory permit system

> whereby a permit shall be required for the discharge by any person of any pollutant in the air, land, or water, or for the conduct by any person of any activity, including, but not limited to, the operation, construction, expansion, or alteration of any installation, which results in or may result in the discharge of any pollutant in the air, land, or water.... (FSMEPA, Section 11(5))

CHAPTER NINE

AGRICULTURE - NATIONAL

9.1 Existing Legislation

9.1.1 Title 22 - *Agriculture and Livestock*

This title creates the Coconut Development Authority (CDA) and defines its powers. The CDA assists in marketing copra and transporting it from production areas throughout FSM. It administers subsidies allocated by Congress and promotes development of alternative value-added products from coconuts, such as oil, soap and shampoo.

Chapter Three addresses copra trade licensing; Chapter Four addresses plant and animal quarantines and enables the issuing, administration and enforcement of quarantine regulations; Chapter Five provides for export meat inspection control, stipulates unacceptable contaminants, requires inspection of animals before slaughtering and labelling of products.

9.1.2 *Plant and Animal Quarantines Regulations 1991*

These Regulations provide for specified ports of entry to FSM, inspection of plants and animals entering FSM, plant and animal quarantine permits, inspection and treatment of conveyances at ports of entry and quarantine treatments of plants and animals.

The Regulations stipulate those fruits, vegetables, plants, animals, flowers and associated products which may be imported and sets out conditions for importation.

9.2 Key Issues

There is a need for all agricultural projects and developments to be subjected to EIA. There is a need for EIA legislation and regulations to prevent soil erosion, manage waste water, avoid pollution, and minimize sedimentation of streams. This legislation should also address issues of watershed, coastal and river management.

The *FSMEPA Earthmoving Regulations* apply to many agricultural activities but the proponents of the majority of agricultural projects do not apply for earthmoving permits. *FSMEPA Pesticides Regulations* and the *Export Meat Inspection Act* (22 FSMC) are also not effectively enforced.

9.3 Recommendations

19. Draft legislation and regulations requiring soil conservation and erosion control. Consistent State legislation should be encouraged. Enactment of appropriate and enforceable EIA legislation is also necessary to regulate problems associated with agro-forestry developments and practices.

20. Improve communication and coordination between National and State administrative bodies on agricultural matters.

CHAPTER TEN

FORESTRY - NATIONAL

10.1 Existing Legislation

There is no national legislation specifically addressing forestry and related issues. The *FSMEPA Environmental Impact Assessment and Earthmoving Regulations* are rarely applied to forestry activities.

10.2 Key Issues

As urban development increases, forestry resources are threatened. There is no legislative mechanism for the control of land use to protect forests, mangroves and watershed areas. There is inadequate resource assessment data available in respect of forestry, which makes identification of species requiring protection difficult. Management and planning of forestry activities is also hampered by the lack of resource data.

10.3 Recommendation

21. Extend the EIA process to forestry activities. Draft legislation for protection of forests, mangroves, watershed areas and land use planning. Harvesting and use of forest products should also be regulated in accordance with sustainable development principles. Development of agro-forestry and forestry industries in Federated States of Micronesia must occur in conjunction with EIA and conservation legislation.

CHAPTER ELEVEN

MINING AND MINERALS - NATIONAL

11.1 Responsibilities for mining and minerals

The responsibility for mining of minerals beyond the 12 mile limit of State jurisdiction, such as deep sea sources of cobalt and manganese and any oil which may be discovered, rests with the Marine Resources Division of the Department of Resources and Development. There is no specific national administrative unit responsible for land and marine mining, as, apart from sand coral, the exploration of mineral deposits is at a very early stage throughout FSM.

11.2 No legislation

There is no legislation which considers the exploitation of minerals or the environmental problems that may occur as a result of dredging and coral mining.

While the development of mineral resources is at the inception stage, there is still an existing need for stronger enforcement of earthmoving and EIA Regulations to address deleterious environmental impacts caused by dredging and sand and coral mining. If exploitation of mineral resources does develop, a concurrent need will be created to develop strong environmental protection legislation and controls.

CHAPTER TWELVE

BIODIVERSITY CONSERVATION - NATIONAL

12.1 Existing Legislation

12.1.1 Title 23 - *Resource Conservation, Chapter 1: Marine Species Preservation*

The Marine Species Preservation Chapter of Title 23 has its source in the Trust Territory Code of the 1960's and 1970's. The Chapter provides for the control of destructive fishing methods, prohibiting the catching, possession, or sale of any fish or other marine life by means of explosives, poisons, chemicals or other noxious substances. In recognition of customary practices, destructive fishing methods do not include use of local roots, nuts, or plants which have the effect of stupefying but which do not kill fish or other marine life.

The Chapter also sets limitations on the taking of hawksbill, green and sea turtles. It forbids the taking or killing of hawksbill turtles, sea turtles, or their eggs while on shore. A hawksbill turtle may not be taken or killed unless its shell is at least 27 inches, measured lengthwise over the top of the carapace. No green turtle may be taken or killed whose shell is less than 34 inches over the top of the carapace. No sea turtle of any size may be taken or killed from June through August, nor from December through January. Sea turtles and their eggs may be taken for scientific purposes only when specifically authorized.

This Chapter also prohibits the taking or molestation of artificially planted or cultivated sponges, and sets size and seasonal limitations on the taking of black-lipped mother-of-pearl oysters. No black-lip oyster shells may be taken from August through December. In any case, no taking is allowed if the shell is less than four inches in minimum diameter, as measured across the nacre.

Penalties are trifling; violators are liable to a fine of not more than $100 or to a term of imprisonment for not more than six months, or both.

12.1.2 Title 23 - *Resource Conservation, Chapter 2: Trust Territory Endangered Species Act of 1975*

This brief Act, passed in 1975 under the Trust Territory and subsequently adopted by FSM, provides for the protection of endangered species of fish, shellfish and game. It declares the indigenous plants and animals of the Federated States to be of aesthetic, ecological, historical, recreational, scientific, and economic value, and states that the policy of FSM is to foster the well-being of these plants and animals, including the prevention of the extinction of any species.

The Act is administered by the Director of the Department of Resources and Development. Administration includes authority to set up conservation and research programs aimed at conserving endangered and threatened species. It further includes authority to acquire land or aquatic habitats for the conservation of resident endangered or threatened species. To date, no conservation programs or habitat acquisitions have been effected.

The Act prohibits, with certain exceptions, any person from taking, engaging in commercial activity with, holding possession of, or exporting any threatened or endangered species of plant or animal listed by regulation. Exceptions include:

* takings for scientific purposes, with appropriate permits;
* species which become a public nuisance or public danger;
* species which have been commercially raised through mariculture, aquaculture, game farming, agriculture or horticulture;

* where the Director determines that takings from certain islands of certain species for subsistence food or for traditional uses does not further endanger the species involved (limited to non-commercial takings by indigenous inhabitants);

* innocent possession; and

* non-living species acquired before the Act became law.

The Act, in anticipation of FSM ratification of the *Convention on International Trade in Endangered Species* (CITES), prohibits imports into the Federated States of any species which is listed by CITES. It further allows for a listing by regulation of CITES prohibitions.

A permit is required for importation of exotic plants and animals. The FSM Government may confiscate any endangered species of plant or animal, or any weapon, gear, or vehicle used for the purpose of violating the Act. Violators shall be liable to a fine not exceeding $10,000 or to a term of imprisonment not exceeding one year, or both.

12.4 Adopted Regulations; Title 45; *Fish, Shellfish and Game*: Chapter 5; *Endangered Species*

On December 4, 1976, a Regulation was adopted in the Territorial Register, Volume 2, Number 1, listing endangered species of the Trust Territory and their ranges. Currently in effect in FSM, this list includes the following species with FSM or pan-Micronesian ranges: Blue Whale; Sperm Whale; Truk Micronesian Pigeon; Hawksbill Turtle; Leatherback Turtle; Nightingale Reed-Warbler; Truk Greater White-eye; Ponape Greater White-eye; Ponape Mountain Starling; Truk Palm; and Truk Poison Tree.

This Regulation is subsidiary to the *Endangered Species Act*. The Act provides for further subsidiary regulations to be issued by the Director of Resources and Development. No such regulations have yet been issued.

12.5 Key Issues

12.5.1 Protected Areas

Much work remains to be done in the protection of species and development of nature preserves. Currently, there are very few legally established protected areas in FSM, nor is there appropriate legislation for this purpose.

Nature conservation and protected areas should be elements of an overall National Conservation Policy. Such a policy should guide FSM development along sustainable paths, and serve as a formal declaration of the importance of conservation to FSM. Strong State participation is essential in the development of this planning document. The policy might call for comprehensive protected areas legislation and organizational changes to provide for the effective administration of the proposed legislation.

12.5.2 Conservation of Living Resources

FSM's abundant terrestrial and marine resources suffer from rapidly increasing human population levels and their consequent infrastructure and development demands. Additional conservation efforts are necessary to adequately protect, conserve and manage FSM's living resources. Principles of sustainable development must be more vigorously incorporated in all development proposals and in the environmental community's responses to those proposals. Terrestrial and marine flora and fauna conservation efforts must be more fully incorporated into large-scale government development projects.

Aquaculture, mariculture, and aquarium fish harvesting activities will increase in the next decade. There is the potential for over-exploitation of marine resources such as trochus and black-lip mother-of-pearl oysters. Regulatory controls are required. All regulatory controls, however, must take into consideration takings for traditional purposes, much like language currently found in the Title 23, Resource Conservation: Marine Species Preservation Chapter.

Enforcement efforts under the present legislative framework for species conservation is not adequate. Enforcement is hampered by the vast geographical distances within FSM, by the lack of updated information on the species inhabiting FSM and which species require protection, by the jurisdictional confusion between National and State Governments, and by the ubiquitous lack of funding and training which plagues most environmental efforts in the Federated States.

12.6 Key Issues and Recommendations

22. FSM presently requires more comprehensive nature preservation legislation, both in regard to species preservation and protected areas. Legislation for the administration and protection of marine and terrestrial areas should incorporate several concepts, including:

    * the establishment of a protected areas agency, either as part of a Government Department or as an independent authority, and preferably the same entity that oversees environmental health protections;
    * the setting out of certain areas as protected, with distinctions for differing uses;
    * the development of advisory bodies, including customary landowner participation;
    * enforcement powers; and
    * the power to make regulations.

    Any system of protected areas must maintain traditional rights and practices. All protection must first be recognized as appropriate and desirable by customary landowners. Because of the innovation of governmental regulatory control over private, customarily-held lands and waters, public hearings, public education, and close interaction between National and State Departments is the proper starting point for a comprehensive network of protected areas.

23. Provide additional funding and training to promote effective management and enforcement of living resources legal protection.

24. Coordinate legislative efforts to conserve living resources.

25. Revise the *Endangered Species Act*. At present, the Act is inadequately specific and insufficiently inclusive. Include an expanded listing of FSM endangered and threatened species.

26. It is recommended that FSM become a signatory to the *Convention on International Trade in Endangered Species Convention* (CITES).

CHAPTER THIRTEEN

TOURISM - NATIONAL

13.1 Existing Legislation

There is no existing legislation for tourism at the National level.

13.2 Key Issues

There is one Tourism Officer posted to the Division of Commerce and Industry within the Department of Resources and Development. The officer gives advice and assistance on tourism issues to the States. The officer also is responsible for the development of literature, brochures and improving market access to the international tourist market.

FSM's tourism industry is small and developing slowly. Tourism development is hindered by the Constitutional prohibition against sale of land to non-FSM citizens, by traditional land tenure systems, and by the consequent difficulty to negotiate and acquire long-term leases. The Government also recognizes the value of slow growth in this area; significant cultural and natural resources are protected by emphasis on small-scale, community-oriented, ecologically sound tourism.

Because of the potential impact of tourism on the environment, there is a need to initiate planning now. While tourism depends on the nurture of strong natural and cultural values, it can have negative impacts on those values. Mechanisms should be developed to encourage tourism while at the same time assessing and controlling its impacts upon the socio-cultural and environmental systems of FSM. As tourism often has repercussions upon traditional community life, it is vital that tourism development occurs with extensive public consultation. Traditional cultural, historical and social values and practices must be respected and considered when planning development of this industry.

As tourism develops in FSM, increasing pressures will be placed on the natural environment, historic and archaeological sites and on infrastructure such as water, sewerage, roads, power and waste disposal. Physical planning and zoning will be necessary to identify the most appropriate areas for tourism development. If properly planned, revenue from tourism may be used for environmental protection, conservation of historic and archaeological sites and the provision of infrastructure.

13.3 Recommendations

27. Create a National Tourism Development Plan, in consultation with the four States, including an emphasis on small-scale, low impact eco-tourism.

28. Enact legislation providing for tourism development coupled with effective, enforceable controls, including EIA requirements, so as to limit cultural and environmental impacts.

29. Introduce licensing or permit systems for tourism development so that proposal proponents pay for development of infrastructure necessary for their projects.

CHAPTER FOURTEEN

CULTURAL HERITAGE - NATIONAL

14.1 Existing legislation

14.2 Definition of cultural heritage

Environmental concerns are broadly defined in this Review to encompass cultural heritage protection, as well as environmental health and natural resources concerns. Current environmental philosophy links the celebration of the past to a grounded understanding of appropriate paths toward future development. Under this proposition, the protection of cultural heritage and traditional ways is integrally bound to a respect for the physical world. Recognition of traditional ways often opens a wellspring of knowledge regarding the sustenance and appropriate use of the world's resources.

14.3 Administration

The administrative body charged with the preservation of cultural heritage is the Office of Administrative Services, which established the Division of Archives and Historic Preservation in 1988. Presently, the Division is staffed by one Historic Preservation Officer (HPO). This officer provides technical and financial assistance to the four States. The States, in return, conduct field work for the National HPO. As of September, 1992, the Division employed a staff archaeologist, to further assist the States in the identification and preservation of State historic sites.

The United States Parks Service provides 95% of the Division's funding, which is then distributed to the States. State historic preservation programs are required to submit monthly reports to the National HPO detailing their preservation activities and challenges.

14.4 Micronesian Resource Study

One program with great potential administered by the National HPO is the "Micronesian Resource Study." In operation in FSM, the Republic of the Marshall Islands, and Palau, the study is funded by a United States, private, non-profit agency called the "Micronesian Endowment for Historic Preservation." Phase I of the study establishes a computer data base program which catalogues sites according to archaeology, ethnography, ethnobotany, and ethnomusicology. Phase I has been initiated in Pohnpei and Kosrae; 267 and 68 sites, respectively, have been designated. Each archaeological site listing offers a description and specification of the site, states relevant vegetation and soil types, and offers information about the depth and archeological layers of each locale. It is hoped that each State will eventually operate its own branch system, and offer quarterly updates to the National system.

14.5 Legislative Authority

14.5.1 FSMC Title 26 - *Historical Sites and Antiquities*

Title 26 states that it is the policy of FSM to protect and preserve the diverse cultural heritage of the peoples of Micronesia and to identify and maintain areas, sites and objects of historical significance.

"Cultural attribute" is broadly defined to mean all aspects of local culture, tradition, arts, crafts, all social institutions, forms of expression and modes of social interaction. "Historical property" is defined to mean sites, structures, buildings, objects and areas of significance in local history, archaeology or culture.

"Historical artefact" means an object produced by human beings 30 or more years previously.

The Title provided for the establishment of an Institute for Micronesian Culture and History. The Institute was to be guided by an Advisory Panel comprising State representatives and experts in Micronesian history and culture. The Institute was never established and in 1987 the relevant section was repealed. In its place, the Director of Administrative Services was charged with oversight, identification, conservation and protection of historic properties and cultural attributes within the FSM.

The Director's function is to provide professional assistance to historic and cultural preservation programs in the States and to all levels of government, private business and foreign governments operating in FSM. He or she is also to advise the National Government concerning public and private actions which may affect historic properties and cultural attributes. Overall, the Director has broad legislative powers to facilitate protection of historic and cultural heritage.

Title 26 provides a scheme for historic preservation which includes the following:

* The National Government, its agencies and other private and foreign parties, operating with financial assistance or permission of the National Government, are required to provide plans and studies for all undertakings to the Director so that he or she may determine the effects of these undertakings on historic properties and cultural attributes;

* If the Director determines that significant effects are likely, he or she shall institute consultations with the proponent, relevant agencies, State preservation programs and the public to clearly identify the historic properties or cultural attributes subject to impact;

* The Director has an obligation to eliminate or mitigate harmful effects on historic and cultural heritage;

* Proponents of undertakings must consult with various bodies when so requested by the Director;

* If a project which has been the subject of consultation proceeds and there is a threat of immediate and irreparable harm to an historic property or artifact, the undertaking is to be suspended and not resumed until the approval of the President has been obtained. The President is the final arbiter of conflict between a proponent of an activity and the Director in regard to perceived threats to historic and cultural heritage.

The Title makes it an offence to move an historic artifact within FSM and outside the country in interstate or foreign commerce without approval of the relevant State's Governor and two-thirds of its Legislature. It is also an offence to damage or destroy historic property within the control and jurisdiction of FSM without approval of the President and Speaker of Congress. Requests to the President for permission to export or damage historic property or artifacts must be referred for approval to the Director of Administrative Services and to the affected States.

The Title also requires that efforts be made to recover and return to the State of origin all historic objects which have been exported from FSM.

14.5.2 *Draft Regulations for the Consideration of Historic Properties and Cultural Attributes in Project Planning*

These Regulations have been developed and are awaiting comment from the United States Parks Service. The Regulations provide a scheme for the assessment of the impact of developments and activities of the National Government, its agencies and any bodies who have national funding or approvals for projects regarding cultural and historic heritage. The scheme requires submission of detailed plans and proposals by proponents, public consultation, assessment of impact and consultation with State HPO's prior to the allocation of funds or

granting of permits. In the event of a dispute between a proponent, the National HPO, State HPO or other parties concerned with the undertaking, the President and Speaker or Congress shall be the final arbiters. Cease and desist powers and powers to mitigate and ameliorate impacts of activities on cultural and historic heritage are also provided. Permits for transport of artifacts in interstate and foreign commerce and for destruction of artifacts are required. Recommendations for the issue or denial of permits must be referred for approval by the National HPO to the President and Speaker of Congress or to a Governor and State Legislature where appropriate.

14.6 Key Issues

All States have significant pre-historic, pre-European and European/Asian historic sites and artifacts. These sites are found on land, inter-tidal zones and sub-marine areas. FSM also has a vast wealth of intangible cultural heritage; intangibles like community practices, information or ideas are often exchanged and celebrated through oral traditions. National Government recognition of these rich resources is growing. Recent efforts have been encouraging, but additional funding and interaction with State Governments is required before a fully developed system of cultural protection is in place. The planned Joint National-State Attorney General Opinion regarding allocation of powers between National and State jurisdictions on environmental matters should help the formation of policy regarding the appropriate level of interaction between the States and National Government regarding historic and cultural protection.

14.7 Recommendations

30. Enhance legislative protections. Amend Title 26 to prohibit the movement of cultural and historic artifacts for non-commercial purposes. This would alleviate the current practice of removing certain artifacts from their sites for research purposes.

31. Revise, enact and enforce the Draft Regulations. Amendments to the Regulations might address the need for recording and interpretation of those sites which are destroyed by necessary development. The penalties for violation of Title 26 and the Regulations must be commensurate with the great National importance of historic and cultural conservation. The current fines of between $200 and $1,000 are not adequate.

32. Reinstate the Advisory Panel to advise the Director of Administrative Services and the National HPO. Such a Panel is a useful instrument for the integration of cultural protection with other Government efforts. As noted earlier, the full spectrum of environmental and cultural protection is now splintered among various Departments and agencies. The Advisory Panel could work as an effective educational body for the transmission of cultural and historic concerns.

PART 3

STATE OF KOSRAE

CHAPTER FIFTEEN

CONSTITUTIONAL AND ADMINISTRATIVE STRUCTURE

15.1 The Constitution

15.1.1 General Overview

The Constitution of the State of Kosrae was adopted by the First Constitutional Convention on April 1, 1983, ratified at referendum on October 15, 1983, and took effect at noon on January 11, 1984. Formerly a part of the District of Ponape in the Trust Territory of the Pacific Islands, Kosrae was created as a separate political entity quite recently, in 1977 (Draft 2ndNatDevPlan; Vol. 1, Ch. 10, page 1). The Kosrae Constitution, a declaration of the supreme law of the State, follows basic tenets of western democratic legal and governmental structures. Article II sets forth 12 categories of civil rights, closely patterned after the United States Bill of Rights. Article III entitles all FSM citizens who have reached the age of 18 years and who are domiciled in Kosrae to vote in all elections by secret ballot. Although patterned after western legal concepts and institutions, the Constitution also incorporates some aspects of Kosraean cultural traditions.

15.1.2 Traditional Aspects of the Constitution

The Preamble to the Constitution declares that Kosraeans are one, as a people, in their language, in their traditions, and in their family and communal life. The Preamble declares that this way of life has survived the "assaults of colonizers and the ravages of time", and promises to preserve Kosraeans' traditions and communal spirit. Emerging democratic institutions established in this document coexist with language praising a more cooperative, communal approach to government. For example, although the Constitution establishes a three-branch governmental structure, devised in the United States so that each branch would operate as a check and balance to the other two, the Preamble emphasizes the drafters' faith in "our communal ability for compromise and flexible growth".

Article XIII establishes the Kosraean language as the sole official language of the State, although English may be employed in governmental discourse and proceedings. All laws and Resolutions must be published in both Kosraean and English, although in the event of a conflict, the English language version is controlling (Constitution of Kosrae, Article IV, Section 18).

A further provision protecting Kosraean cultural heritage is found at Section 2 of Article II. This Sections allows the State Government to protect the State's traditions as may be required by the public interest. Section 1 of this Article, which protects civil liberties, begins by providing that any stated rights may be superseded "when a tradition protected by statute provides to the contrary." At Section 9 of Article VI, the Judiciary is instructed that court decisions "shall be consistent with this Constitution, State traditions and customs, and the social and geographical configuration of the State."

15.1.3 Three Branches of Government

The Legislative, Executive, and Judicial branches of government are set out at Articles IV, V, and VI, respectively. Established under democratic principles, the Legislature and Governor are elected every four years by the qualified voters of Kosrae. The unicameral Legislature is comprised of 14 Senators, elected by the qualified voters of the four electoral districts: Lelu, Malem, Tafunsak, and Utwe. Judicial powers are vested in the Kosrae State Court, which consists of a Chief Justice and an Associate Justice or Justices. Justices are nominated by the

Governor with the advice and consent of three-quarters of the Senators, and hold office for a term of six years (Kosrae Constitution, Article VI, Section 3).

15.1.4 Environmental Provisions

The Kosrae Constitution contains a number of powerful and explicit environmental statements. The Preamble speaks of the "bounty and beauty of our island and its waters", and pledges to "preserve our natural riches." Article XI, entitled "Land and the Environment", flatly declares at Section 1 that: "A person has the right to a healthful, clean, and stable environment." The Section continues, requiring the State Government to protect, by law, Kosrae's environment, ecology, and natural resources from impairment. Section 2 makes a strong anti-pollution assertion by declaring:

> There may be no nuclear, chemical, gas or biological weapons, or radioactive material hazardous to public health or safety, within the State. No hazardous waste or other hazardous substance may be disposed of within the State except as expressly authorized by State law.

Section 3 of Article XI allows the use of real property to be regulated by law for purposes of public health and well-being, preservation of places of cultural or historic value, and island beauty. Section 4 makes the waters, land, and natural resources within the marine space of the State public property, and Section 6 designates all rivers and streams as public property. Additional Constitutional land provisions are discussed at Systems of Land Tenure - Kosrae, Chapter 16, below.

15.1.5 Municipal Government

Article VIII acknowledges both State and municipal levels of government, establishes the right for municipalities to adopt a charter for self-government, and gives municipalities power over their local affairs, property and government that are not denied or limited by law. Municipal governments in Kosrae do currently draft and pass Ordinances, but are prohibited from pronouncing enactments on subjects covered by State law. As State law is so explicit regarding many environmental issues, and as municipalities presently lack enforcement ability, municipal governments have not emerged as strong repositories of environmental controls.

15.2 Kosrae State Administrative Structure

Article V, Section 12, of the Kosrae State Constitution states that all executive and administrative Offices and Departments shall be established by law. Each principal Department is under the supervision of the Governor, who nominates and appoints the Department's Director, with the advice and consent of the Legislature. The Governor also appoints members of Boards, Commissions, or other bodies when those bodies are the head of a principal department or are regulatory or quasi-judicial agencies.

15.2.1 Departments

The Executive Branch is organized pursuant to Title 5 of the Kosrae State Code of Laws (KC). KC 5.201 lists the principal Departments of the Kosrae State Government as follows (a listing of subsidiary Divisions is also included for those Departments with environmental oversight responsibilities):

(1) The Office of the Attorney General

(2) The Office of Budget and Planning

(3) The Office of Finance and Treasury

(4) The Office of Personnel and Employment Services

(5) The Department of Conservation and Development

* The Division of Agriculture and Forestry
* The Division of History and Culture
* The Division of Land Management
* The Division of Marine Resources
* The Division of Production and Marketing
* The Division of Tourism

(6) The Department of Education

(7) The Department of Health Services

* The Division of Administrative Services
* The Division of Clinical Services
* The Division of Dental Services
* The Division of Environmental Health and Sanitation
* The Division of Medical Services
* The Division of Public Health Nursing

(8) The Department of Public Affairs

(9) The Department of Public Works

15.2.2 Agencies

KC 7.102 lists the Kosrae State Agencies as follows:

(1) The Broadcast Authority

*

(2) The Election Commission

(3) The Environmental Protection Board

(4) The Executive Service Appeals Board

(5) The Health Council

(6) The Land Commission

(7) The Parole Board

(8) The Sports Council

(9) The Scholarship Board

The Environmental Protection Board was saved from Trust Territory times to serve as the Kosrae State Government's preeminent administrative body for environmental control. The Board, although still in legal existence, has not been active since 1988. The Board's enumerated powers and duties, and a current proposal to replace the Board with a "Development Review Commission", are discussed at Pollution Control - Kosrae Chapter 17, paragraph 17.1.1, below.

CHAPTER SIXTEEN

SYSTEMS OF LAND TENURE - KOSRAE

16.1 Traditional Systems

Kosraeans have traditionally enjoyed a close-knit, subsistence life with intimate ties to the land and sea. As with most of the developing Pacific, customary patterns of land rights and inheritances on Kosrae abide to this day, frequently colouring a person's status within her or his society. Land rights and privileges are extremely important to the people of Kosrae. Land issues are often litigated. Recognition of the traditional systems of landholding is integrally linked to the success or failure of State Government land use and environmental protection measures.

Kosrae is the smallest State in FSM, both in land area (Approximately 43 square miles) and population (6,607 in 1986). (Draft FSM 2ndNatDevPlan, Chapter 10; page 1). The land is easily able to support the number of human residents; most of the mountainous, forested interior is uninhabited. An island grouping of great beauty, each land area is named. Names are determined either by the land's spatial orientation, to commemorate past events or myths, or to designate ecological zones (McGrath, page 191).

Traditional land tenure was hierarchical. The absolute ruler (Tokosra) held all rights to land. Chiefly titles were assigned by the king for the administration of approximately 57 districts. Although succession of the king was nominally matrilineal, the chiefs had considerable voice in the selection (McGrath; page 191).

The chiefs appointed "collectors" (Mwet suk suk), who gathered tribute, one-half of the food going to the king and one-half to the chief. Commoners held land rights subject to the king and chief. The system has grown more flexible as kingly and chiefly rights have deteriorated over time.

Ownership concepts were and are quite different from western thoughts about land. A commoner landholder rarely forbade anyone from crossing her or his land, or from gathering, or hunting, although permission was required to cut a tree or take a cultivated plant. The extension of land title to coastal, reef and lagoon areas is unclear; land rights could be extended, however, by filling in land formerly covered by water (McGrath; page 192).

Inheritance is patrilineal, although in the event all male descendants are deceased (moving in a pattern from the eldest to next-eldest male sibling, then first-born son of the eldest male sibling to next-born son of the eldest male sibling, and so on), succession may pass to the eldest female (Land Commission Guideline A). Land acquisitions could be through inheritance, good deeds, dowry, acts of love, gift, purchase, or exchange (Land Commission Guideline B). Dowry gifts of land (Tuka) from a woman or her family to her husband transfers all rights of ownership to her husband (*Likiaksa v. Henry Skillings and Isaiah N.*, Civil Action No.56; Trial Division of the High Court, Ponape District; December 11, 1953).

16.2 Constitutional Provisions

Article XI of the Constitution of the State of Kosrae, entitled "Land and the Environment", sets forth certain requirements regarding the acquisition and use of land. Real property uses may be regulated in the public interest for a number of public health and environmental interests (Section 3); the State Government may acquire interests in private land for a public purpose without the consent of the landowners, but with payment of fair compensation and a showing that the land and the interest are "highly suited" to their intended use (Section 5); and only FSM citizens who are domiciled in Kosrae, or a corporation which is wholly owned by such a citizen, may acquire title to land in the State, although acquisition and utilization of interests in real property may be restricted or regulated by other law (Section 7).

16.3 Current Status

No land use planning legislation has yet been enacted. The Land Commission, a State agency, registers title to land in the name of one person. The Commission began its work in the early 1980's; more than one-half the occupied land is registered, although less than one-half of the land in Kosrae is claimed. The Commission provides a panel of three persons for administrative resolution of land disputes. There is a right of appeal from the administrative decision to the State Court, although the process is often slow and cumbersome.

Land Commission policy prevents the registration of approximately eighty percent of the middle of Kosrae, as the ownership of that land is in dispute. A 1932 Japanese boundary map asserts Japanese ownership of the huge parcel, which ownership would flow to the present State Government. There are, however, no supporting documents to the map. The Legislature is currently contemplating a legislative document which would return that land to the traditional owners. Primarily mountainous and not farmable, the designation of this land as a nature preserve or protected watershed forest would provide excellent species and natural resources protection.

Land is mostly private in Kosrae. The Capitol Building, however, rests on public land, the six main rivers are public property (Kosrae Constitution, Article XI, Section 6), and all land below the high water mark is public (Kosrae Constitution, Article XI, Section 4). This last provision is very important for future environmental protection efforts, as it allows State Government reef and coast conservation measures to be carried out primarily on public land. As has been stated throughout this document, private landowners frequently resist the initial stages of government environmental oversight of private land.

CHAPTER SEVENTEEN

POLLUTION CONTROL - KOSRAE

17.1 Existing Legislation

17.1.1 The Environmental Protection Board (EPB)

Chapter 4 of Title 7 of the Kosrae State Code establishes the Kosrae Environmental Protection Board in 1985. Saved from the Trust Territory era (63 TTC Ch.7), the Board has not been functional since 1988. However, its legal powers and duties remain intact.

The Kosrae EPB consists of seven members who serve a four year term. Broad powers and duties are prescribed, including the ability to: protect the environment; abate and control pollution; prevent contamination of air, land and water; adopt and enforce regulations; adopt environmental protection programs; collect information and develop reports; enter property for purposes of inspection; issue cease and desist orders; and order a pollution party to abate and remove polluting matter.

Specific stated regulations follow Micronesia-wide Trust Territory thinking regarding appropriate environmental health matters. KC 7.402 suggests adoption of regulations relating to: primary and secondary drinking water, classifying air, land and water according to present and future uses; pesticides control and certification of applicators; and pollutant discharge permitting.

Board enforcement powers are set out at Kosrae Code Title 11 "Land and Environment", Chapter 13 "Protection of the Environment". KC 11.1302, reflecting Trust Territory enforcement provisions, allows the following Board enforcement action against violators:

* issuance of a cease and desist order;
* imposition of a civil penalty up to $10,000 for each day of violation; or
* commencement of a civil action to enjoin the violations

Board findings of actual or possible unlawful discharges of waste may be remedied by requiring a detailed time schedule of specific corrective actions or by issuing a cease and desist order. A cease and desist order must be followed by a public hearing.
KC 11.303 permits the Attorney General to petition the Court to require compliance with any ECB order.

17.1.2 L.B. No. 5-58, introduced October 9, 1991

This proposal for an Act, ready for resubmission to the Kosrae State Legislature, is part of a larger proposed Kosrae Island Resource Management Program (KIRMP). In 1988, the Governor of Kosrae invited the University of Hawaii Sea Grant College Program to work with the Kosrae State Government to help with resource management. A Coastal Resource Management Committee was organized, hosted by the Department of Conservation and Development. The resulting Kosrae Island Resource Management Program is designed to:

* formally review proposed development projects;
* help improve the coordination between Kosrae's government and private sectors in supporting wise development; and
* help to protect Kosrae's natural and cultural resources from being needlessly destroyed by unwise development (Dahl Guide; Introduction).

The proposed Program requires implementation by legislation. The first version of legislation implementing the KIRMP did not move beyond first reading in the State Legislature. L.B. No. 5-58 is the second draft of the Resource Management bill. Narrowed in scope from the first version of the bill, and adding provisions for environmental impact assessments and development permitting authority, this draft amends the Kosrae State Code to establish a Development Review Commission to replace the EPB.

The proposed Development Review Commission will be responsible for overseeing the use and protection of Kosraean resources, "balancing the needs of economic and social development with those of environmental quality and respect for our traditional ways" (L.B. No. 5-58, Section 1). The Commission will be composed of five members, appointed by the Governor, who serve terms of two years. Commission powers and duties include:

* generally protecting the environment and abating pollution and contamination of air, land and water;

* adopting and enforcing regulations, including those regarding primary and secondary drinking water systems, regarding classes of air, land and water uses, regarding pesticides pollution and certification of applicators, and regarding issuance of permits for the discharge of a pollutant;

* adopting a development permit system regarding construction projects which may significantly affect natural or historic resources;

* collecting information and reports;

* entering public or private property to inspect;

* issuing cease and desist orders and abatement orders to violators of environmental laws or regulations;

* devising land use plans; and

* acting as an agent of the FSM Environmental Protection Board pursuant to written agreement approved by the Governor.

A Technical Advisory Committee is formed at Section 7.403 to advise the Development Review Commission. The Committee is comprised of representatives from the following agencies:

* Office of Planning and Statistics;

* Bureau of Construction and Engineering;

* Division of History and Culture;

* Division of Agriculture and Forestry;

* Division of Marine Resources;

* Division of Tourism;

* Division of Environmental Health;

* Department of Public Works.

This interdisciplinary body is charged with providing technical guidance in the review of development project proposals, and coordinating the regulatory, review and permitting powers of its member bureaus with the powers of the Commission. Environmental impact studies are

required at Section 7.405 for all development proposals significantly affecting the quality of the human environment. All statutory language applicable to the EPB is changed to name the Development Review Commission.

17.2 Key Issues

A great deal of effort and years of cooperative action went into the creation of the KIRMP and its enabling legislation. Indeed, the very effort itself furthered peoples' recognition of the fragile nature of Kosrae's environment and the need for an effective system of environmental and resource controls.

The Bill as it is now written encompasses the duties of the ECB and adds important land use and planning functions. Land use plans are still quite a controversial item in Kosrae. Government plans could preempt traditional land uses, and landowners in custom are not yet familiar with that level of government oversight. It has also been suggested that existing Government bodies, such as the Land Commission, the Department of Conservation and Development, or the Office of Planning and Budget might be better suited to the actual development of such plans.

The Technical Advisory Committee's role and functions should be clarified, and perhaps the State Government employees sitting on the Committee could be given additional power to guide Commission decisions and set permit requirements. Currently, the Committee is an advisory body only. The Committee, if given more authority, may be the ideal body to extend environmental protections to include natural resource management as well as environmental health and sanitation protection. Certainly the ringing State Constitutional environmental language in Section 1 of Article XI anticipates environmental protection of natural resources as well as pollution and contaminant control. An umbrella group of environmental health and natural resource managers contemplated in the present legislation as an advisory body may better serve environmental interests by acting with the full powers of an independent statutory authority. Such an authority could be given additional regulatory powers over natural and living resources.

The inclusion of historic preservation language recognizes the appropriate placement of cultural protection within the auspices of environmental oversight, but possible overlaps with State HPO powers might be examined. Environmental impact studies are required only for proposals affecting the quality of the human environment; those that effect other species or their habitats will presumably remain unexamined. Additional specificity regarding environmental impact study requirements and the addition of definitions for key words and phrases may help decrease future litigation.

Certainly this Bill carries with it a momentum that may reinvigorate formerly-dormant environmental protection inquiries and oversight. To the extent that the Bill requires interdisciplinary review of environmental issues and discussion of large development projects, it alleviates the common plight of inadequate and compartmentalized environmental oversight. A proposal that combines many separate areas of environmental scrutiny within a single body is needed; the Legislature must now decide if L. B. No. 5-58 is acceptable in its present form.

17.3 Recommendations

33. Devise legislation for a statutory environmental oversight authority with full regulatory and permitting power in regard to the environmental health and natural resource protection and management. Such legislation should include specific environmental impact study requirements, cultural heritage protections, establish a Board, Commission, or Committee with interdisciplinary membership and regulatory power, and should specify a broad spectrum of required environmental health and natural resource regulatory instruments.

34. Issue a Joint Attorney-General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in all areas of environmental oversight.

CHAPTER EIGHTEEN

WATER QUALITY - KOSRAE

18.1 Existing Legislation

KC Section 13.514 prohibits the fouling of public rivers and public water supplies. "Fouling" means introducing impurities into a stream, river, or public water supply, except for the introduction of impurities in a stream or river in connection with washing clothes or washing a person. "Fouling" constitutes a misdemeanour.

No Kosrae State public drinking water, marine water quality, or fresh water quality standards are in existence. National minimum standards for public drinking water and marine water quality, adopted from *Trust Territory Regulations*, are followed.

18.2 Key Issues

The Division of Environmental Health and Sanitation within the department of Health Services currently performs public drinking water monitoring, in accordance with national standards. For both drinking and marine water quality issues, additional monitoring efforts may control environmental degradation before pollution becomes an impediment to public health, local subsistence and foreign fishing ventures. Further technical and monetary assistance is required to accomplish this goal.

In a move also contemplated in many other jurisdictions of the developing Pacific, Kosrae State is considering transferring authority over public water and sewerage supply to a quasi-governmental public utility corporation. If responsibility for the public water supply is given to a private corporation, the Sanitation Section may wish to charge that corporation for its monitoring services. Current *FSM Public Water Supply Regulations* require the delivery entity to test its own product; if the water delivery agent is private, a government charge for testing services would be appropriate.

18.3 Recommendations

35. Fund technical and laboratory assistance programs to enable further testing of public, coastal and offshore marine waters.

36. Draft marine, fresh and public drinking water standards with standards appropriate to Kosrae (but not less than Constitutionally-mandated national standards); or, enter into a written cooperative agreement with the National Government Department of Human Resources to administer National standards.

CHAPTER NINETEEN

WASTE MANAGEMENT - KOSRAE

19.1 Existing Legislation

19.1.1 Kosrae Code Section 13.506 *Littering*

Listed under "Offences Against the Public Welfare and Tradition", this Section prohibits littering on property, or dumping waste matter in or on a public or private road, or dumping waste matter in parks or other public property, or dumping waste matter on private property without the owner's permission. It further makes it unlawful to deposit rocks or dirt on roads or on property without the appropriate authority's consent.

"Litter" is defined as the wilful or negligent throwing or depositing of any waste matter on land or water in other than appropriate storage containers. "Waste matter" is defined and discarded, used or left-over substances. In deference to private property rights, the enactment does not restrict an owner in the use of his or her private property, unless he or she creates a public nuisance. Littering is a misdemeanour.

19.1.2 Kosrae Code Section 12.1201 *Toilets; disposal of human excreta*

This Code Section requires that the State Department of Health Services provide toilet standards, and restrictions on the disposal of human excrement outside a toilet. The Section further requires that inhabited dwelling places have toilets.

19.2 Key Issues

Again, the Division of Environmental Health and Sanitation within the department of Health Services currently handles waste management issues. No State standards have been enacted; Sanitarians follow FSM National standards. In Kosrae, most residences have an outside "house" which includes a toilet and shower. Wells are generally not productive in Kosrae, and almost none are in current operation.

The United States Environmental Protection Agency (USEPA) has funded a number of sewage collection systems in Kosrae. Generally, they include septic tanks with leaching systems or oxidation ponds. Lela's sewerage system, newly installed by USEPA, moves untreated waste through a collection system to a 90 foot deep outfall at the mouth of Lela harbour. Other systems are taxed beyond capacity.

19.3 Recommendations

37. Develop a State-specific project for rural sanitation, wastewater treatment and solid waste disposal.

38. Draft solid waste and toilet facilities regulations with standards appropriate to Kosrae (but not less than Constitutionally-mandated national standards); or, enter into a written cooperative agreement with the National Government Department of Human Resources to administer National standards.

CHAPTER TWENTY

ZONING EARTHMOVING, AND ENVIRONMENTAL IMPACT ASSESSMENTS - KOSRAE

20.1 Existing Legislation

20.1.1 Kosrae Code Section 11.201 *Proposed land use legislation*

This Section requires that the Governor submit proposed legislation regulating land use to the Legislature within one year following the effective date of the Compact of Free Association. No proposed legislation has yet been submitted.

20.1.2 *Regulations on Fill and Construction Projects Below High Water Mark*

Submitted on May 5, 1986, by the Director of the Department of Conservation and Development, these regulations were promulgated to establish procedures by which land below the high water mark may be filled and built on. No substantive environmental review is required.

20.2 Key Issues

The State of Kosrae has recognized the need for unified environmental oversight of development projects to prevent the degradation of precious natural resources. Such oversight must include setting zoning standards, examining the impact of accelerated erosion and sedimentation on reefs and coastal areas, and requiring specific environmental impact assessments, preferably funded by the project proponent. See discussions in Chapter 17, paragraph 17.1.1, Pollution Control - Kosrae above, regarding proposed new powers to regulate the appropriate use of land, to issue development permits for new earthmoving projects, and to require environmental impact studies.

There is a good deal of confusion between the National Government and State Governments regarding jurisdiction on various environmental issues. A case in point is the question of jurisdictional authority regarding the recently-enacted *National Government Environmental Impact Assessment Regulations*. By letter of December 2, 1988, to the Secretary of the National Department of Human Resources, Kosrae Governor Yosiwo P. George reiterated his belief that the National Government was Constitutionally prohibited from conducting environmental oversight of projects occurring in Kosrae. He opposed the imposition of National Government environmental standards in Kosrae (while allowing National Government technical assistance to be provided), and affirmed that the final decision on whether or not a project should go forward was a prerogative of the State. This issue must be resolved in all environmental areas throughout FSM.

20.3 Recommendation

39. Pass legislation providing for (a) land use planning; (b) analysis of earthmoving activities' effects on reef, cultural and coastal zones; and (c) specific environmental impact assessment requirements to be provided by development project proponents before construction commences.

CHAPTER TWENTY ONE

FISHERIES - KOSRAE

21.1 Existing Legislation

21.1.1 Kosrae Code, Section 14.1302 *Foreign fishing agreement*

This Section permits the Governor, following the Legislature's consent by Resolution, to enter into a foreign fishing agreement for the State's benefit. The terms of the agreement may not include provisions less stringent than National law, unless permitted by the State Legislature.

21.1.2 Kosrae Code, Section 14.1303 *Fishing permit*

This Section forbids foreign vessels from fishing in the State's marine space (defined by National law as 12 miles seaward from the State's baseline) unless the vessel has a permit issued pursuant to a State foreign fishing agreement. Permit applications may be no less detailed than those required by National law.

21.2 Key Issues

The Division of Marine Resources within the Kosrae State Department of Conservation and Development is charged with management of marine resources. Legislative instruments protecting, managing and conserving natural resources in Kosrae are scant. It is a pleasure, however, to contemplate controls on an environment not already despoiled by environmental pollutants or overuse. The State's first economic development priority is in the marine resources sector, so regulatory instruments or plans protecting resources such as fisheries, aquaculture centres and mangrove areas could ensure that such resource exploitation was sustainable and renewable.

21.3 Recommendation

40. Approve the proposed Kosrae Island Resource Management Program; extend resource management beyond coastal areas to include full interior and marine jurisdictions. Draft legislative instruments, preferably after National/State environmental jurisdictional issues are settled, for the protection and management of fisheries, mangrove areas, coastal and ocean areas, and reefs.

CHAPTER TWENTY TWO

AGRICULTURE AND FORESTRY - KOSRAE

22.1 Administration

The Division of Agriculture and Forestry within the Kosrae State Department of Conservation and Development controls agricultural and forestry development issues. Although there is meagre present legislative environmental oversight of agriculture and forestry efforts, continued development in these two key fields require concomitant protective instruments. The proposed Kosrae Island Resource Management Program and its companion legislation are a good first step toward a fully-realized system of environmental protection for these natural resources. Further steps to protect cultivated ground and forest areas include enhanced pesticides protection, environmental review of development projects, watershed legislation and mangrove forest protection.

22.2 Recommendations

41. Coordinate with the Division of Environmental Health and Sanitation, or a statutory environmental oversight authority, regarding development and enforcement of *State Pesticides Regulations*, preferably to be drafted after National/State environmental jurisdictional issues are settled.

42. Draft statutory instruments, or subsidiary regulations pursuant to legislation creating a statutory environmental oversight authority with power regarding natural resource protection and management, regarding protection of watersheds and mangrove forests.

CHAPTER TWENTY THREE

BIODIVERSITY CONSERVATION - KOSRAE

23.1 Existing Legislation

23.1.1 Kosrae Code Section 11.1601 *Endangered species*; Kosrae Code Section 13.524 *Endangering a species*

Section 11.1601 authorizes the Director of the Department of Conservation and Development to set forth endangered species and provide for their protection by regulation. Section 13.524 makes it a misdemeanour to endanger any species set forth by regulation. The misdemeanour is punishable by imprisonment for up to 12 months or a fine not exceeding $1,000, or both. "Endangering" is described as "taking, possessing, exporting or engaging in any commercial activity concerning any endangered species of plant or animal".

23.1.2 *Endangered Species Regulations*

Promulgated pursuant to KC Section 11.1601 and adopted in 1988, these Regulations classify four species of giant clam as endangered. A Giant Clam Sanctuary is also designated to provide sanctuary for the species and to promote the expansion of the Giant Clam population in Kosrae. The Sanctuary is located at the "depressed area in the reef flat on the seaward side of the Lelu causeway adjacent to the island Yenasr".

23.1.3 Kosrae Code Section 11.1602 *Psittacine birds*

This Section prohibits a person from bringing a psittacine bird (including parrots, parakeets, or love birds) into Kosrae without specific case-by-case approval by the Department of Health Services.

23.1.4 Kosrae Code Section 13.523 *Unauthorized Procuring of Marine Life*

This Section sets seasonal, place and size limits on the taking or killing of the following marine life:

* Hawksbill turtle, sea turtle, or sea turtle eggs;
* Black-lip mother-of-pearl;
* trochus, except as authorized under KC Section 11.1101.

The Section further prohibits catching, possessing or selling marine or fresh water aquatic life caught with explosives, electrical charges, poisons, chemicals, or other killing substances. Fish or other marine life may not be procured on Sundays.

23.1.5 Kosrae Code Section 11.1101 *Trochus*

This Section empowers the Director of the Department of Conservation and Development to preserve and develop trochus resources for "maximum economic and ecological benefit." The Director may set forth time, size, place and method limitations on trochus harvesting by a regulatory permitting system. Such a system has not yet been enacted.

23.2 Key Issues

No current legislation exists which protects marine and terrestrial areas by contemplating the establishment of nature parks or preserves. Specific instruments protecting specific species are enacted, but they are scattered and incomplete. The Division of Land Management within the Department of Conservation and Development has set the development of conservation and

wildlife sanctuaries as a future priority. One candidate area could be the large interior area formerly owned by the Japanese Administrative Government. Primarily mountainous and not farmable, the designation of this land as a nature preserve or protected watershed forest would provide excellent species and natural resources protection.

23.3 Recommendations

43. Consolidate and expand species protection legislation; increase penalties; include fruit bat protections; create related habitat protection.

44. Draft legislation relating to the protection of marine and terrestrial areas, perhaps as State parks or preserves, in consultation with affected State Department, Divisions, Boards and Commissions.

CHAPTER TWENTY FOUR

TOURISM - KOSRAE

24.1 Existing Legislation

There is no existing legislation for tourism at the State level.

24.2 Key Issues

The Division of Tourism within the Department of Conservation and Development is the administrative agency charged with management of tourism in Kosrae. Tourism is a new industry in Kosrae, with enhanced prospects following the upgrading of the State's airport. The number of total visitors to Kosrae in 1987 (after jet service was initiated) was 1,870 (Draft 2ndNatDevPlan, Ch. 10; page 8). Although Kosrae is host to many stunning natural and cultural attractions, tourism at present is a low State Government priority. Community concerns include recognition of tourism's potential for infringing on customary and traditional lifestyles as well as concern regarding large-scale tourist facilities' potential for degradation of the surrounding environment.

There is, however, great potential for small-scale village tourism and eco-tourism. Requiring little infrastructure, these low-impact ventures rely on hardy travellers who enjoy pristine, natural surroundings. Kosrae also is host to a number of basalt ruins similar to the better-known structures at Nan Madol in Pohnpei State. Well-enforced, comprehensive environmental protections create additional potential for small-scale and eco-tourism development.

24.3 Recommendations

45. Establish a Tourism Review Board that includes environmental protection advisors.

46. To better protect the environment, focus tourism efforts on small-scale village tourism and eco-tourism.

47. Include legal environmental protection requirements in all handouts and pamphlets to visitors.

CHAPTER TWENTY FIVE

CULTURAL HERITAGE - KOSRAE

25.1 General

Environmental concerns are broadly defined in this Review to encompass cultural heritage protection, as well as environmental health and natural resources concerns. This cross-disciplinary approach is appropriate in the developing Pacific, as the preservation of cultural traditions often leads to a renewed recognition of and dedication to early environmental management skills. Further, the environment itself is often an actual cultural resource. This is especially true in cultures closely linked by subsistence to the land, air, and sea. Kosraean cultural identity remains strong, although many aspects of traditional knowledge and traditional skills are slowly eroding with the introduction of western material and behavioural substitutes.

There is very little cultural preservation legislation in current force in Kosrae. The administrative body charged with the preservation of cultural heritage in Kosrae is the Division of History and Culture within the Department of Conservation and Development. This Division liaises with the National Government's Historic Preservation Office (HPO), and conducts Kosrae State's historic preservation programs. Current plans include preservation and documentation of significant cultural and historic sites, monuments, and oral traditions.

25.2 National Historic Preservation Office

The National HPO provides assistance to the State of Kosrae and channels United States Park Service Funds to Kosrae State as well. The State of Kosrae in response, may conduct fieldwork for the National HPO. In September, 1992, the National HPO plans to hire a staff archeologist, who shall further assist Kosrae in the identification and preservation of State historic sites.

As noted in paragraph 12.4, Chapter 14, above one exciting program administered by the National HPO with implications for Kosrae State is the "Micronesian Resource Study." In operation in FSM, the Republic of the Marshall Islands, and Palau, the study is funded by a United States private, non-profit agency called the "Micronesian Endowment for Historic Preservation." Phase I of the study establishes a computer data base program which catalogues sites according to archaeology, ethnography, ethnobotany, and ethnomusicology. In Kosrae State, 68 historic and cultural sites are now recorded. Each site listing gives a description and specification of the site, states relevant vegetation and soil types, and offers information about the depth and archeological layers of each locale. It is hoped that eventually Kosrae State will operate its own branch system, and offer quarterly updates to the National system.

25.3 Legislation

25.3.1 Existing Legislation

Kosrae Code Section 11.1401 *Impact review* and Section 11.1402 *Regulation*, within the Chapter entitled "Antiquities", require impact reviews and regulations protecting antiquities and traditional culture.

Section 11.1401 states that before the State Government may undertake, assist, participate in, or license action that might affect the land or waters of the State, the Division of History and Culture must consider the action's impact on antiquities and traditional culture. The Division must then report its findings to the Governor, Legislature, and involved State agencies.

Section 11.1402 instructs the Director of the Department of Conservation and Development to state the "classes of structures, artifacts, or other objects which constitute State antiquities" by regulation. Regulations shall further provide for authorization of antiquities use for "scholarly research, museum display or educational purposes."

25.4 Recommendations

48. Draft a State Act and Regulations for the protection, classification, and disposition of prehistoric and historic land and marine cultural resources; define "cultural resources" broadly, including oral traditions and non-tangible resources; establish research and scholarship guidelines; coordinate efforts with the National HPO and other interested State agencies.

49. Establish a trust or other legal entity on behalf of the landowning families associated with the series of basalt ruins and structures on Lela; negotiate a long-term lease arrangement with the trust or other entity for the rehabilitation and preservation of the structures.

PART 4

STATE OF POHNPEI

CHAPTER TWENTY SIX

CONSTITUTIONAL AND ADMINISTRATIVE STRUCTURE

26.1 The Constitution Of Pohnpei

26.1.1 General Overview

The Constitution of Pohnpei was signed on March 5, 1984 by the Delegates of the *State of Pohnpei Constitutional Convention*, and took effect on November 8, 1984. Required under Article VII of the National Constitution, this State Constitution is a sweeping statement of Pohnpei's sovereign right of self-determination. In the Preamble, the people of Pohnpei pledge to protect and maintain the heritage and traditions of each of the islands of Pohnpei, and to live and work together in a peaceful union of their individual cultural pasts.

Territorial and jurisdictional boundaries are set out in Article 1. The territory of Pohnpei is declared to comprise all islands and reefs of Pohnpei, extending outward to marine areas two hundred nautical miles from appropriate land baselines, and includes any other territory and waters belonging to any island of Pohnpei by historical right, custom, or legal title. Jurisdiction extends to all marine waters connecting the islands, to all claimed territory, and the seabed, subsoil, insular and continental shelves, and airspace over lands and waters.

Article 2 declares the Constitution to be the supreme law of Pohnpei. Articles 3 and 4 set out citizenship and the fundamental civil rights of the people of Pohnpei. Constitutional land provisions are discussed in Systems of Land Tenure - Pohnpei, Chapter 27, below.

26.1.2 Traditional Aspects of the Constitution

Although the Constitution is primarily a document embodying Western legal principles, the recognition of traditional ways and values is also incorporated. Article 5 is titled "Tradition"; Section 1 of that Article states: "This Constitution upholds, respects, and protects the customs and traditions of the traditional kingdoms in Pohnpei." The Article further requires the Government of Pohnpei to protect the customs and traditions of Pohnpei. In anticipation of possible conflict between this and other provisions, Section 2 of Article 5 allows statutes to be enacted to uphold custom. In the event the statute is challenged as violative of other Constitutional rights, it shall be upheld upon the Pohnpei Supreme Court's determination that the statute has reasonably protected an existing, regularly practiced custom or tradition.

Further deference to customary practices is embodied in Article 5, Section 3, in which the framers protect both the responsibility and authority of parents over their children, and acknowledges the duties and rights of children "in regard to respect and good family relations as needed."

The Pohnpei language is kept as one of the two official languages of Pohnpei (the other being English) at Article 13, Section 1. A further declaration of the importance of tradition in peoples' lives is set forth at Article 7, Section 5, in which the Government of Pohnpei is required to establish comprehensive plans for the identification, preservation and administration of places, artifacts, and information of historical and cultural importance.

26.1.3 Three Branches of Government

The Legislative, Executive, and Judicial branches of government are set out at Articles 8, 9 and 10, respectively. Established under democratic principles, the Legislature and Governor are

elected every four years by the qualified voters of Pohnpei, voting under a system of universal suffrage and free elections by secret ballot (Pohnpei Constitution, Article 6). Judicial powers are vested in the Pohnpei Supreme Court, which consists of a Chief Justice and not more than four associate justices, who are nominated by the Governor with the approval of a majority of the Legislature (Pohnpei Constitution, Article 10, Section 3(1)).

26.1.4 Environmental Provisions

The Pohnpei Constitution contains a number of explicit environmental statements. Article 7, Section 1 states "The Government of Pohnpei shall establish and faithfully execute comprehensive plans for the conservation of natural resources and the protection of the environment."

Under the terms of this Review, and under the broad definition of "environment", protection of culture and heritage is protection of the surrounding environment. The peoples of Micronesia are enveloped in a tradition that respects, even reveres, the surrounding earth, air, and water. Customary practices are frequently harmonious with principles of environmental protection and sustainable development. A further environmental provision, therefore, as mentioned above, is contained in Article 7. Section 5 of that Article requires the State Government to execute plans to save cultural resources for the benefit of the public.

Finally, Article 13, Section 2 provides for strict control of hazardous materials and harmful substances. Unless a majority of the people of Pohnpei vote by referendum to give permission, the introduction, storage, use, testing, or disposal of certain hazardous materials are prohibited within any part of Pohnpei State. The hazardous materials listed include "(n)uclear, chemical, gas, and biological weapons, nuclear power plants, and waste materials therefrom, including high-level and low-level radioactive waste" (Pohnpei Constitution, Article 13, Section 2(1)). Harmful substances not listed above may be limited by statute so that their introduction, storage, use, and disposal may only apply to activities "necessary for the enhancement of public health, public safety, and economic development" (Pohnpei Constitution, Article 13, Section 2(2)).

26.1.5 Local Governments

Article 14 establishes 11 local governments; Kapingamarangi, Kitti, Kolonia Town, Madolenihmw, Mwokil, Net, Ngetik, Nukuoro, Pingelap, Sokehs, and Uh. Each government may establish its own constitution, not inconsistent with the State Constitution, and may provide a functional role for traditional leaders. Many of these municipalities have differing languages, traditions and physical environments. Just as the four States of FSM act autonomously in most matters from the National Government, so too do the local governments operate independently from State Government in many matters, especially in matters relating to customary practices.

26.2 Pohnpei State Administrative Structure

Article 9, Section 10 of the Pohnpei Constitution provides that the Governor, with the approval of the Legislature, shall appoint the chief officers of all executive departments and agencies, members of all policy-making boards, and such other executive officers as may be provided by law. Chief officers of executive departments and agencies shall serve at the pleasure of the Governor. Article 9, Section 11 allows the executive branch to be reorganized by statute or by executive reorganization plan.
A reorganization of State offices and duties is presently underway in the State of Pohnpei, spearheaded by the current Governor, Johnny P. David, in office since January 1992. Planned Executive Branch Departments, Offices, and Authorities are listed as follows:

26.2.1 Departments and Divisions

Seven Departments are planned. Although environmental issues are inherently cross-disciplinary, four departments have only tangential relations to the preservation of the environment.

* The Treasury Department will include the Divisions of Public Finance, Revenue & Taxation, and Procurement & Property Management.

* The Department of Education will be comprised of the Divisions of Elementary Education, Secondary Education, Educational Services & Development, and Libraries & Archives.

* The Justice Department will include Divisions of Legal Affairs, Public Safety, Corrections & Rehabilitation, and Fire.

* The Public Works Department will consist of Divisions of Construction Management, Operations & Maintenance, Public Utilities, and Sea & Air Transportation.

Three planned Departments cover many aspects of environmental management and resource conservation.

* The Department of Land will include Survey & Mapping, Management & Administration, Historic Preservation, and Parks & Recreation Divisions.

* The Department of Health Services will include Divisions of Medical Services, Dental Services, Public Health, and Administration & Health Development. Governor David plans to request that environmental work being done within the Division of Public Health be further recognized by creating a new Division of Environmental Protection.

* The Department of Conservation & Resource Surveillance will include Divisions of Agriculture, Marine Resources, Forestry, Economic Planning, and Energy.

26.2.2 Executive Branch Offices

Six Offices, reporting to the Office of the Governor, shall be established. These Offices are:

* Budget & Planning;

* Public Affairs;

* Federal & Foreign Relations;

* Youth & Social Affairs;

* Personnel; and

* Island Affairs.

26.2.3 Authorities, Commissions & Agencies

Seven bodies shall be chaired by Governor appointees and report directly to the Governor:

* Economic Development Authority;

* Transportation Authority;

* Tourist Commission;

* Price Control Commission;

* Price Control Commission;
* Foreign Investment Board;
* Board of Presidential Properties & Utilities; and
* Land Planning Commission.

This planned administrative structure separates the Pohnpei Planning Office, which frequently promotes large development projects, from the Division of Environmental Protection within the Department of Health Services. The Division of Environmental Protection, formerly the Sanitation Section of the Public Health Division, primarily addresses environmental health concerns such as water quality and solid and liquid wastes. Natural resource conservation protection efforts fall to the Department of Conservation and Resource Surveillance; the Division of Historic Preservation is located within the Department of Lands; and the Tourist Commission is a separate entity reporting directly to the Governor. There is presently no body responsible for all aspects of environmental protection, and no oversight council or commission which might act as a conduit or clearing-house for the passage of environmental information between State administrative entities.

CHAPTER TWENTY SEVEN

SYSTEMS OF LAND TENURE - POHNPEI

27.1 Traditional Systems

The importance of custom in the life of the people of Pohnpei State cannot be overemphasized. Traditional lineage placement colours all social and cultural arrangements; socio-economic status is often closely linked to a person's standing in traditional land inheritance patterns. The deference to custom is especially clear in regard to the subject of land rights and inheritances, a person's most valuable asset and an area of abiding cultural significance. Indeed, in an island society, often harbouring scant land-based resources, a person's land rights and privileges have always been and continue to be closely guarded and hotly contested. No analysis of current constitutional and statutory responses to the overriding issue of land tenure can be complete without a brief explanation of customary practices.

The Island of Pohnpei is a high volcanic island with an area of about 129 square miles. Traditionally, the island was divided into five states, or tribes (wehi): Uh, Madolenihmw, Kiti, Sokehs, and Net (Riesenberg; page 8). Each district was originally politically independent, with its own customs and dialects; present-day local municipalities reflect these original traditional units.

Each district, or tribe, was headed by two lines of chiefs, the "Nanmwarki" and "Naniken", who were the first in a series of ranked titleholders. Although the title system passed matrilineally, there were aspects of patrilineal land inheritance, which increased with foreign contact. For example, the "Nanmwarki" and "Naniken" were often in an alternating father-son relationship, with each "Nanmwarki" the son of the present or previous "Naniken" and the father of the next "Naniken" (Fischer, 1958; page 84).

The system of governance was feudal, with three levels:

* "Nanmwarki" and "Naniken" heading the five districts;
* 15 to 37 sections in each district, headed by section chiefs; and
* the farmsteads in each section, run by one biological or extended family (Fischer, 1958; page 85).

In theory, all land formally belonged to the "Nanmwarki" and "Naniken", who received tribute regularly and whose rule was absolute (Riesenberg; page 8).

Kapingamarangi and Nukuoro, two Polynesian outlier atolls within Pohnpei State, embrace different land tenure systems. All land, except sacred and community land, is individually owned, by both men and women. Kapingamarangi and Nukuoro land may be inherited or received as a gift from any family member. The landowner controls use and inheritance of the land, although, with permission, family members and friends may take the land's produce (Emory; pages 119-132).

27.2 Transition

In the last one hundred years, Pohnpei has been controlled by four colonial powers: Spain, Germany, Japan, and the United States. Despite very different outlooks on land tenure between the indigenous population and the four powers, Pohnpeians seem to have accepted most of the changes imposed on their traditional systems by the outsiders in authority (Castro; page 188). This has caused some confusion. The Germans reduced the powers of the highest chiefs, forbade women from holding title, began redistributing land, and introduced a land code; the Japanese ignored the German code and only intermittently followed German inheritance patterns; and the U.S. changed inheritance patterns once again, permitting title to pass by

testament, permitting women to hold title, and further weakening the authority the "Nanmwarki" (Castro; page 191).

27.3 Constitutional Provisions

The present system of land tenure in the free, self-governing State of Pohnpei is controlled by Article 12 of the Constitution of Pohnpei. Article 12 states that no land may be leased for more than 25 years, unless the land is leased from the Government or the Legislature provides otherwise (Sections 1 and 4). Further, one may only hold a permanent interest in real property if one is a citizen (pwilidak) of Pohnpei (Section 2); indefinite term land-use agreements are prohibited (Section 3); land may not be sold except as authorized by statute (Section 5); and the Government may only take interests in land for public purposes after consultation with the local government, negotiation with the landowners, and an offer to pay either just compensation or exchange the land for land of comparable value (Section 6).

27.4 Statutory Enactments

27.4.1 *Public Trust Lands Distribution Act of 1980*

This Act provides for the distribution of public trust land to qualified beneficiaries by the Public Lands Authority. An Act drafted to effect a fair and peaceful transition from land practices carried out by the former Japanese and United States Administrators, the Act transfers legal title on certain lands to state residents who have developed the land, or to their successors.

The purpose of the Act is to distribute lands held in trust for the people of Pohnpei State to beneficiaries of the trust who have developed the lands for agricultural purposes "pursuant to leasehold or other use agreements issued for that purpose by the Government of Japan or the Trust Territory Government" (State Law (SL) No. 2L-43-80, Section 2). The Act was amended in 1987 to extend the time for application to the Public Lands Authority to December 1, 1987 (S.L. No. 1L-117-87).

27.4.2 *Public Lands Act 1987*

This Act establishes a division within the Department of Lands called the Division of Management and Administration of Public Lands, and transfers the Pohnpei Public Lands Trust to this Division. Formerly administered by the Pohnpei Public Lands Authority (abolished by this Act), the Pohnpei Public Lands Trust Board of Trustees is continued and recognized as trustee to all rights, title and interest to public lands in Pohnpei for the benefit of the people of Pohnpei (S.L. No. 1L-155-87, Section 5). The Board is now comprised of nine Trustees appointed by the Governor with the advice and consent of the Legislature.

The Board is deemed the successor the Public Lands Authority relative to the use and disposition of Trust properties, but all rights, interests and liabilities of the former Authority, not a part of the Trust, are assumed by the Executive Branch of the Pohnpei Government (Section 19(3) and (5)).

27.4.3 *Deed of Trust Act of 1987*

This Act sets out a system of land transactions using a legal conveyance called a "Deed of Trust." A "Deed of Trust" is defined as "a conveyance of the freehold or leasehold interest in trust to secure an indebtedness or charge against real property conveyed, with or without a power of sale, vested in the trustee to sell according to the terms as set forth the in instrument" (S.L. No. 1L-157-87, Section 4). The Act is intended to provide for a satisfactory method of securing the financing of improvements to real property by the U.S., acting through the Farmers Home Administration, the Department of Housing and Urban Development, and the Veteran's Administration.

CHAPTER TWENTY EIGHT

POLLUTION CONTROL - POHNPEI

28.1 Existing Legislation

28.1.1 *Trust Territory Environmental Quality Protection Act* (TT EQPA)

The State of Pohnpei has saved this former Trust Territory environmental enactment, along with its subsidiary Regulations. State transition language states that if a Trust Territory enactment does not conflict with State law, the Trust Territory law is in force until repealed or revoked. Although Section 1 of Article XV of the National Constitution only provides for continuation of statutes of the Trust Territory by the National Government, the National Congress enacted Public Law No. 2-48, which states in Section 8: "The authority of the States of the Federated States of Micronesia with regard to those provisions of the Trust Territory Code within the jurisdiction of the State is unaffected and hereby reaffirmed."

In *State of Pohnpei v. John and Leopold* (Pohnpei Criminal Cases Nos. 453-86 and 499-86; Trial Division of the Pohnpei Supreme Court; January 27, 1987; Pohnpei Supreme Court Reports at page 290), Associate Justice Judah Johnny relies on Section 8 of P.L. No. 2-48 to hold "that Trust Territory statutes applicable to the States became part of States laws, whether or not republished in the F.S.M. Code." Justice Johnny further states that the intent of transition provisions of the National Constitution must be read to allow States to adopt Trust Territory statutes.

The State of Pohnpei continues to enforce the *Trust Territory Environmental Quality Protection Act* and its underlying Regulations. The TT EQPA, originally passed in 1972, was amended five times between 1972 and 1978 to create a strong legislative statement on behalf of the environment. Creating a Board with a mandate to enact controls on a broad range of environmental concerns, the Act sets forth an all-inclusive public policy at Section 502:

> The people, plants and animals of the Trust Territory of the Pacific Islands are dependent upon the air, land and water resources of the islands for public and private drinking water systems, for agricultural, industrial and recreational uses, and as a basis for tourism. Therefore, it is declared to be the public policy of the Trust Territory of the Pacific Islands, and the purpose of this Subchapter, to achieve, maintain and restore such levels of air, land and water quality as will protect human health, welfare and safety and to the greatest degree practicable prevent injury to plant and animal life and property, and as will foster the comfort and convenience of its people and their enjoyment of the environment, health, life and property, and as will promote the economic and social development of the Trust Territory of the Pacific Islands and facilitate enjoyment of its attractions.

Seven Regulations setting forth environmental health protections were enacted during Trust Territory times. Six of those Regulations remain as law in the State of Pohnpei: *Trust Territory Air Pollution Control Standards & Regulations*, *Trust Territory Pesticides Regulations*, *Public Water Supply Systems Regulations*, *Marine and Fresh Water Quality Standard Regulations*, *Trust Territory Solid Waste Regulations*, and *Toilet Facilities and Sewage Disposal Regulations*. A seventh *Trust Territory Regulation*, concerning Earthmoving controls, has been superseded by a *State of Pohnpei Earthmoving Regulation*. These Regulations will be briefly outlined in this and the next two Subsections. As the FSM National Government also saved the six Trust Territory Regulations mentioned above, a fuller discussion of those Regulations is set out in Pollution Control - National, Chapter 4, paragraphs 4.1.1-4.1.3, above.

Disagreement among the State legal community regarding the ability of the State to save a Trust Territory enactment without a specific legislative instrument (or even with one), and the urge to draft environmental protection legislation particularly appropriate to the State of Pohnpei, have

both led to the 1991 submission of a Bill to create a Pohnpei Environmental Protection Agency, Board and Advisory Council.

28.1.2 *Pohnpei Environmental Protection Act of 1991* (not passed)

The proposed *Pohnpei Environmental Protection Act* (PEPA) was drafted and submitted to the Second Pohnpei Legislature at its Seventh Regular Session in 1991. The Bill, following the trend of many recent environmental proclamations, sets out a sweeping public policy statement in defense of a broadly-defined natural environment:

> The Government of Pohnpei, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth and redistribution, cultural change, resource exploitation, and new expanding technological advances, and recognizing the critical importance of restoring and maintaining environmental quality for the overall welfare and development of man, declares that it is the continuing policy of the Pohnpei Government...to create and maintain conditions under which man and nature can exist in productive harmony, and fulfil the social, economic and other requirements of the present and future generations of Pohnpeians (PEPA, Section 2(1)).

In concert with present world environmental thought, the last two clauses above address the goal of sustainable development. Recognizing the need to consider traditional cultural relations (PEPA, Section 2(2)) and to work in close cooperation the National Government, each municipality of Pohnpei, and the public and private sector (PEPA, Section 2(3)), the State of Pohnpei pledges to act as trustee of the environment for the current and future generations of Pohnpeians. "Man" is used throughout the document to denote both male and female human beings.

The Act creates an independent governmental agency, the Pohnpei Environmental Protection Agency, at Section 4. The Agency's Board of Directors is composed of seven members, FSM citizens and residents of Pohnpei, appointed by the Governor for staggered terms of four years (PEPA, Section 5). The Agency's management is headed by an executive officer designated by the Board.

Powers of the Agency include the protection of the environment and the abatement, control, and prohibitions of pollution or contamination of air, land and water through the establishment of regulatory and permitting systems (PEPA, Section 9). Allowable regulations include but are not limited to the following areas: earthmoving, environmental impact assessments, water supply systems, pesticides, sewage, solid waste, marine and fresh water quality, air pollution, groundwater, and hearing procedures for the Board.

In the administration of a permitting system controlling discharges of pollutants into the air, land or water, the Agency is required to submit copies of permit applications and environmental impact assessments to a number of State Government agencies for comment (PEPA, Section 9(2)(a)). Environmental impact assessments are required for public or private projects "that may significantly affect the quality of the environment to include the land, water and air" (PEPA, Section 9(2((b)). The inclusion of private projects is an important new step, as the National Government limits environmental impact assessments to public projects only.

Enforcement provisions, at Section 11, allow a variety of enforcement actions by the Agency, including issuance of a cease and desist order, issuance of an abatement order, imposition of a civil penalty, pursuit of a civil action for an injunction or monetary damages, and setting a public hearing on the violation (PEPA, Section 11(1)). Civil penalties are low ($100 per day for each day of violation), but the amounts go into an "Environmental Quality Fund" until $50,000 is reached, after which the penalties are deposited into the Pohnpei Treasury. This provision is quite important, allowing the Agency control of penalty funds for emergency response to environmental accidents and for program support.

28.1.3 TT EQPA Subsidiary Regulations - Air Pollution

The *Trust Territory Air Pollution Control Standards & Regulations* (Trust Territory Code (TTC) Title 63, Chapter 13, Subchapter VIII) were enacted on June 25, 1980. The purpose of these Regulations is to control the quality of air by setting clean air quality standards and by preventing or controlling the emission of air contaminants at their source. The Regulations specify monitoring, recordkeeping and reporting requirements for operators of air contaminant sources.

28.1.4 *TT EQPA Subsidiary Regulation - Pesticides*

Trust Territory Pesticides Regulations (TTC Title 63, Chapter 13, Subchapter IV) are in current use in Pohnpei for the control of pesticides. The Pesticides Regulations, in effect since August 1, 1980, establish a system of control over the importation, distribution, sale, and use of pesticides by persons within Pohnpei.

28.2 Key Issues

28.2.1 Allocation of Powers between the National Government and Pohnpei State

Pohnpei State government officers believe that Pohnpei State has the clear authority to regulate its environment. Because the word "environment" does not appear in the allocation of powers sections of the National Constitution, the State may argue that all environmental authority rests with the state. (Powers not expressly delegated to the National Government are considered state powers, pursuant to Article VIII, Section 2 of the National Constitution.) Even if the National Government's exclusive power to promote education and health by setting minimum standards (National Constitution, Article IX) is interpreted to include environmental regulation, the State may argue that it is fully free to set any standards higher that those set by the National Government. This issue has not yet been litigated.

28.2.2 Passage of a *Pohnpei Environmental Protection Act*

Bill No. 569-91, the *Pohnpei Environmental Protection Act*, was passed by the Legislature in 1991 by a large margin. The Governor at that time, the Honourable Resio S. Moses, did not approve the measure, however, and a subsequent attempt at a legislative override narrowly failed. Concerns raised at the time included questions from the State Attorney's Office regarding the appointment procedure for the Agency's executive officer and the Bill's conflict with Executive Branch reorganization efforts. Governor Moses assured the Legislature, by letter dated July 8, 1991, that he agreed in concept with the Bill, but felt that the less expensive route of elevating environmental functions currently within the Department of Health Services to a new Division within the Department was more fiscally sound. The new Governor, the Honourable Johnny P. David, in office since January, 1992, although continuing reorganization efforts, has declared his support for the Bill. Resubmission of the Bill to the State Legislature is currently planned.

The development of an independent Agency is a very strong statement of the State's desire to protect its environment. An autonomous entity may usually move more quickly in response to emergency situations, and environmental enforcement efforts are also often enhanced. Essential liaison and outreach functions are specifically delineated. This consultant hopes that concerns raised during the first political viewing of the document may be addressed, and that the bill finds its place in the statutory enactments of the State of Pohnpei.

Of the desired regulations specifically cited in PEPA, only environmental impact assessment, groundwater, and hearing procedures are areas not covered previously by Trust Territory regulatory instruments. The attempt to update old Trust Territory legislation, and add three new essential areas of environmental oversight, is laudable. Although PEPA's public policy statement contains mention of the whole of the natural environment, and seeks to prevent injury to plant and animal life, this Act's regulatory structure follows the more narrow path of pollution abatement and environmental health protection. This split between biodiversity management and health protections was first established by FSM's and Pohnpei's relegation of environmental

control to their Public Health Divisions. An independent Agency may be just the body to incorporate both environmental health and natural resource protections within one administrative structure. The resulting simplicity and coordination of effort may be worth any initial required administrative restructuring.

28.2.3 *Trust Territory Air Pollution and Pesticides Regulations*

Currently, the National Government and the State of Pohnpei operate two regulatory and permitting systems with the same legislative instruments. Perhaps representatives from the State may wish to consider a Memorandum of Understanding, or similar document, with the National Government Department of Human Resources to set forth a single permitting system, thereby avoiding duplication of effort and subsequent overconsumption of scant monetary resources. Such a cooperative effort is certainly anticipated by the *Federated States of Micronesia Environmental Protection Act*, Section 12, which authorizes delegation by the National to State Government by way of "written cooperative agreement."

28.3 Recommendations

50. Modify and reintroduce a bill for a *Pohnpei Environmental Protection Act*

51. Issue a Joint Attorney General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in all areas of environmental oversight.

52. Enter into a "written cooperative agreement" with the National Government Department of Human Resources to avoid duplication of regulatory and permitting efforts. This agreement should include provisions on pollution, water quality, waste management, zoning, earthmoving and EIAs.

53. Fund a position for a State environmental legal officer, either within the Department of Health Services or within the newly-created Pohnpei Environmental Protection Authority, with authority to draft regulatory instruments and enforce them. This office could draft legislation covering all aspects of environmental health and natural resource protection.

54. If Pohnpei State is granted or delegated authority to enact and enforce pollution regulations, re-draft *Trust Territory Air Pollution and Pesticides Regulations* to update them and make them Pohnpei-specific.

NOTE: See Pollution Control - National, Chapter 4, paragraphs 4.1.1-4.1.3, above, for additional and more detailed analysis, issue identification, and recommendations regarding the *Trust Territory Air Pollution* and *Pesticides Regulations*.

CHAPTER TWENTY NINE

WATER QUALITY - POHNPEI

29.1 Existing Legislation

29.1.1 TT EQPA Subsidiary Regulation - Public Water Supply Systems

The *Trust Territory Public Water Supply Systems Regulations* in current use in Pohnpei are the same instruments as the current FSM instruments, and were promulgated on February 1, 1983. The purpose of the Regulations, technical provisions and specifications is to establish certain minimum standards and requirements to insure that water supply systems are protected against contamination and pollution and do not constitute a health hazard.

29.2.2 TT EQPA Subsidiary Regulation - Marine and Fresh Water Quality

The *Trust Territory Marine and Fresh Water Quality Standard Regulations*, also in use at the national level, were promulgated March 31, 1986. The purpose of these Regulations is to identify the uses for which the various waters of Pohnpei shall be maintained and protected, to specify the water quality standards required to maintain the designated uses, and to prescribe requirements necessary for implementing, achieving and maintaining the specified water quality.

29.3 Key Issues

Water quality monitoring in Pohnpei is currently performed by the Sanitation Section of the Division of Public Health within the State Department of Health Services. Public drinking water monitoring is limited to testing for chlorine, bacteria and turbidity. Overall monitoring of the water delivery system is attempted, but insufficient funds and inadequate staffing levels prevent comprehensive oversight.

In a move also contemplated in many other jurisdictions of the developing Pacific, Pohnpei State is considering transferring authority over public water and sewerage supply to a quasi-governmental public utility corporation. If responsibility for the public water supply is given to a private corporation, the Sanitation Section may wish to charge that corporation for its monitoring services. Current *Public Water Supply Regulations* require the delivery entity to test its own product; if the water delivery agent is private, a government charge for testing services is appropriate.

Marine water quality testing is also not fully comprehensive. Selected coastal areas are monitored for contaminants approximately four times yearly. Additional monitoring efforts may control environmental degradation before pollution becomes an impediment to local subsistence and foreign fishing ventures. Further technical and monetary assistance is required to accomplish this goal.

29.4 Recommendations

55. Fund technical and laboratory assistance programs to enable further testing of public, coastal and offshore marine waters.

56. If Pohnpei State is granted or delegated authority to enact and enforce pollution regulations, re-draft *Trust Territory Public Water Supply and Marine and Fresh Water Quality Standards Regulations* to update them and make them Pohnpei-specific.

NOTE: See Water Quality - National, Chapter 5, paragraphs 5.1.1-5.1.3 for additional and more detailed analysis, issue identification, and recommendations regarding the *Trust Territory Public Water Supply and Marine and Fresh Water Quality Standards Regulations*.

CHAPTER THIRTY

WASTE MANAGEMENT - POHNPEI

30.1 Existing Legislation

30.1.1 TT EQPA Subsidiary Regulation - Solid Waste

Trust Territory Solid Waste Regulations, also in use by the National Government, were promulgated on April 12, 1979. The purpose of the *Solid Waste Regulations* is to establish minimum standards governing the design, construction, installation, operation, and maintenance of solid waste storage, collection and disposal systems.

30.1.2 TT EQPA Subsidiary Regulation - Toilet Facilities and Sewage Disposal

Trust Territory Toilet Facilities and Sewage Disposal Regulations, also in use by the National Government, were promulgated on January 31, 1977. The purpose of the Regulations is to establish minimum standards for toilet facilities and sewage disposal to reduce environmental pollution, health hazards, and public nuisance from such facilities. It is generally required that all public buildings or any buildings which may be used for dwellings shall have toilet and sewage facilities in accordance with these Regulations.

30.2 Key Issues

Increasing population pressures and increasingly available non-biodegradable materials have exacerbated Pohnpei's solid waste disposal problems. Solid waste issues differ between localities; municipal governments must play a primary role in the development of waste management strategies. Private and communal land ownership systems require active landholder participation in any government-initiated solid waste reduction proposals. Sewage facilities remain inadequate in many areas of Pohnpei, despite recent rehabilitation of sewerage systems in some localities. Maintenance is a problem, as is compliance with current Regulations.

30.3 Recommendations

57. Develop a State-specific project for rural sanitation, wastewater treatment and solid waste disposal.

58. If Pohnpei State is granted or delegated authority to enact and enforce pollution regulations, re-draft Trust Territory *Solid Waste and Toilet Facilities and Sewage Disposal Regulations* to update them and make them Pohnpei-specific.

NOTE: See Waste Management - National, Chapter 6, paragraphs 6.1.1-6.1.3. , for additional and more detailed analysis, issue identification, and recommendations regarding the *Trust Territory Solid Waste* and *Toilet Facilities and Sewage Disposal Regulations*.

CHAPTER THIRTY ONE

ZONING, EARTHMOVING AND ENVIRONMENTAL IMPACT ASSESSMENTS - POHNPEI

31.1 Existing Legislation

31.1.1 *TT EQPA Subsidiary Regulations - Earthmoving*

These Regulations, sponsored by the Director of the Department of Health Services and signed into law by Governor Moses on September 13, 1990, regulate earthmoving activities in the State of Pohnpei. In keeping with the Trust Territory provisions from which they were redrafted, "earthmoving" is broadly defined as:

> any construction or other activity which disturbs or alters the surface of the land, a coral reef or bottom of a lagoon, including, but not limited to, excavations, dredging, embankments, land reclamation in a lagoon, land development, subdivision development, mineral extraction, ocean disposal, and the moving, depositing or storing of soil, rock, coral or earth (*Earthmoving Regulations*, Part 1.3.g)

The Regulations require that all earthmoving activities within the State of Pohnpei be conducted so as to prevent accelerated erosion and accelerated sedimentation. People wishing to engage in earthmoving activities must set out erosion and sedimentation control measures in a plan, and must receive a State Permit before embarking on their planned activity.

31.1.2 *Transportation Zone Act of 1987*

This Act designates Dekehtik Island as a "Transportation Zone", for the purpose of promoting public health, safety and welfare. Permitted uses are limited to activities, facilities, and complimentary services relating to the promotion and development of sea and air transportation; a height limit of two stories is established.

31.1.3 State Law No. 2L-197-91

This Act authorizes the Pohnpei Public Lands Board of Trustees to designate the sites and limit the amounts of allowed removal of mined and dredged materials located on Public Trust Land in Ohwa, Metipw, Temwen and Lohd Pah, or on any other Public Trust Land.

31.2 Key Issues

31.2.1 *Earthmoving Regulations*

These Regulations are quite broad, and complete enforcement would accomplish a stunningly complete scrutiny of every effort to move earth. The Regulations are generally enforced, however, only to curb the most blatant unauthorized dredging and fill activities. Although the Regulations have been quite effective in the recent past, currently the National Government and the State of Pohnpei are operating two regulatory and permitting systems with the same legislative instruments. Perhaps representatives from the State may wish to consider a Memorandum of Understanding, or similar document, with the National Government Department of Human Resources to set forth a single earthmoving permitting system, thereby avoiding duplication of effort and subsequent overconsumption of scant monetary resources. Such a cooperative effort is certainly anticipated by the *Federated States of Micronesia Environmental Protection Act*, Section 12, which authorizes delegation by the National to State Government by way of "written cooperative agreement."

31.1.2 Environmental Impact Assessment

Pohnpei's draft *Environmental Protection Act* recognizes the urgent need for assessments of environmental impacts. The draft Act requires Environmental Impact assessment statements to be prepared before issuance of permits for any public or private project that may significantly affect environmental quality (see above discussion of the draft Act at Pollution Control, Chapter 28, paragraph 28.1.2.). The Act further requires that regulations set forth criteria for their development and for the payment for their preparation (many developing countries prefer to require initiators of proposed projects to fund their own impact assessments, prepared by mutually-agreed consultants). Whether drafted under the present TT EPQA or the new draft Act, Regulations should be considered in this vital area of environmental control.

Presently, *National Environmental Impact Assessment Regulations* apply in Pohnpei State whenever any Project Proponent receives funding from the National Government for a specific project with environmental impact. This includes FSM projects, FSM/State Projects, or State projects funded by the National Government (Straight; January 16, 1989 Memo). Again, a Memorandum of Understanding with the National Government in this area of proposed State permitting would be advisable.

31.3 Recommendations

59. Draft Pohnpei-specific Environmental Impact Assessment Regulations.

60. In conjunction with State and Municipal planning officials and other affected Department officials, State environmental officers should participate in the development of more comprehensive zoning standards, especially regarding the fragile and often over utilised coastal zone.

CHAPTER THIRTY TWO

FISHERIES - POHNPEI

32.1 Existing Legislation

32.1.1 *Conservation and Resource Enforcement Act*

This Act, effective December 2, 1982, establishes a Conservation and Resources Enforcement Program within the Department of Conservation and Resource Surveillance. An attempt to strengthen natural resources enforcement capabilities, this Act delegates enforcement authority to the Chief of the Division of Marine and Aquatic Resources and the Chief of the Division of Forestry of the State Department of Conservation and Resource Surveillance. Under the Act, these two Chiefs, called the State Fisheries Officer and State Forester, respectively, are granted the power to investigate offences, serve and execute warrants, and arrest violators of conservation laws and regulations over which the Department has authority. Such authority may be granted either by State law or by written agreement between the Director and the State Attorney, with the concurrence of the Governor (S.L. No.2L-158-82).

32.2.2 An Act Relating to Foreign Fishing In State Waters

Enacted on July 16, 1979, this Act governs foreign fishing in the waters of Pohnpei State until such time as a Pohnpei State Maritime Authority or other control mechanism is established. As the Constitution of the Federated States of Micronesia established State jurisdiction over interior State waters and waters extending out from land baselines to a distance of 12 miles, this Act controls activity within those waters by requiring permits for all foreign vessels wishing to fish within the State marine jurisdiction. "Foreign fishing" is defined to mean fishing by vessels not registered in the Trust Territory for fishing in State waters, not wholly owned or controlled by citizens, or of foreign registry chartered by citizens (D.L. No.4L-19-79).

32.2.3 An Act Prohibiting Harvesting and Use of Bait Fish

Enacted into law on November 27, 1971, this Act prohibits the harvesting and use of bait fish taken from Trust Territory waters within "Ponape District" by non-citizen owned or controlled business entities for use in commercial fishing operations.

32.3 Key Issues

32.3.1 Environmental Enforcement

The effort at direct enforcement of environmental violations by environmental officers in the field found in the *Conservation and Resource Enforcement Act* is laudable. Frequently, state law enforcement officers and prosecutors are so overwhelmed with the vast array of pressing investigative, arrest, and prosecution actions required by law that they cannot attend to every suspected environmental offence. Budgetary and staffing constraints further ensure that environmental prosecutions are given a relatively low priority. This Act only covers fisheries and forestry violations; appointment of a state legal officer with responsibility for all environmental matters may be an additional step toward effective enforcement.

32.3.2 Marine Resources Division

The Marine Resources Division within the Department of Conservation and Resource Surveillance currently issues permits and administers fisheries policy in Pohnpei State. The Legal Counsel in the Office of the Governor is currently revising all permitting forms and applications.

32.3.3 Coastal and Ocean Management

There is no comprehensive Fisheries Act in force in the State of Pohnpei. The Office of the State Legislative Counsel, however, has given priority to the drafting of a coastal and ocean management statute. Such an instrument could combine current site-by-site coastal earthmoving scrutiny undertaken by the Department of Health Services with marine management efforts.

32.4 Recommendations

61. Liaise more closely with National marine protection officers.

62. Fund additional positions for marine resources surveillance and environmental enforcement.

63. Draft a Coastal and Ocean Management Statute for the protection and management of renewable resources.

CHAPTER THIRTY THREE

AGRICULTURE - POHNPEI

33.1 Existing Legislation

The control of Pohnpei State agricultural policy rests within the Division of Agriculture in the Department of Conservation and Resource Surveillance. Coconut, pepper, and rice development programs rest on Trust Territory legislative instruments designed to subsidize these three crops. The legislation is cited as Public Law 55-66, 8/31/66 (Copra); P.L. 83-67, 5/3/67 (Pepper); and P.L. 121-68, 4/16/68 (Rice).

33.2 Key Issues

State Pesticides and Earthmoving Regulations, described at Section B. Environmental Health Protections, above, affect agricultural workers, but as the Regulations are overseen by State workers in a different Division, as well as a different Department, little pesticides control or regulation of accelerated erosion or sedimentation is conducted by the Agriculture Division. Here, development of agriculture is institutionally separated from environmental concerns. Integration of the two concerns leads to sustainable and environmentally-sound development.

33.3 Recommendation

64. Initiate liaison efforts between the Division of Agriculture and the Division of Environmental Protection to achieve goals of sustainable development. Liaison between National and State agricultural programs is also desirable.

NOTE: Watershed issues discussed in forestry Chapter 34, below also have a great impact on agricultural activities.

CHAPTER THIRTY FOUR

FORESTRY - POHNPEI

34.1 Existing Legislation

34.1.1 *Forest Management Act of 1979*

The intention of this Act is to provide for the orderly management of Pohnpei's forest resources by creating and maintaining an effective and comprehensive system of regulation of and assistance to the development of forest land. The Act enables the Governor to appoint a State Forester who serves as administrative officer of the Division of Forestry. It further enables the Legislature to set apart government lands as Forest Reserve lands in order to maximize the benefits to the public of timber, water, wildlife, and forage. Additionally, the Legislature is empowered to set aside Watershed Reserves on public land from which:

* water supplies are obtained for a city, town or community; or

* water infiltrates into artesian or groundwater aquifers from which water supplies are obtained for a city, town or community (D.L. 4L-203-79).

Just such a watershed protection measure was passed eight years later by the Pohnpei Legislature.

34.1.2 *Pohnpei Watershed Forest Reserve and Mangrove Protection Act of 1987*

This Act dedicates and vests the use and management rights in certain public trust lands to the State Government to protect watershed forests and conserve mangrove forests in Pohnpei. At Section 3(1), the Legislature states that many thousands of hectares of public trust land have highly erodible soils that should not be cleared of forest cover or used for farming because such uses would endanger the watersheds of Pohnpei. The ringing declarations of the value of environmental protection continue: at Section 3(2), the Legislature finds "unique and valuable plants and animals that require legal protection to assure their continued survival" in Pohnpeian forests; at Section 3(3), the Legislature states that mangrove forests benefit the people by providing the basis for healthy fisheries; and at Section 3(4) they state the "[t]he conservation, protection and wise management of Pohnpei's forests in perpetuity is of material benefit to all the people of Pohnpei" (S.L. No. 1L-128-87).

One excellent aspect of this strong legislative statement is found at Section 9(3). This Subsection states that public understanding and acceptance of the Act are important to the success of its objectives. It requires the Director of the Department of Conservation and Resource Surveillance to work with the College of Micronesia and the Pohnpei Department of Education in curriculum development and training for grade school and high school teachers, as well as in extension education for adults. Educational areas to be emphasized include conservation of soil, water, forests, mangroves, lagoons, watersheds, wildfire prevention, and the recognition, appreciation and protection of native species.

34.1.3 Draft subsidiary Regulations to the *Forest Management Act* and *Pohnpei Watershed Forest Reserve and Mangrove Protection Act*

This set of Rules and Regulations, now in its second draft form, has been devised to offer specific language to preserve, maintain and manage forest reserves, watershed forest reserves, and mangrove forests of the State of Pohnpei. The Regulations were drafted pursuant to both the *Forest Management Act* and the *Watershed Forest Reserve and Mangrove Protection Act*, and have undergone one round of very active public hearings.

34.2 Key Issues

34.2.1 Watershed Legislation

Both the *Forest Management Act of 1979* and the *Pohnpei Watershed Forest Reserve and Mangrove Protection Act of 1987* are very strong legislative statements. It is understandable that some members of the public and Legislature may be initially uneasy with State Government oversight and control of large areas of forest and mangrove. Indeed, public hearings revealed some negative comments regarding the scope of controls and restrictions envisioned in the newly-proposed Regulations. The second draft of the proposed Regulations address many of those concerns; the draft is being currently circulated to state forestry workers for comment before undergoing future public hearings. There is also the possibility that the *Mangrove Protection Act of 1987* may be amended to include language respecting customary and traditional practices on the affected lands.

34.2.2 Conservation education

The *Watershed Act* requires education regarding a number of areas of conservation and natural resource protection concern. This educational requisite is an all-too-infrequent statement in environmental legislation. Uniquely interdisciplinary, environmental protection often suffers in United States-influenced jurisdictions from narrow categorisation as a sanitation, or public health discipline. The field further suffers from a lack of public understanding of the profound consequences of environmental degradation. This lack of understanding is entirely natural in a developing State such as Pohnpei, whose overwhelming earthly beauty is practically untouched by significant environmental decay. Development, and its attendant environmental impacts, is inevitable. Only broad public education will effect a change from uncontrolled to sustainable development. The drafting and enforcement of environmental protection legislation, and education about that legislation, assists the process whereby an informed public wisely manages its resources.

34.3 Recommendations

65. Redraft and resubmit for public hearing *Forest Management Act* and *Pohnpei Watershed Forest Reserve and Mangrove Protection Act Subsidiary Regulations*.

66. It would be advisable to revise the *Forest Management Act* and *Pohnpei Watershed Forest Reserve and Mangrove Protection Act* to transfer nature park language and species protections to the appropriate authority, once the following matters are determined:

    * which environmental control powers belong to the National Government and which belong to the State Governments (by issuance of a National-State Joint Attorney-General Opinion);

    * whether State environmental efforts will be confined to the Department of Health Services or placed in an Environmental Protection Agency:

    * whether oversight of the Environmental Department or Agency will be broadened to include oversight of natural resource protections. If authority for parks, preserves, and conservation of living resources is retained within the Division of Forestry, it may be advisable to create a program specifically for the environmental protection of those species and reserve areas identified.

67. Fund environmental education officers and programs, with particular emphasis on developing programs for primary, secondary, and adult extension courses.

CHAPTER THIRTY FIVE

BIODIVERSITY CONSERVATION - POHNPEI

35.1 Existing Legislation

Regarding establishment of parks or nature preserves, one State Park has been established at the "Spanish Wall" in Kolonia, and another park is proposed for the top of Sokes Mountain. Both would be administered by the Parks Division of the Department of Land. There is presently no specific legislative regulatory instrument establishing state nature preserves, although it is a State priority to create such an instrument for public lands.

The Acts in the following paragraphs concern the conservation of living resources:

35.1.1 *Act Regarding Exportation of Certain Crabs and Lobsters*

This brief 1971 enactment makes it unlawful to export mangrove crabs, coconut crabs and lobsters, and sets penalties for violation at imprisonment for no more than two years or fines of not more than $1,000, or both (P.L. No. 2L-223-71). A 1977 Amendment to the Act permits exportation of mangrove crabs for a period of one year after the Act's effective date of May 6, 1977. Such export must be accompanied by a special permit from the Pohnpei Marine Resources Division (P.L. No. 4L-76-77).

35.1.2 *Act Concerning Fresh-Water Shrimp Harvesting*

This 1972 Act prohibits the harvesting and sale of fresh-water shrimp with explosives, chemicals, poisons, and other substances deleterious to aquatic life. The list of proscribed substances includes common bleaches and plant materials. Penalties are slight; violation of the Act warrants fines of not more than $100 or imprisonment for not more than six months, or both (D.L. No. 3L-40-72).

35.1.3 *Designation of State Bird*

This short Act designates the *Trichoglosus rubiginosus*, or Pohnpei Lorikeet, locally known as "Serehd", as the State Bird for the State of Pohnpei. The Act forbids the hunting or killing of any Pohnpei Lorikeet. Penalties include a fine of not more than $500 or imprisonment for not more than one year, or both (S.L. No. 2L-90-81).

35.1.4 *Marine Resources Conservation Act of 1981*

This Act regulates and protects five marine species: Trochus, Black Coral, Bumphead Parrotfish (Kemeik in Pohnpeian), Grouper (Maud, Mwanger, Sammerip, Sawi, or Sawipwiliet in Pohnpeian), and Mangrove Crab (Elimong in Pohnpeian). The Act sets taking, processing, marketing and commercial harvesting limitations, establishes seasons for taking, and prescribes criminal and civil penalties (S.L. No. 2L-106-81).

Trochus harvesting procedures were amended on October 18, 1989, by S.L. No. 2L-132-89. The amendments were written to take effect on the third anniversary following approval of this Act, except for the immediate effect of a provision allowing a ban on exporting unprocessed trochus and trochus shell. A protection for local manufacturing interests, the ban would exempt products made from trochus and trochus shell. In this amendatory Act, the Director of the Department of Conservation and Resource Surveillance is granted authority over harvesting and marketing of trochus.

35.2 Key Issues

Pohnpei presently requires more comprehensive nature preservation legislation. Some conservation proponents suggest splitting species preservation and protected areas into two separate initiatives. This bifurcated approach would allow full legislative and administrative attention to each of these crucial areas.

In Pohnpei, parks may most easily be established on public lands, as more than 50% of Pohnpei land is public. Establishing parks on private land may be difficult; customary landowners often resist government regulatory structures thought to encroach on traditional rights and practices. Any system of protected areas must maintain traditional rights and practices to the extent possible; all protection must first be recognized as appropriate and desirable by customary landowners.

Presently, the Department of Land, Parks & Recreation Division has administrative authority over the development of protected terrestrial areas. Legislation could designate a parks system under the *Public Lands Act*. Nature preserve language is also present, however, in the *Forest Management Act* and the *Pohnpei Watershed Forest Reserve and Mangrove Protection Act*. Again, different administrative Divisions and Departments have similar legislative authority.

As for species protection, a number of Acts cover some species, while other species remain unmentioned. Penalties are frequently insufficient. Legislative consolidation of species protection and introduction of related habitat protection is desirable.

35.3 Recommendations

68. Enact legislation to create an umbrella environmental protection organization, with power to establish controls regarding natural resources conservation and environmental health areas. This would eliminate duplicative efforts and administrative confusion by defining environmental protection responsibility in one organization. If no umbrella organization is desired, then create an environmental advisory body, comprised of representatives from all government Departments, to coordinate biodiversity and environmental health efforts.

69. If no umbrella environmental organization is desired, enact original legislation for the creation of State parks or nature preserves, or create parks under the *Public Lands Act*, the *Forest Management Act*, or the *Pohnpei Watershed Forest Reserve and Mangrove Protection Act*.

70. If no umbrella environmental organization is desired, and if species protection is considered a State function pursuant to a Joint National-State Attorney General Opinion, enact comprehensive legislation for the consolidation of species protection and introduction of related habitat protection at the State level.

71. Additional funding and training is required to promote effective management and enforcement of current living resources legal protections; legislative efforts to conserve living resources should be coordinated with National and municipal Governments and updated.

CHAPTER THIRTY SIX

TOURISM - POHNPEI

36.1 Existing Legislation

There is no existing legislation for tourism at the State level.

36.2 Key Issues

The Pohnpei State Tourism Commission is the administrative agency charged with management of tourism in Pohnpei. Tourism is a low State Government priority; less than $100,000 has been appropriated for the Commission's work in 1992. The number of visitors to Pohnpei is not high; the total number of visitors arriving in Pohnpei State in 1990 was 11,218, only 6,451 of whom were tourists (Pohnpei State Statistics Yearbook, 1991; page 55).

The visitor industry is plagued with incomplete facilities and infrastructure, poor maintenance and servicing of tourist attractions, and transportation difficulties. Additionally, land tenure disputes between National, State and Municipal Government, and between Government and landowners, create unstable conditions for infrastructure development. In any event, property leases may not extend beyond 25 years, so long-term tourism facility development is often not feasible. There is, however, great potential for small-scale village tourism and eco-tourism. Requiring little infrastructure, these ventures rely on hardy travellers who enjoy pristine, natural surroundings. Beautiful mountains, forests, and coral reefs, plentiful terrestrial and marine species, a mild tropical climate, and stunning cultural attractions such as Nan Madol could certainly create a satisfactory visitor industry. Well-enforced, comprehensive environmental protections create additional potential for small-scale and eco-tourism development.

36.3 Recommendations

72. Include environmental protection advisors within the Pohnpei State Tourism Commission.

73. To better protect the environment, focus tourism efforts on small-scale village tourism and eco-tourism.

74. Include legal environmental protection requirements in all handouts and pamphlets to visitors.

CHAPTER THIRTY SEVEN

CULTURAL HERITAGE - POHNPEI

37.1 General

Environmental concerns are broadly defined in this Review to encompass cultural heritage protection, as well as environmental health and natural resources concerns. The administrative body charged with the preservation of cultural heritage is the Historic Preservation Division within the Pohnpei State Department of Lands. This Division administers *Pohnpei's Cultural Preservation Act*, liaises with the National Government's Historic Preservation Office (HPO), and conducts Pohnpei's state Historic Preservation Office programs. The Pohnpei State Historic Preservation Division is currently planning to establish a State Museum and incorporate legislative protections for Nan Madol.

The National HPO provides assistance to the State of Pohnpei and channels United States Park Service Funds to Pohnpei State as well. The State of Pohnpei, in response, conducts fieldwork for the National HPO. In September, 1992, the National HPO plans to hire a staff archeologist, who shall further assist Pohnpei in the identification and preservation of State historic sites.

One exciting program administered by the National HPO with implications for Pohnpei State is the "Micronesian Resource Study." In operation in FSM, the Republic of the Marshall Islands, and Palau, the study is funded by a United States private, non-profit agency called the "Micronesian Endowment for Historic Preservation." Phase I of the study establishes a computer data base program which catalogues sites according to archaeology, ethnography, ethnobotany, and ethnomusicology. In Pohnpei State, 267 historic and cultural sites are now recorded. Each site listing gives a description and specification of the site, states relevant vegetation and soil types, and offers information about the depth and archeological layers of each locale. It is hoped that eventually Pohnpei State will operate its own branch system, and offer quarterly updates to the National system.

The cultural heritage of Pohnpei represents both the foundation upon which rests modern Pohnpeian society and the identity of the Pohnpeian people. Pohnpeian cultural identity is reflected in the Pohnpeian language and its unique oral traditions. Although oral traditions are frequently associated with natural features of the landscape, such as natural depressions, large coral boulders, or lengthy stretches of land, traditions also respect an intangible heritage. Intangibles like community practices, information or ideas are often exchanged and celebrated through oral traditions. One of the many tasks of the Historic Preservation Division within the State Department of Lands is the recording and archiving of the body of oral traditions of the islands and atolls of Pohnpei.

37.2 Nan Madol

Nan Madol, translated as "Places In Between" (and sometimes called the "Venice of the Pacific" in tourist brochures), is a collection of 92 human-made islets covered by megalithic architecture and cross-cut by waterways. The subject of a 1,000-year span of active construction and modification, the basalt stone structures are dated from approximately 500 A.D. to mid-1500 A.D. (Nan Madol Brochure, Archaeology Section). Covering an area of approximately 200 acres off Pohnpei's southeast coast, Nan Madol is perhaps Pohnpei's most distinctive cultural treasure.

The site has been plagued with land disputes, site destruction by natural forces and looting by human visitors. Further, transportation difficulties inhibit access to the islets. Despite several attempts at site clearance, no structured restoration plans are underway. Although Nan Madol is prominently mentioned in the Pohnpei State Development Plan of 1987-1991, the Municipality of Madolenihmw Physical Master Plan of 1991, and the Trust Territory of the Pacific Physical Master Plan of 1968, none of the recommendations contained in those documents have yet been implemented.

A private, non-governmental organization called the Nan Madol Foundation has just been incorporated with the purpose of funding cultural, historical, protective, educational and research activities related to the site. The Foundation's first priority is to sponsor development of a Nan Madol Master Plan to control the locale's physical development, management and preservation. Legal issues of jurisdiction, control and site use will be addressed in the Plan. Future Foundation activities include supporting a Nan Madol Environmental Impact Assessment, funding restoration and site preservation efforts, and urging ethnographic and archaeological research. Eventual production of educational materials is also a current goal.

37.3 Recommendation

75. State legislation should be enacted immediately to preserve and protect the actual site and surrounding environment of Nan Madol.

PART 5

STATE OF CHUUK

CHAPTER THIRTY EIGHT

CONSTITUTIONAL AND ADMINISTRATIVE STRUCTURE

38.1 Traditional rights

The Chuuk State government enacted its Constitution in 1989. Although based to large extent on western legal principles, custom and tradition is also recognized. Article IV provides that existing Chuukese custom and tradition shall be respected and protected by statute. Traditional leaders are recognized and permitted to play formal or functional roles in government. Traditional rights over all reefs, tidelands and other submerged lands are recognized. It is stated, however, that the Legislature may regulate their reasonable use.

38.2 General provisions

Article VI, Section 10 provides for the creation of the executive departments of Health, Education, Transportation, Marine Resources and Agriculture which may not be divided, combined or eliminated. Other executive departments may be created by statute.

Article VII creates judicial powers and vests original jurisdiction in the State Supreme Court to adjudicate all matters except those which fall within the exclusive jurisdiction of the FSM Supreme Court.

Article IX concerns public officers and employees. Section 3 provides that there shall be an independent Public Service Commission to administer a public service system based on merit principles with such powers and duties as may be prescribed by statute.

38.3 Environment and land

Article XI, Section 1 states that the Legislature shall provide by law for the development and enforcement of standards of environmental quality and for the establishment of an independent state agency vested with the responsibility for environmental matters.

Section 2 of Article XI specifies that the State government may take an interest in land only for a specified public interest purpose prescribed by statute. Negotiations with landowners for voluntary lease, sale or exchange are to be fully exhausted before government may appropriate private land. The courts have the power to determine the good faith of negotiations, the necessity for acquisition and the adequacy of compensation offered. Once the public use for which land was acquired has ceased it is to be returned to the landowner or his successor.

38.4 Local Government

Article XIII provides that there shall be two levels of government in the State of Chuuk, state and municipal. Thirty-nine municipalities are identified. Provision is made for the creation of new municipalities by the Legislature. Section 4 states that the jurisdiction of municipal governments extends to the sea area within the surrounding reefs of the islands which are included within the municipality.

Section 5 provides for the adoption of municipal constitutions which are to be democratic and may also be traditional. The powers and functions of a municipality with respect to its local affairs and government are superior to statutory law. Although not provided for in the Constitution, there are 11 Regional Development Authorities which assist and support planning and development efforts of the municipalities.

38.5 Key Issues and Recommendations

The National Constitution states that all powers not expressly delegated to Congress are to be exercised by the States.

The 1991 Amendments to the National Constitution delegate to Congress the power to set minimum health standards. The States have interpreted these Amendments to grant the States power to regulate health standards over and above the national minimum.

It is the view of some senior Chuukese government officials that apart from minimum health standards and hazardous waste matters clearly delegated to the National Congress, the National Constitution is silent on environment matters and that consequently these are within the state's jurisdiction to regulate.

There needs to be clarification, perhaps by way of Memoranda of Understanding, regarding which environmental powers and functions are to be exercised by the States and which by the National government. Considerable confusion exists as to which responsibilities are currently exercised.

For example, 23 FSMC Resource Conservation prohibits the use of explosives and chemicals for fishing. It is not clear whether this title applies to the States. Also, Chuuk State is the only State to have signed a Memorandum of Understanding with the National government transferring administration of the *National Earthmoving Regulations* to the State government in respect of activities within the state. See Part 2, , Constitutional and Administrative Structures - National, Chapter 3 paragraph 3.2.6., on Allocation of Powers, for a fuller discussion of this jurisdictional issue.

Similarly, in relation to the new national minimum health standards required by the 1991 Amendments to the National Constitution, there must be close liaison and coordination with States so that they may develop standards consistent with National Standards.

There are several issues which arise regarding the powers and functions of municipal governments. Article VII of the State Constitution appears to state that a municipal government in the exercise of its functions may override a state statute. If this is a correct interpretation of the provision then there is great potential for conflict between the state and municipal governments.

The State Constitution does not adequately define the roles and functions of municipal government. There is a need for clear definition of their functions. At the present time municipal governments play a negligible role in environmental matters. The State government is considering delegating responsibility for management of solid waste disposal sites to municipal governments. If this occurs the precise function and power to be exercised must be clearly stipulated.

CHAPTER THIRTY NINE

SYSTEMS OF LAND TENURE - CHUUK

39.1 Traditional Systems

Chuukese people have a deeply rooted strong attachment to their land. Most Chuukese are loathe to give up land tenure except in extreme circumstances. In Weno almost all of the land is privately owned. The State government owns or leases only 240 acres of the 4,600 acres of land on the island. If people are forced to surrender their interest they often retain some reversionary rights.

The predominant form of land acquisition in Chuuk is matrilineal. Under this system land will pass to the male and female children of a woman and to the children of her daughters and female descendants, but not to the children of her sons and male descendants. The great majority of land transfers occur prior to death so transfer by will is rare.

Real property may be owned by individuals or by family lineage groups, clans. Other methods of land acquisition include:

* Matrilineal;
* Patrilineal;
* Through parents or extended family;
* Gift;
* Purchase;
* Lease or easement.

39.2 Constitutional Provisions

The National Constitution forbids sale of land other than to FSM citizens. Land owned by the Chuukese includes dry land, mangroves, coastal reefs and isolated coral heads in lagoons. Improvements such as structures, trees, and fish may pass independently of the land or reef on which they are found.

Article IV of the Chuuk State Constitution recognizes traditional rights over all reefs, tidelands and other submerged lands.

Article XI, Section 2 of the State Constitution permits the government to appropriate private land for public purposes upon payment of adequate compensation. Interestingly, the Constitution also provides that when the public purpose ceases to exist the land is to be returned to the original owner or his successor in title. This provision reflects the Chuukese customary recognition of reversionary rights. Traditional law as to reversionary rights is extremely complex and includes a general view that an original landowner has the right to buy back his land in certain circumstances. For example, if a seller sold land to a buyer who was in need of land at a particular time (for instance to pay debts) then the seller had a right to repurchase at a later time.

Article XI, Section 2 of the State Constitution permits government acquisition of land for public purposes. At present there are three eminent public domain cases pending in the Supreme Court. The State Government has an ever-growing need to acquire land to assist in the building of infrastructure and public utilities. The State Government currently owns approximately one percent of land in Chuuk, but this is filled land only. Leasing costs to the government are very high and are increasing.

39.3 Land Disputes

While traditional land tenure is firmly entrenched, customary rules and laws governing that tenure are far from clear. There are many disputes as to land ownership which are frequently not resolved by customary law as there is disagreement about which customary rules or laws apply in each case. If disputes aren't resolved by traditional methods they must be dealt with by the courts. The Land Commission was established initially to deal with resolution of disputes over land after the Second World War. The Commission is also responsible for surveying and registering land in Chuuk State. While approximately 80% of the land in Weno has been surveyed, the Commission has made poor progress throughout the rest of Chuuk. There is no effective system established for recording or registering traditional land ownership. Nor is there a satisfactory dispute resolution mechanism. The Supreme Court may appoint assessors to deal with traditional land law problems.

39.4 Land Registration

There is no statutory or regulatory requirement for people to register their land. The Division of Land Management in the Department of Commerce and Industry is responsible for handling the government's land needs.

The role of the Office of Land Management is to determine the land needs of government and to return lands no longer required to their original owner. In addition the Office negotiates government leases for terms of 15 years with rentals to be re-negotiated every five years. Surveys of land to be leased and of lands generally are carried out and negotiations for easements conducted. Foreigners requiring leasehold interests in land are also assisted by the Office which encourages private landholders to become joint partners in foreign investment projects.

39.5 Key Issues

As the pressures on State Government grow it will have to consider using its Constitutional powers of land acquisition more frequently. The shortage of government owned land and the high cost of leasing or acquiring easements greatly impairs the Government's ability to provide essential infrastructure and public utilities. For example, there is a critical shortage of raw materials such as sand and gravel obtained through dredging, with private landholders charging immoderate rates for use of their land.

There is a need for a comprehensive program of land survey and registration, including registration of easements and leases. This need must be balanced against the strength and flexibility of customary landholding interests.

An attempt should be made by the State Government, in close consultation with customary leaders, to record traditional land tenure and to ascertain the scope and substance of customary rules and law relating to land. This process is an essential precursor to physical planning and the development of policies regarding appropriate land uses.

Attention should also be given to more clearly defining the roles and functions of the Land Commission and the Office of Land Management in order to avoid unnecessary duplication of functions.

CHAPTER FORTY

POLLUTION CONTROL - CHUUK

40.1 Administrative Structure

There is no administrative unit designated to have specific responsibility for pollution control of air, water and land. Several State Government bodies have responsibilities for matters such as wastewater disposal, which have pollution control elements. The Department of Health Services also has certain pollution control functions, particularly with regard to sanitation. The State Transportation Division is responsible for oversight of aspects of water pollution such as fuel and oil leaks from vessels, and the dumping of trash into the harbour.

40.2 Existing Legislation

There is no Chuuk State legislation specifically regarding pollution. In the absence of state laws the State Attorney General is of the opinion that National pollution laws may be applied by the State government.

40.3 Key Issues

Efforts must be made to enact state pollution control laws and regulations. "Pollution" must be broadly defined. Responsibility for pollution control should be allocated to a government administration unit which will liaise with other government authorities having related responsibilities, so as to avoid duplication. Clear, enforceable pollution policies and regulations must be developed. The responsibility of municipal governments for pollution control must be identified and power delegated accordingly.

At present, pollution control is effected on a case-by-case, reactive basis. For example, there are no regulations or policies in respect to petroleum and other spills. When a small oil spill recently occurred, the State Government ordered the responsible company to cease its operation and clean up the spill. This direction, however, had no identifiable statutory basis other than the State's Constitutional obligation to protect the land and waters of the State.

Water and land pollution are probably the most pressing forms of pollution requiring immediate attention. In land fill areas all kinds of toxic materials such as plastics and car bodies are simply bulldozed into the water. Surplus chemicals are dumped directly into the water. Sewerage and waste water also find their way directly into the water surrounding the state. The sunken warships in Chuuk lagoon are laden with tons of deteriorating chemicals and explosives which have major pollution potential.

Intensive local land use and growing urbanization, particularly in Weno are generating pollution problems from gasoline, solid waste, PCB's, chlorine, sewerage, pesticides and fertilizers.

The State Constitution (Article XI, Section 1) expressly provides for the government to make laws for the development and enforcement of standards for environmental quality and for the establishment of an independent state environment agency. The Government should exercise these powers by establishing an effective, strong environmental protection agency (EPA). A State EPA was disbanded; a Task Force has been established to examine environmental controls.

To alleviate confusion and avoid duplicative effort, the National and State Governments need to hold discussions in order to determine which pollution control responsibilities properly belong to the National Government and which to Chuuk State. The 1989 Memorandum of Understanding signed between the FSM government and Chuuk State delegated certain national powers and responsibilities to the State but clearly reserved particular powers to the National Government. Those retained by the National Government included zone of mixing approvals for pollutant discharge, storage and disposal of hazardous waste, the construction permit program for air

pollution sources, the air pollution sources operation permit program, the Pesticide Applicator Certification program and the Restricted Use Pesticide Dealer License program.

Recommendation

76. Develop and enforce state pollution control policies, regulations and standards, with special emphasis on prevention of petroleum spills and the dumping of hazardous wastes.

CHAPTER FORTY ONE

WATER QUALITY - CHUUK

41.1. Administrative Structures

The Department of Public Works is responsible for assessing statewide water resources and needs and for expanding the existing Weno water system. Freshwater resources are limited and deteriorating in quality.

Weno's water system is supplied by wells and supplemented by river water. High islands in Chuuk lagoon have small springwater-supplied systems for individual settlements and also use private wells. However, overpumping of some wells has resulted in saltwater intrusion. There are also rainwater catchment tanks on private properties and community structures.

The Department maintains infrastructure and detects and repairs leaks in the Weno water supply system.

The Department leases land upon which pumps, wells and sewers are located.

41.2 Existing Legislation

Pursuant to the Memorandum of Understanding (MOU) signed between the National Department of Human Resources and the Chuuk Department of Health Services in 1989 the following laws and programs were delegated to the State:

* Public Water Supply System Notice of Intent Program; and

* Public Water Supply System Emergency Construction Permit Program.

41.3 Key Issues

The current control of water quality is ineffective. There are no State water quality standards set. Often sewerage and water pipes are laid in the same trench. Tap water is generally not drinkable. In some rural areas bacterial and soap contamination from toilets and domestic washing activities threatens the quality of well water and contributes to contamination of ground water.

The water distribution system is also inadequate, with frequent limitations on availability. People rely on private catchment tanks and supplementary pumps. Public access to river water is constrained by private land ownership rights. Landowners often require high payments for access to and use of their land.

The 1989 MOU reserved certain water control powers to the National Government, including public water supply system operator certification, public water supply system variances and exemptions, and the public water supply system plan and specifications approval program.

41.4 Recommendations

77. Fund technical and laboratory assistance programs to enable the State to conduct appropriate levels of water testing.

78. Draft marine, fresh and public drinking water standards with standards appropriate to Chuuk (but not less than Constitutionally-mandated national standards).

CHAPTER FORTY TWO

WASTE MANAGEMENT-CHUUK

42.1 Administrative Structures

Responsibility for the broad range of issues embraced by the term "waste management" is scattered among several state administrative units.

The Department of Planning and Statistics is charged with formation of a Wastewater System Development and Improvement Program to improve sanitation of rural wastewater systems.

The Department of Public Works is responsible for the establishment of effective solid waste disposal systems and assists the Visitor's Bureau in disposing trash it has collected. The Department also works with municipal governments and provide technical assistance on solid waste systems. The Department is required to be involved in the preparation of a long-term water and sanitation development plan. The Facilities Management Improvement program proposes the extension of wastewater collection lines and the extension of the system to more households in the Weno area.

The Department of Health Services is responsible for ensuring sanitary conditions for the State. However, the precise nature of these responsibilities is not clearly defined and there is some overlap with the functions of the Department of Public Works.

The Chuuk Visitor's Bureau operates a garbage collection and disposal program. Trash bins are provided for some government agencies and public areas free of charge. Trash bins are provided for private residents at fees ranging from $6, $8 or $12 per month depending on frequency of collection. At present the Bureau receives an average of $80 per month in fees. It is hoped that if the program develops it may eventually be privatized.

42.2 Existing Legislation

The 1989 Memorandum of Understanding between the State and National governments delegated to the State the power to administer at State level the Solid Waste Management Permit Program and the Solid Waste Management Permit Variance Program. However, the FSM Government retained the power to approve the sewer construction grant priority system, as well as the certification of applications for sewer construction grants.

42.3 Key Issues

Although the Visitor's Bureau has conducted "clean-up" programs, the problem of public litter is still acute. Empty oil containers dumped directly into water cause damage to the marine environment. It should also be noted that the majority of people in Weno cannot afford to pay the Visitor's Bureau to collect their garbage. Other than the separate collection of aluminium cans, there is no system for sorting garbage.

Garbage dumps are frequently sited at water's edge with the inevitable leachate seepage into the water. Garbage placed in the dump sites is bulldozed into the water, causing further environmental damage. Hazardous waste is often placed in the dumps. Sewerage and wastewater from residences drains directly into the lagoon. In Weno, approximately 40 to 50% of homes are connected to a sewer; the rest of the state is not. Many people deposit solid waste and excreta directly into the water surrounding the islands and atolls.

There are no controls at all for pollution caused by chemicals used in the processing of crops, meat and fish. Roads are often sealed with waste oil products. There is also no regulation of the disposal of human remains. Bodies are buried directly into the ground on private land.

Chuuk State requires precise clarification of National powers delegated under the Memorandum of Understanding and a new assessment of whether additional National powers should be delegated or new State laws and regulations enacted.

42.4 Recommendations

79. Delineate responsibility for all aspects of waste management, and consolidate these responsibilities within one department.

80. Develop a State-specific project for rural sanitation, wastewater treatment and solid waste disposal.

81. Draft solid waste and toilet facilities regulations with standards appropriate to Chuuk (but not less than Constitutionally-mandated national standards)

CHAPTER FORTY THREE

ZONING, EARTHMOVING AND ENVIRONMENTAL IMPACT ASSESSMENTS-CHUUK

43.1 Administrative Structures

As in the National Government, responsibility for these matters rests with the Chuuk State Department of Health Services. It should be noted that the Chuuk State Department of Commerce and Industry is responsible for developing comprehensive physical planning.

43.2 Existing Legislation

The State Constitution calls for the creation of an independent EPA and the enactment of appropriate environmental protection laws and regulations.

The 1989 Memorandum of Understanding (MOU) delegated to the State Government the power to apply the *National Earthmoving Regulations* to activities in Chuuk. There was no corresponding delegation of the Environmental Impact Assessment Regulation.

There is no zoning legislation or regulation in Chuuk. The MOU also delegated to Chuuk the National Building Construction Permit Program.

The National legislative requirement for Foreign Investment Permits (32 FSMC) ensures that some environmental impact assessment of proposed developments and projects for Chuuk takes place. However, this assessment is done at the National level and only when a Foreign Investment Permit is required. Clearly many projects will not be caught by this requirement, and even those which do may be reviewed by persons with relatively little local Chuukese knowledge.

43.3 Key Issues

Although the State Government has the power to apply the *National Earthmoving Regulations*, many projects proceed without permits being granted. The administration of the Regulations is haphazard. There is very little, if any, enforcement. In view of the considerable dredging, sand mining and land clearing activities in Chuuk, the Regulations need to be applied and enforced to limit environmental damage.

Zoning and physical planning are not implemented in Chuuk. Rapid urbanization and population pressures necessitate a legislative response. Further, there is no legislative or regulatory basis for Environmental Impact Assessments in relation to developments and activities in Chuuk.

43.4 Recommendations

82. Establish an independent state environment agency pursuant to Article XI, Section 1 of the Chuuk State Constitution.

83. Allocate the following tasks to the newly-created State environment agency:

    * examining State needs for environmental protection legislation and regulation, and advising the State Government accordingly,

    * liaising with the National Government to determine which environmental protection functions the State should administer;

      advising the State government as to the operation and implementation of National environmental laws and regulations within the State.

84. Strengthen physical planning within the State Department of Commerce and Industry.

85. Review and amend the National-Chuuk State Memorandum of Understanding to detail more clearly which environmental protection functions are the State's responsibility and which are the functions of the National Government.

86. Institute Environmental Impact Assessment requirements.

CHAPTER FORTY FOUR

FISHERIES-CHUUK

44.1 Administrative Structures

The Chuuk State Department of Marine Resources, created in 1990, is responsible for marine resource management, development of tuna resources, encouragement of investment in pelagic fisheries and increasing artisinal fisheries. The Department is charged with managing sustainable development of marine resources. The Department is presently encouraging local fishermen to move beyond the reef so as to relieve pressures on inshore marine resources by deployment of additional fish aggregating devices. The Department further plans to reinstitute the culture of giant clams off Falos Island, facilitate trochus re-seeding of reefs, and collect fisheries production data.

The Chuuk Maritime Authority, which is involved in aquaculture and fisheries development, has been incorporated into the Department of Marine Resources. The Chuuk State Department of Commerce and Industry, also formed in 1990, has as one of its objectives the conservation, assessment and management of marine resources.

44.2 Existing Legislation

Article IV of the Chuuk Constitution permits government regulation of the use of reefs and tidelands.

FSM Public Law 7-111 (as amended by PL 1-26) authorizes the States to establish entities to promote, develop and support commercial utilization of living marine resources within their jurisdictions. The Act further authorizes the states to make regulations for the exploitation of living marine resources.

It is presently unclear whether 23 FSMC Marine Resources applies to the States its prohibition against the use of dynamite and poisons for fishing, controls on trochus harvesting and on the taking of turtles. Some senior State government officials believe that these National provisions do apply to Chuuk.

44.3 Key Issues

The marine environment is Chuuk's principal source of subsistence, recreation, tourism and commerce. Chuuk's marine resources cover 180,000 square miles, including lagoons, reefs and a wealth of living marine resources. Marine resource data, an essential foundation to informed environmental judgments, is presently insufficient.

Inshore areas are suffering from overfishing of certain reef and deep bottom species, clams and crustaceans. These areas are also becoming polluted; reefs are being irreparably damaged by the destructive use of dynamite for fishing. Where fishing permits are required, they are generally granted without scrutiny regarding potential environmental impacts, and without conditions.

44.4 Recommendations

87. If it is determined, by issuance of a National-State joint Attorney-General opinion, that 23 FSMC does not apply to Chuuk State, then the State must enact its own legislation: prohibiting the use of chemicals, poisons and dynamite for fishing; controlling trochus harvesting; controlling the taking of turtles; and stipulating acceptable fishing methods for artisinal and commercial purposes. The issue of the taking of turtles might be more appropriately addressed under separate marine species protection legislation.

88. The State Government may wish to use its Constitutional powers to legislate and regulate for the management and protection of in-shore areas. The complex traditional reef tenure systems may be a capable foundation for creating satisfactory environmental regulatory controls. The increasing problems of in-shore water pollution, and the massive damage caused by dynamiting and overfishing, necessitate some level of State Government legislative and regulatory intervention.

89. Educate local communities regarding the importance of marine resource management and conservation. Local communities must be involved in decisions regarding management of marine resources. Traditional reef ownership and traditional fishing practices could be incorporated into legislation regulating in-shore areas.

90. Place conditions on fishing permits which stipulate methods to be used and the imposition of certain restrictions.

91. Apply rigorous EIA standards so as to ensure sustainable development of marine resources.

92. Transfer responsibilities regarding marine resources to the Department of Marine Resources, from the Department of Commerce and Industry in order to avoid duplication of effort.

CHAPTER FORTY FIVE

AGRICULTURE - CHUUK

45.1 Administrative Structures

The Department of Agriculture was created in 1990. Its functions were previously carried out by the Department of Resources and Development. The Department liaises with and assists the Department of Commerce and Industry, which is responsible for the development of small agricultural processing industries. Such industries include slaughterhouses and butchering facilities used to expand intermediary market for agricultural products.

As the Department of Agriculture is a relatively new body, its functions are stated in terms of future priorities. The great majority of these priorities are centred around forestry, agro-forestry and related matters, which will be detailed in the Subsection on Forestry.

Agricultural programs include the following:

- the encouragement of home gardening to increase production of Vitamin A rich foods by providing at cost to farmers seeds, tools and fertilizers;
- provision of technical assistance through agents stationed in the municipalities in training programs for growing vegetables and other subsistence crops;
- pig projects to improve breeds for local use;
- increasing local production of agricultural produce for consumption by the local market to decrease reliance on imported food;
- the improvement of existing pest and disease control programs;
- the assessment of potential for goat husbandry; and
- a poultry production program.

45.2 Existing Legislation

Apart from the two national pesticide control programs delegated to Chuuk by the 1989 Memorandum of Understanding (Pesticide Applicator Certifications Program and Restricted Use Pesticide Dealer License Program), there is no legislation in relation to agriculture.

45.3 Recommendations

93. Examine agricultural practices, to identify future legislative and regulatory needs in areas such as mitigation of soil erosion, appropriate use of fertilizers and pesticides, and safe disposal of resultant waste. Regulate piggery and poultry operations to control appropriate waste disposal and processing methods.

94. Examine land use patterns to identify the most appropriate areas for agricultural development so as to minimize deleterious environmental impact, including clearing of important forest areas for agricultural purposes. Educate landowners regarding practices which are least harmful to the environment.

95. Establish land use guidelines.

CHAPTER FORTY SIX

FORESTRY - CHUUK

46.1 Administrative Structures

The Chuuk State Department of Agriculture is responsible for forestry matters. The Department identifies its policies and future priorities in forestry and related matters as follows:

* to develop and manage mangrove forests by preventing erosion, and by creating regulations to prevent use of mangroves for filling areas, dumping and for firewood; and

* to review current land use policies to determine whether sufficient forested areas have been protected and whether specialty species planting may be integrated within urban development.

The State Department of Health Services states that one of its major programs is the management and control of land clearing and development on steep slopes and in watersheds.

46.2 Existing Legislation

Apart from the *National Earthmoving Regulations*, often insufficiently applied, there is no legislation in respect of forest management or conservation.

46.3 Key Issues

Much valuable forest has been destroyed or damaged in Chuuk as a result of clearing for agriculture and urban development generally. The interior forests of the high islands which serve as watersheds are not protected and are increasingly encroached upon by farming and urban development. Previously inaccessible forested areas are being threatened by road construction. Clearing of forests is causing and will continue to cause significant soil erosion. In Chuuk there are only a few mountain top, cliff and ravine areas of primary forest left relatively untouched by urban and agricultural development.

Chuuk's mangroves, like those throughout FSM, are vital ecosystems which perform many essential functions, such as trapping sediments, regulating nutrient flux and in some areas protecting shorelines from erosion. Mangroves are also the habitat of endemic flora and fauna. There appear to be no controls on mangrove timber harvesting, which can create disastrous erosion problems. People often use mangroves for dumping garbage and as fill areas.

There is no watershed management or protection in Chuuk. Agro-forestry practices and urban development threaten and damage watershed areas daily.

46.4 Recommendations

96. Review and assess forest resources and forest management priorities.

97. Develop appropriate programs and legislation to ensure sustainable development.

98. Develop practical management and conservation plans for use of mangrove areas.

99. Draft regulations to protect and manage mangrove areas, to prevent erosion in forest areas created by agro-forestry practices, and to protect watershed areas.

CHAPTER FORTY SEVEN

MINING AND MINERALS - CHUUK

47.1 Administrative Structures

The Department of Commerce and Industry has responsibility for mining and related matters. As the Department has only been in existence since 1990, it has had little opportunity to address mining issues.

47.2 Existing Legislation

The *National Earthmoving Regulations* are being used to control dredging and sand mining. Practical evidence of consistent application and enforcement of the Regulations is scarce. There are no State legislative instruments regarding mining.

47.3 Key Issues

Sand and coral mining are the only mining activities ongoing in Chuuk State. Chuuk, along with FSM's three other States, has yet to ascertain the extent of mineral deposits such as cobalt, manganese and oil in its marine areas. Exploration and assessment of mineral resources must occur to determine if extraction is commercially viable.

Dredging and sand mining along the shoreline and in lagoons has already caused significant environmental damage and is not subject at present to effective regulatory oversight. The great need for sand and dredging operations for development must be balanced with appropriate, enforceable regulation to protect tidelands and mangroves from unacceptable damage.

47.4 Recommendations

100. Introduce an enforceable permit system incorporating comprehensive EIA provisions for all mining and extractive activities.

101. Designate appropriate areas for mining and dredging.

CHAPTER FORTY EIGHT

BIODIVERSITY CONSERVATION - CHUUK

48.1 Administrative Structures

Several of Chuuk's newly-created administrative units have responsibilities which could contribute to biodiversity conservation. The Department of Marine Resources is committed to marine resource assessment, management and planning. The Department of Agriculture is involved in a program to establish a Tol Island Bird Reserve in concert with local residents and United States government agencies. The Department of Agriculture has a policy of ensuring protection and controlled development of mangrove forests through identification of protection classifications such as coastal parks, recreation areas and wildlife sanctuary areas. An essential adjunct to this process is the zoning of areas for timber extraction and land fill.

The Department of Health Services designates protection of the habitat of rare and endangered species as one of its concerns.
Further, if the Department of Health Services does achieve its objective of establishing an EPA, then this body may be given authority to regulate biodiversity conservation.

48.2 Existing Legislation

There are no present State legislative instruments regulating the protection of marine and terrestrial areas or the conservation of living resources.

48.3 Key Issues

There is inadequate resource assessment data available in all areas of biodiversity conservation. Data is required for the accurate identification and listing of endemic species of flora and fauna, including endangered species and their habitat. Other than research regarding the Chuuk poison tree and the Chuuk Greater White-eye, very little has yet been done to gather data on endangered species. Further, marine and terrestrial areas with significant conservation values should be identified.

Chuuk State has made an attempt to create a protected conservation area on Tol Island in Chuuk Lagoon. Two rare and endangered species, the Chuuk Greater White-eye and the Chuuk Poison Tree are found on Tol Island. The local community is interested in creating a reserve to protect an area of remnant native forest and an important watershed. Discussion favourable to the introduction of a Natural Heritage Areas Bill, however, has not yet resulted in a draft document.

Habitat and species destruction is occurring with frightening speed through land clearing, dredging, dynamiting, uncontrolled waste disposal and pollution. Fragile terrestrial and marine ecosystems such as reefs and mangroves are under continuing and relentless threat by uncontrolled development not subject to EIA.

48.4 Recommendations

102. Develop policies, administrative structures, legislation and regulatory controls regarding biodiversity conservation. Accumulate resource assessment data. Appropriate policies and controls may not be formulated if knowledge of the resources to be protected is inadequate.

103. If a State EPA is established, extend its powers to encompass biodiversity conservation. Such an agency could spur conservation measures by coordinating efforts between government departments and agencies whose activities have an impact on biodiversity conservation.

104. Develop EIA processes to address the impact of a development project or proposal upon endemic flora and fauna, their habitat, and upon the natural terrestrial and marine environment. Any approvals granted for development should include conditions to minimize impact and ensure rehabilitation whenever possible.

105. Undertake physical planning and zoning to control development and divert it away from environmentally sensitive areas. Zoning could also be used to designate and limit activities within protected areas such as watershed areas and in-shore reefs.

106. Regulate the reasonable use of traditional tidelands.

107. Draft legislation to protect native flora and fauna with particular emphasis on protection of endangered species, following a decision between the State and National Government regarding the appropriate jurisdiction for the protection and control of native flora and fauna.

CHAPTER FORTY NINE

TOURISM - CHUUK

49.1 Administrative Structures

The Chuuk Visitor's Bureau is responsible for encouraging tourism, and maintaining the beauty of the state for the benefit of residents and tourism. The Bureau is a quasi-governmental body operated by a Board of Directors nominated by the Governor with the advice and consent of the State Legislature.

49.2 Existing Legislation

Apart from the legislation which protects the historic wrecks in Chuuk Lagoon, there is no legislation which is specifically oriented toward tourism. Diving in the lagoon is regulated by requiring divers to have permits and to be accompanied by licensed guides.

49.3 Key Issues

Tourism, particularly diving, is Chuuk's principal source of foreign revenue. The tourism potential of Chuuk has not yet fully been explored. Chuuk's extensive natural wealth, both in its marine and terrestrial environments, provides a perfect basis for the development of eco-tourism.

All tourist activities need to be developed and managed so as to minimize impact on the environment and on the lifestyle of the Chuukese people.

Diving in Chuuk Lagoon has already resulted in damage to the submerged wrecks and to the coral surrounding them. Diving practices have to be consistently monitored and controlled to minimize damage to the wrecks and to reefs.

49.4 Recommendations

108. Review and broaden functions and responsibilities of the Visitor's Bureau. Transfer the responsibility for garbage collection to one of the government bodies already concerned with waste management and disposal, such as the Department of Health Services or Public Works. The Bureau's activities should include long-range tourism development planning.

109. While marine-based tourist activities predominate, the terrestrial natural environment and Chuuk's rich cultural and historic heritage should be examined for their tourism potential. Chuuk's natural environment lends itself particularly well to low impact eco-tourism. It is necessary and advisable to link eco-tourism with biodiversity conservation through the creation of protected areas such as reserves or parks.

110. Liaise with municipal governments and local landholders to minimise the impact of tourism on the lives of local residents. Local communities may participate in tourism promotion by making private areas with natural or cultural conservation values accessible to tourists. Financial returns from tourism might encourage local communities to accept protection of areas with high natural or cultural heritage conservation values.

111. As tourism is one of Chuuk's growth industries, its development must be subject to rigorous environmental impact assessment so that impact on the natural and social fabric of the State is benign. Proponents of development projects aimed at tourists should be required to assess the impact of their projects on existing infrastructure, as well as on natural and cultural resources. Developers' payment for the provision of the infrastructure and services necessary for their projects may be an effective method of improving Chuuk's existing infrastructure without resort to government funding.

CHAPTER FIFTY

CULTURAL HERITAGE - CHUUK

50.1 Administrative Structures

The Department of Commerce and Industry is responsible for cultural heritage conservation. It's charter is to document and record important cultural and historic sites as well as to record intangible heritage such as oral traditions, culture and history. The Department is also responsible for recording and interpreting cultural and historic sites which are being destroyed. One of the Department's major programs is to review and issue permits for all construction projects, so as to protect cultural and historic heritage sites.

The Department of Health Services has as one of its programs the protection of major archaeological sites. The Chuuk Society for Historical Investigation and Preservation is a non-government organization concerned with the protection of marine and land-based historic sites as well as environmental issues generally. The Chuuk Visitor's Bureau is also involved in cultural heritage protection. It has developed five shelters and trails to historic Japanese sites on Tonowas, Weno and Fefan Islands.

50.2 Existing Legislation

Legislation exists which declares the approximately 80 submerged wrecks in the Chuuk Lagoon to be a war memorial and historic site. Removal of artifacts from the wrecks is prohibited and divers must have permits and be accompanied by licensed guides.

A draft Bill has been prepared for the enactment of the *Chuuk State Historic Preservation Act of 1991*. The Bill recognizes the importance of physical cultural and historic heritage as well as the intangible heritage in traditions, arts, crafts and songs. The Bill proposes the establishment of an Historic Protection Office (HPO) within the Department of Commerce and Industry whose principal objectives shall be to protect and conserve places of historic and cultural interest including intangible heritage. All government agencies engaging in activities which may have an impact upon cultural or historic heritage must consult with the HPO to mitigate damage. The HPO would also have the power to issue cease and desist orders in the event of damage to items of historic or cultural heritage. The HPO would have wide-ranging responsibilities for surveying, recording and protecting historic and cultural heritage.

The Bill also establishes a Review Board which would review all requests for permits and land leases for areas which have cultural or historic heritage significance. There is also power to make cease and desist orders in the event of an activity having a damaging impact on historic or cultural heritage. The Governor is the final arbiter in such disputes. The power to make regulations to achieve the purposes of the Bill is also included. A $2,000 fine or one year's imprisonment is imposed for breaches.

50.3 Key Issues

Presently, there are inadequate controls in Chuuk State for protecting items of historic or cultural heritage. The Regulations protecting the wrecks in Chuuk Lagoon are rarely enforced. Historic and cultural heritage preservation is centred around the wrecks in Chuuk Lagoon, while neglecting land-based sites and artifacts such as lighthouses, gun emplacements and items of Chuukese cultural and historic heritage.

50.4 Recommendations

112. The draft *Chuuk State Historic Preservation Act of 1991* should be reviewed and submitted to the Legislature. Amend the Bill to ensure that the HPO or the Review Board is involved in all projects or developments affecting cultural or historic heritage. Increase fines proposed for breaches.

113. Administer and enforce the diving permit system for Chuuk Lagoon. Attach rigorous permit conditions prohibiting damage and removal of artifacts. Undertake a comprehensive study of the wrecks in the lagoon to provide a basis for regulations and to indicate the most appropriate methods to protect these items of historic heritage. An effective EIA process will ensure that the impact upon cultural and historic heritage from minor and major development projects will be addressed, mitigated, and avoided where possible.

PART 6

STATE OF YAP

CHAPTER FIFTY ONE

CONSTITUTIONAL AND ADMINISTRATIVE STRUCTURE

51.1 Traditional Aspects Of The Constitution

The supreme law of the State, the Constitution of the State of Yap places great emphasis on the conservation of traditional heritage and preservation of the environment. The Preamble to the Constitution speaks of the Yapese peoples' desire to live in harmony with each other and with the environment. The Preamble recognizes traditional heritage and village life as the foundation of Yapese society, and commits the Government to an integration of modern technology with traditional ways, so as to benefit both present and future generations.

Although dedicated in large measure to Western legal principles, the Constitution gives priority of place to tradition and custom. Article III, titled "Traditional Leaders and Traditions", establishes a Council of Pilung and a Council of Tamol, both of which perform functions concerning tradition and custom. Section 2 of Article III requires that "due recognition shall be given to traditions and customs in providing a system of law, and nothing in this Constitution shall be construed to limit or invalidate any recognized tradition or custom."

Article V of the Constitution provides for elected members of the legislature to develop and enact legislation. Although empowered to pass legislation, the Legislature must present every passed bill to the Council of Pilung and the Council of Tamol for consideration. These Councils have the power to disapprove legislation which "concerns tradition and custom or the role or function of a traditional leader as recognized by tradition and custom." (Yap Constitution, Article V, Section 16).

The Councils of Pilung and Tamol may disapprove a bill by returning the proposed law to the Legislature for appropriate amendment within 30 days. A disapproved bill may be amended to meet the Councils' objections and be resubmitted for Council approval. Traditional leadership is thus granted a specific and powerful means to influence the governance of the Yapese people in matters of custom.

Respect for tradition and customary ways is further embodied in Article XII of the Constitution, which concerns health and education. The Constitution grants the Yap State Government responsibility for the protection and promotion of public health, which may include the traditional practice of medicine (Yap Constitution, Article XII). Article XII, in creating State Government responsibility for public education, requires that the traditions and customs of the people of Yap be taught in public schools.

51.2 Environmental Provisions of the Constitution

Environmental protection and customary protection are linked in the Yap Constitution. Article XIII, titled "Conservation and Development of Resources", requires the State Government to promote the conservation and development of agricultural, marine, mineral, forest, water, land and other natural resources. Respect for customary land ownership and environmental protection is embodied in Sections 2 and 3 of Article XIII. These Sections state that title to land may only be acquired in a manner consistent with traditions and custom, and agreements with foreigners for the use of land may not be for more than fifty years.

Section 4 of Article XIII bans the testing, storing, use or disposal of radioactive or nuclear substances within Yap State. Section 5 again recognizes traditional rights and ownership of natural resources and areas within Yap's marine jurisdiction, both within and beyond 12 miles

from shore. The Constitution at Article XIII, Section 5 ensures that no action may be taken to impair these traditional rights, with the exception of State Government action providing for conservation and protection of natural resources within 12 miles from island baselines.

Protection of both the environment and indigenous peoples' rights is embodied in Section 6 of Article XIII. Section 6 provides that only enactment of a statute, or permission of the appropriate persons who exercise traditional rights of ownership, may allow a foreign fishing, research, or exploration vessel to take natural resources from anywhere within the marine jurisdiction of Yap State.

51.3 Local Government

Article VIII of the Constitution provides for a local tier of government. Political subdivisions may be established by the Legislature; each subdivision shall exercise such powers as may be conferred by law. The Municipality of Rull, a Yap local government, has recently demonstrated that local governing entities can play an important role in environmental protection. Rull has recently enacted a local Ordinance restricting gillnet fishing mesh sizes.

CHAPTER FIFTY TWO

SYSTEMS OF LAND TENURE - YAP

52.1 Traditional Systems

Yap is recognized as a bastion of tradition in Micronesia. Nowhere is this tradition more strongly felt than in matters of land tenure. The people of Yap ardently identify with their land. The extended family and the land it occupies are inextricably interwoven.

The traditional unit of land ownership in Yap is known as "tabinaw", defined as "that which is the land", a term synonymous in Yapese with the word for "family" or "household". The tabinaw estate consists of one or more house platforms for the extended family, as well as its associated taro pits, fishing lands inside the reef, stone fish weirs, coconut plantations, yam gardens, grassy uplands and wooded lots. A tabinaw may also include a local community building.

The oldest male member of the family is traditionally the head of the tabinaw household. He is, however, a trustee for the estate rather than an owner. His position confers only limited rights to dispose of the estate or to prevent members of the extended family from living on and from estate proceeds. Inheritance in tradition is predominantly patriarchal.

In Yap tradition there are only very limited and restricted forms of transfer of land from one tabinaw (extended family) to another. An outright sale to an outsider or foreigner is not allowed in Yapese tradition.

52.2 Constitutional Provisions

The Constitution of the State of Yap prohibits the outright sale of land to non-citizens of the Federated States of Micronesia, but allows non-citizens to enter into agreements for the use of land for a term not exceeding 50 years (Yap Constitution, Article XIII, Section 2). Section 3 of Article XIII, providing that land title may be acquired only in a manner consistent with traditions and customs, lends strength to the traditional concept that the tabinaw remains intact among members of the extended family.

The Constitution also guides the Legislature's actions regarding the State's compulsory acquisition of land. Section 11 of Article II allows State takings of private property for public purposes, with the provision that there be just compensation, good faith negotiations, and consultation with appropriate local governments prior to the taking of private lands.

CHAPTER FIFTY THREE

POLLUTION CONTROL - YAP

53.1 Existing Legislation

53.1.1 *Environmental Quality Protection Act 1987*

Yap State has enacted its own environmental protection legislation, passed by the Legislature in late 1987. The stated public policy underpinning the *Yap State Environmental Quality Protection Act* (the Act) proclaims the State's desire to cooperate with National Government and Municipal Governments, as well as other concerned organizations, in order to create and maintain conditions under which human beings and nature may co-exist in productive harmony for the benefit of present and future generations.

The Act establishes the Yap State Environmental Protection Agency (the Agency). This Agency consists of a five-member Board of Directors and a full-time executive officer assisted by supporting staff. The State Governor appoints the Board members and also provides the Agency with necessary technical and legal assistance from within the State Government offices. The Agency may, however, retain the services of its own independent legal counsel. The Agency has the power and responsibility to control and prohibit pollution of air, land and water. For these purposes it may make regulations and adopt and implement systems, plans and programs for monitoring pollutants and restricting pesticide use. It is empowered to issue permits for controlling pollutants and is given wide powers of entry into private property to carry out its duties. The Agency must report annually to the State Legislature.

The Agency is given powers of enforcement against those who transgress any of the provisions of the Act. The enforcement action may include orders to stop or clean up or abate the effect of any pollution. Civil penalties of up to $10,000 per day may be imposed against violators of the Act.

Public hearings may be conducted regarding alleged violation of the Act. Severe penalties of up to $10,000 or six months imprisonment, or both, may be imposed for making deliberate false representations on applications to the Agency. This provision is designed to thwart any developer who does not truthfully alert the Agency to a potential environmental hazard in its permit applications or required environmental impact assessment study.

Agency Regulations are currently being promulgated in the areas of pesticides, public water systems, sewage, and earthmoving. Subsidiary regulations drafted pursuant to the former *United States Trust Territory Environmental Quality Protection Act* have been saved under Yap State's current environmental protection Act until such time as new State regulations are promulgated.

NOTE: See Pollution Control - *Trust Territory Environmental Protection Quality Act*, Chapter 28 paragraph 28.1.1 for additional information regarding States' abilities to adopt Trust Territory statutes and subsidiary regulations.

53.1.2 *Draft Pesticides Regulations*

Draft Yap State Pesticides Regulations have been formulated, and, if passed into law, shall replace the former Trust Territory Pesticides Regulations. The Draft Regulations make it unlawful for any person to distribute, import, sell, offer for sale, transport, or deliver unregistered pesticides, highly toxic and unlabelled pesticides, adulterated pesticides, or restricted use pesticides. In addition, the draft Regulations make it unlawful to use pesticides to excess, or to store or discard them in a manner creating an adverse affect to the environment. It is unlawful to use restricted-use pesticides except under the instruction and control of a competent and certified applicator. Further, no pesticide label may be altered.

These Regulations provide for registration of imported pesticides for a small fee. No pesticide may be registered, however, if its proposed use would result in substantial adverse effect on the environment. The Agency is given wide powers of seizure, as well as the power to ban particularly harmful pesticides from sale.

As presently drafted, these Regulations grant Yap State authorities wide powers to prevent contamination of the local environment with imported pesticides. Current plans include amendment of the draft Regulations so that they may be compatible with National Pesticide Regulations.

53.1.3 Disposal of Petroleum Products

Yap State Code, Title 18, Chapter 4, Section 401 prohibits releasing or disposing of any petroleum product into the sea, lagoon, or an adjacent shoreline. A December, 1991, amendment to the petroleum disposal provisions makes it unlawful for any person to release or dispose of any petroleum product in or on the waters of a State Fishery Zone.

53.1.4 Oil Spills

Yap State Code, Title 11, Section 805 creates an offence for the intentional or negligent spillage of oil. An intentional spill carries a maximum fine of $25,000 or 60 days imprisonment. A negligent spill in excess of 50 gallons carries a fine of $25,000.

53.2 Key Issues

Issues of National/State jurisdiction plague attempts at coherent pollution control efforts. Currently, the National Government and the State of Yap plan to operate two regulatory and permitting systems with similar legislative instruments. Representatives from the State may wish to consider entering into a Memorandum of Understanding, or similar document, with the National Government Department of Human Resources to set forth a single permitting system, thereby avoiding duplication of effort and subsequent overconsumption of scant monetary resources. Such a cooperative effort is certainly anticipated by the *Federated States of Micronesia Environmental Protection Act*, Section 12, which authorizes delegation by the National to State Government by way of "written cooperative agreement."

A Memorandum of Understanding regarding environmental permitting and oversight should reflect the legal consensus of the planned Joint Attorney General Opinion between the National Government and the four States.

53.3 Recommendations

114. Issue a Joint Attorney-General Opinion between the National Government and each of the four States to disentangle competing jurisdictional claims in all areas of environmental oversight.

115. Enter into a "written cooperative agreement" with the National Government Department of Human Resources to avoid duplication of regulatory and permitting efforts. This agreement should include provisions on pollution, water quality, waste management, zoning, earthmoving and EIA's.

CHAPTER FIFTY FOUR

WATER QUALITY - YAP

54.1 Draft *Water Supply System Regulations*

Draft *Water Supply System Regulations* for the State of Yap have been completed. The draft Regulations are modelled on the *United States Trust Territory Public Water Supply Systems Regulations*. These relatively complex regulatory controls require increased infrastructure and monitoring capabilities before full compliance is possible. It is therefore recommended that technical training and laboratory assistance programs be funded in order to enable further testing of the public water supply.

54.2 Recommendation

116. Fund technical training and laboratory assistance programs to enable further testing of the water supply.

CHAPTER FIFTY FIVE

WASTE MANAGEMENT - YAP

55.1 Existing Legislation

55.1.1 *Trust Territory Solid Waste Regulations*

Trust Territory Solid Waste Regulations saved by the 1987 Act, also in use by the National Government, were promulgated on April 12, 1979. The purpose of the *Solid Waste Regulations* is to establish minimum standards governing the design, construction, installation, operation and maintenance of solid waste storage, collection and disposal systems.

55.1.2 *Draft Toilet Facilities and Sewage Disposal Regulations*

These draft Regulations, modelled on old *Trust Territory Regulations* of the same name, establish minimum standards for toilet facilities and sewage disposal to minimize environmental pollution, health hazards and public nuisance. All public buildings including schools and hospital are required to have adequate toilet and sewage facilities. All new buildings which are used for dwellings must be connected to the public sewage system where it exists. If no public sewage system is available, a septic tank or pit privy is required. All existing facilities must be of such a type as to pose no immediate water pollution threats or public health hazards. It is a requirement that, for all new building construction, a permit be obtained under these Regulations. The draft Regulations provide for standards and inspection of appropriate facilities.

These draft Regulations make it unlawful to dispose of treated or semi-treated sewage into any river, creek, stream, pond, well, reservoir, or ground, whether private or public. Exceptions require a permit from the Agency. Violations of the draft Regulations may result in an order to stop work or issuance of fines of up to $1000 per day.

55.2 Key Issues

Increasing population pressures and increasingly available non-biodegradable materials have exacerbated Yap's solid waste disposal problems. Solid waste issues differ between localities; municipal governments must play a primary role in the development of waste management strategies. Private and communal land ownership systems require active landholder participation in any government-initiated solid waste reduction proposals.

55.3 Recommendation

117. Develop a State-specific project for rural sanitation, wastewater treatment and solid waste disposal.

CHAPTER FIFTY SIX

ZONING, EARTHMOVING AND ENVIRONMENTAL IMPACT ASSESSMENT - YAP

56.1 Existing Legislation

56.1.1 *Draft Earthmoving and Sedimentation Regulations*

Draft Regulations for the control of earthmoving and sedimentation have been authored recently, again based on old *Trust Territory Regulations* of the same name. The draft Regulations currently are undergoing a process of criticism and review. The draft *Earthmoving and Sedimentation Regulations* seek to control earthmoving activity, defined very broadly as any construction or other activity which disturbs or alters the surface of the land, a coral reef or bottom of a lagoon, including excavations, dredging, embankments, land reclamation in a lagoon, land development, sub-division development, mineral extraction, ocean disposal and the moving, depositing or storing of soil, rock, coral or earth. The Regulations therefore cover all development which has an appreciable effect on the physical environment.

Under the draft Regulations all earthmoving activities must be conducted in such a way as to prevent accelerated erosion and acceleration of sedimentation. There is a requirement that an erosion and sedimentation control plan be prepared by an expert and filed with the Environmental Protection Agency if a permit is needed. Permits are required for all earthmoving activities except for ploughing or tilling for agricultural purposes or for building one or two family residences.

56.1.2 *Environmental Quality Protection Act*, Section 150 9 (Chapter 15 of Title 18 of the Yap State Code)

This Section of the Act provides for compulsory environmental impact studies. It provides that all persons must include an environmental impact assessment study in accordance with the Agency's regulations in all development proposals. The environmental impact statement must be made to the Agency before the developer takes any action significantly affecting the quality of the human environment. It appears that environmental impact assessment regulations have not yet been promulgated.

56.1.3 Zoning

The Yap State Code, Title 20, Chapter 3 regulates the issuance of building permits. These provisions require a person to obtain a permit from the Planning Commission before building any permanent structures. The Commission is given 60 days in which to issue a permit. No guidance is provided regarding environmental factors that could mitigate for or against issuing such a permit.

56.2 Key Issues and Recommendations

118. Amend the draft Regulations for Earthmoving and Sedimentation in accord with the 1991 reviews of the Regulations by the Office of the Attorney General. Enact the regulations as soon as practicable.

119. Enact environmental Protection Agency Regulations offering specific environmental impact assessment controls and requirements for all development projects pursuant to Yap State Code Title 18, Section 1509. This effort should be coordinated and merged, if possible, with a proposed new system of development review recently submitted by the University of Oregon Micronesia Program.

120. Although the University of Oregon proposal suggests that part of the cost of the development review process could be met by the developer's application fees, additional

State funding for increased staff and training costs will be required before effective review could be accomplished.

121. This proposed coordinated development review process seems both sensible and worthwhile. It would however, need to be coordinated with the environment impact assessment system established under the *Yap Environmental Quality Protection Act*. Extensive consultation with the Departments and agencies responsible for implementation of this proposal is essential, as is the considered development of clearly worded and easily understood procedures.

122. Code provisions regarding the issuance of building permits remain silent on specific assessment criteria or environmental zoning requirements. The provisions refer to the Yap Islands Proper Master Plan Area, an area not yet defined. Guidance for the Commission is required, perhaps in the form of Regulations. Proper planning criteria and guidelines for both the public and the Commission are desirable. Coordination with the Environmental Protection Agency is also necessary.

CHAPTER FIFTY SEVEN

FISHERIES - YAP

57.1 Existing Legislation

57.1.1 *Fishing Authority Act of 1979* (Yap State Code, Title 18)

This Chapter of the State Code creates a legal entity to promote, develop and support commercial use of living marine resources within the State of Yap. Pursuant to National law, the jurisdiction of the State seems not to extend beyond 12 miles from its island baselines, notwithstanding the wording of Section 5 of Article XIII of the Constitution, which refers to "marine space of the State within and beyond 12 miles from island baselines".

Yap Fishing Authority duties include helping establish and operate facilities required for commercial fisheries development which are not suitable for investment by the private sector, as well as establishing and supporting programs to promote and guide fishing cooperative associations. In addition, the Authority is charged with financing locally-owned private enterprise fishing ventures and supplying foreign fishing vessels. The Authority's business is conducted by a five-member Board of Directors. The Board may appoint a Manager as its Chief Executive Officer, as well as a Treasurer and an Attorney.

57.1.2 *State Fishery Zone Act of 1980* (Yap State Code, Title 18)

The purpose of the State Fishery Zone provisions is to promote economic development and manage and conserve living sea resources in Yap State. The State fishing zone is defined from the shore line to 12 nautical miles out to sea. This Act give the Yap fishing authority additional duties and powers, which include the power to adopt regulations for the conservation, management and exploitation of fisheries resources, and to regulate the activities of foreign fishing vessels within the fishing zone.

The Act contains detailed provisions for the licensing of foreign fishing vessels and provides steep civil penalties for breaches of foreign fishing permits and related offences occurring within the fishing zone. In addition, criminal penalties may be imposed, including fines of up to $100,000 or 2 years imprisonment, or both, for serious breaches of the Act's provisions. Comprehensive fishing vessel and gear forfeiture provisions are also present in this inclusive legislation. The Attorney General and his or her officers are granted wide powers of search and seizure.

57.1.3 Wildlife Conservation (Yap State Code, Chapter 10, Section 1008)

This section of the Code makes illegal the use of explosives, poisons, chemicals or other substances to catch fish. This provision carries fines of between $100 and $2,000, or a maximum of between 6 months or 2 years imprisonment, or both. The flexibility within this sentencing range is appropriate.

57.2 Key Issues

57.2.1 Yap Fishing Authority

One of the practical problems of conservation and management of fisheries that faces the State of Yap authorities is the overlap of responsibility given to the Yap Fishing Authority and the Marine Resources Management Division of the Department of Resources and Development. While the latter is charged with the promotion of "... economic development and the conservation and development of .... water, ... and other natural resources" (Yap State Code, Title 3, Chapter 1, Section 125), the Yap Fishing Authority is charged with adopting regulations for the conservation, management and exploitation of all living resources in the State Fishery Zone and internal waters. The internal waters are defined as the shore to the outer reef; the

State Fishery Zone is measured from the outer reef to 12 nautical miles from shore. This overlapped responsibility requires close coordination between the two agencies pending necessary amendments to the legislation.

57.2.2 Municipality of Rull

Local fishery-related environmental conservation measures have been enacted by the Municipality of Rull. In mid-1991, the municipality enacted a provision outlawing the use of fishing nets made of mesh less than 2 inches wide. The Director of the Department of Resources and Development and the Marine Resources Management Division have both encouraged this local legislation and suggested ways that it may be improved and made enforceable. There are no State Regulations which restrict the use of gillnets. An appropriate provision should be considered.

57.3 Recommendations

123. Assess the status of reef fish stocks and their availability to the local market; amend the *State Fishery Zone Act* to address possible restrictions on the export of reef fish.

124. Pass State legislation restricting gillnet fishing.

125. Assess reef owners' desire to control spear fishing. Consider prohibiting spear fishing with scuba equipment or flashlights on certain overused reefs.

CHAPTER FIFTY EIGHT

AGRICULTURE - YAP

58.1 Agriculture Extension Agents

The Yap State Code provides for the establishment of Agriculture Extension Agents. Sixteen of these agents work on Yap Proper and the other four work in the Outer Islands. Their duties are to assist and educate local farmers in coconut planting, thinning and bushing, copra processing, and vegetable and fruit crop production. They also demonstrate new agriculture techniques and assist the farmers market.

58.2 Control of animals

Agricultural efforts involving farm and domestic animals must comply with the Yap State Code requirements regarding penning of animals. All animals, other than dogs, fowl and cats, must be fenced under the provisions of the "Regulation of Animals" Chapter of the Code. In the larger population areas, dogs must have dog tags to avoid being impounded or destroyed. Provisions regarding stray or wild dogs should be more comprehensive, in order to address this potentially serious environmental health issue.

CHAPTER FIFTY NINE

COASTAL ZONE, MARINE AND REEF PROTECTION - YAP

59.1 Existing Legislation

59.1.1 Coastal Zone Management Plan

In November 1991, a draft marine resources and coastal management plan was prepared for the Marine Resources Management Division of the Department of Resources and Development. This plan supplements the Second Development Plan for marine resources and coastal areas of Yap.

59.1.2 Damage to Reefs

In December 1991, Section 815 of Title 11 of the Yap State Code was enacted, regulating reef and environmental damages. The Section creates a penalty of 60 days imprisonment, or a $250,000 fine, or both, if a person causes damage to a coral reef or damage to any part of the natural environment that is important to the maintenance of a coral reef, including its seagrass areas and mangroves.

This provision was designed to penalize persons responsible for oil spills or shipwrecks causing damage to reefs. It excludes damage caused to the reefs when FSM citizens exercise their traditional rights to fish or carry out other activities. It further excludes those persons who have complied with the environmental impact assessment requirements of Section 1509 of the Conservation and Resources Section of the Yap State Code.

59.1.3 Petroleum Spills

Yap State Code, Title 18, Section 404 provides for penalties to be paid to the State Government by any person who is found in a civil proceeding to have transgressed the provisions of Sections 402 and 403 relating to reef damage or petroleum spills. The amount of actual damage may be claimed up to $75,000, and each day is a separate offence for a continuing violation. Other sanctions relating to oil spill and reef damage provisions include forfeiture of vessels and injunctions.

In a sensible provision that assists the court in assessing an appropriate penalty level, the Section sets out criteria for court consideration. Such criteria includes consideration of the extent of the damage, the type of reef damaged or the amount of petroleum discharged, the nature, circumstances, extent and gravity of what was done, the degree of culpability to be attributed to the violator, and whether or not there has been a prior offence.

The Yap State Attorney General is authorized to bring proceedings to recover civil penalties. In this way, sums recovered may assist funding the policing of oil pollution and reef damage.

Section 405 of the Code provides that any transgressing vessels may be forfeited to the State Government of Yap. Half of the proceeds of sale of such forfeitures is paid to the Marine Emergency Internal Service Fund referred to below. Section 406 also allows injunctions in civil proceedings brought by the Attorney General to restrain any act and prevent possible violations of the reef damage and oil pollution provisions. The injunctions may be granted without provision of a bond by the applicant. Adequate penalties exist for a person who disobeys any injunctive order of the court.

Section 401 sets out wide powers of arrest, boarding of vessels, and search and seizure by the State Attorney General and his or her agents. This legislation specifically allows Yap citizens to bring civil actions against transgressors in addition to granting broad State powers to act against persons who damage reefs or spill oil.

59.1.4 *Marine Emergency Response Act*

The Yap State Code on Conservation and Resources was recently amended to create a Marine Emergency Response Board. The purpose of the legislation is to create an interagency emergency response team. The team is designed to be equipped to train and intervene in order to mitigate potential threats to the marine environment caused by a marine emergency event such as a shipwreck or an oil spill. The jurisdiction for this law includes the 12 mile Yap State Fishing Zone and the State's internal waters.

The Board meets regularly, or when called to a meeting by the Governor when a particular marine emergency exists. This Act requires the State Attorney General to provide legal advice to the Board and further requires the Attorney General to seek all appropriate legal remedies on behalf of the State of Yap, including bringing actions to enforce civil and criminal penalties against any parties who damage the marine environment.

The marine environment is broadly defined as the sea, coral reefs, coral grasses, channels, mangroves, rocks, and beaches and all living resources that exist there. The Board is given power to issue regulations regarding marine emergencies and to issue guidelines, including procedures for assessing and containing damage to the marine environment and investigating the causes of marine emergencies. The Board acts in a marine emergency through a special Team that is established for this purpose.

The Act sets up a Marine Emergency Internal Service Fund. The purpose of the Fund is to accumulate and provide monies to equip the Team. In another excellent provision of this new enactment, half of the money recovered under the civil penalties provisions referred to above for reef damage or oil spills goes into this Fund.

59.2 Key Issues and Recommendations

126. The recently drafted Marine Resources and Coastal Management Plan should be reviewed by all State conservation and environmental departments and agencies, and should be considered for final drafting and implementation.

127. The wording used in the customary fishing exemption to the reef damage Code provision allows FSM citizens to cause damage to reefs and other adjacent areas provided they are exercising traditional rights. This provision should be strengthened by delineating which specific traditional rights are covered by the exemption. A further amendment should limit the complete exclusion of persons who have submitted environmental impact assessment documents. Provision of environmental documentation regarding a development project should not prevent enforcement of this Section if excessive reef damage is still incurred.

128. Both National and Yap State environmental leaders have recently been assessing the benefits and appropriateness of using traditional enforcement systems, including Chiefs and community leaders, rather than the western judicial system of enforcement. Preliminary consensus favors using the western judicial system for oversight of larger-scaled, non-traditional activities. Smaller-scaled traditional activities should be subject to the traditional system of enforcement.

129. Create "fisheries committees" for oversight of reef fisheries management. One committee could be established for Yap Proper, and a second could be established for the Outer Islands. This proposal increases the likelihood of both effective enforcement of conservation measures and increased public awareness of environmental issues.

CHAPTER SIXTY

BIODIVERSITY CONSERVATION - YAP

60.1 Existing Legislation

NOTE: There are presently no specific legislative regulatory instruments establishing Yap State nature preserves or parks. The present enumeration of existing legislation is limited, therefore, to conservation of living resources.

* The Yap State Code provides a limited hunting season for wild pigeon from 1 October to 31 December. At no time of the year is wild pigeon allowed to be sold. In addition, the hunting of wild pigeon may be banned totally in a wildlife emergency. The Governor may declare such an emergency, for example, during periods of drought.

* The commercial sale of coconut crabs is banned in Yap State. Coconut crabs with a shell of less than 3 inches across (measured at the base) may not be taken, nor may any coconut crabs be taken between 1 June and 30 September, during their breeding season. Similarly, the commercial sale of turtle meat or turtle eggs and clam meat in Yap State is banned. Export of such items is not clearly banned, however.

* Yap State Code, Title 18, Chapter 10, Section 1009 provides for protection of trochus. This section allows the Governor to designate seasons and restrictions on the size and catch of trochus. Sadly, many areas of Yap have extremely depleted trochus populations. This provision is necessary to allow the reintroduction of trochus in Yap State.

* Yap State Code, Title 18, Chapter 10, Section 1010 prevents the taking or harvesting of "any species which has been seeded or planted" by the State Government.

* Yap State Code, Title 18, Chapter 10, Section 1011 permits the Governor to declare a temporary moratorium prohibiting the taking or harvesting of marine life upon being convinced that the population of the marine life area is in imminent danger of dropping below a minimum desirable maintenance level.

* Yap State Code, Title 18, Chapter 10, Section 1101 protects fruit bats. The Governor is given power to restrict the taking, hunting, purchasing or selling of fruit bats by restricting the season for so doing.

60.2 Key Issues and Recommendations

130. In conjunction with the National Government, and pursuant to jurisdictional requirements set forth in the Joint Opinion of the Attorney Generals of FSM and of the four States, enact comprehensive legislation for the consolidation of species protection and introduction of related habitat protection at the State level.

131. Redraft and expand the Code provisions relating to the protection of turtles. The draft Yap State Marine Resources Coastal Management Plan offers the following drafting suggestions in its September 1991 working paper:

- define the species involved, using the scientific, common English and vernacular names;

- ban the commercial sale of turtle products;

- ban the collection of turtle eggs;
- protect hatchlings ;
- set out appropriate turtle capture methods and seasons;
- protect turtle nesting and feeding habitats;
- discourage the use of non-traditional vessels, including government vessels, to facilitate turtle hunting; and
- regulate customary usage and control.

Note: The Marine Resources Management Division is currently working with the two Councils of Chiefs to develop suitable recommendations for new legislation in this area.

CHAPTER SIXTY ONE

CULTURAL HERITAGE - YAP

61.1 Existing Historic Preservation Legislation

Historic preservation provisions exist in the Yap State Code, as well as in the State Constitution. These "Preservation of Culture" Code provisions are prefaced by the findings of the Legislature that:

* Yap people have an ancient and distinguished history, and have played an important role in the history of Micronesia;

* Sites, structures, buildings, objects and areas of historic and cultural significance have been damaged and objects have been removed from Yap;

* Traditions, arts, crafts, stories and songs of historic and cultural significance are in danger of being lost;

* The spirit and direction of the State of Yap are founded upon and reflected in its historic past.

This body of legislation makes it mandatory for the Yap State Government to implement a program to identify, protect and preserve historic properties and historic culture.

An Historic Preservation Office is established pursuant to the "Preservation of Culture" Code Sections. Code Title 5, Chapter 4, Section 405 requires the State Government, before permitting, assisting or engaging in any activity which may have an impact on historic properties, to notify the Yap Historic Preservation Office. Upon notification, the Office must analyze any activity which is likely to have an impact on traditional culture. The Office must increase beneficial effects and eliminate or mitigate any harmful effects to historic properties or traditional culture from the proposed activity.

If review consensus cannot be achieved, all parties must submit reports of their findings and recommendations to the Governor, who shall review the conflict and make a decision resolving the conflict. Gubernatorial guidelines are offered for this effort. The Governor must consider the value of the activity to the economic and social development of Yap and the value of the historic property or traditional culture affected.

The Yap Historic Preservation Office has other powers and duties, set out in Section 407. Among them are the promotion and establishment of a State Historic Park System and its administration, and the conduct and support of archaeological surveys for identification of historic property. There is provision for the Councils of Pilung and of Tamol to be involved in the process in an advisory capacity to the Office.

Under this legislation, no person may wilfully remove historic property from Yap or disturb, damage or destroy such property without the express written permission of the Governor, a local member of the Council of Traditional Chiefs, and a Historic Preservation Officer. A maximum fine of $2000 or one year in jail is provided for violations against these historic preservation provisions.

Historic Preservation authorities have identified two major unresolved environmental issues during the course of their work. First, many cultural sites are not adequately protected from destruction by earthmoving or vandalism. Second, many culturally important sites have not yet been surveyed. They issues should receive priority attention in future work plans developed by the Historic Preservation Office.

61.2 Yap Institute of Natural Science

The Yap Institute of Natural Science is a non-governmental organization founded in 1975. Two full-time workers staff the organization; villagers also work with the Institute. The Institute is dedicated to maintaining indigenous integrity through sustainable use of local resources and through the exploration of traditional cultural and scientific knowledge. The Institute has an important role in the promotion of public education regarding both cultural and environmental issues.

The link between the land and the people of Yap, and the importance of natural and cultural preservation, is addressed in a recent letter from the Institute to the Secretary of the National Department of Human Resources:

> ... one of the basic inalienable rights of a Micronesian should be the option to at least subsist on island resources. This does not mean that Micronesia cannot develop beyond a subsistence level, but rather that this development should not make it impossible for a Micronesian to be able to support himself on a sustainable basis, through the use of renewable resources. The maintenance of such an option would mean that Micronesians could remain a free people. To give up this option for short economic alternatives would result in obligatory dependence on outside resources.

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Trust Territory Pesticides Regulations
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Trust Territory Solid Waste Regulations
Trust Territory Regulations
United States National Environmental Protection Act

KOSRAE

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About the Reviews of Environmental Law

The National Environment Management Strategies which have been developed over the past two years in a number of Pacific countries have highlighted a wide range of environmental problems. They have also indicated the urgent need for administrative and legal responses to these problems.

The Reviews of Environmental Law have been carried out as part of the National Environment Management Strategy process. Each of the legal consultants has endeavoured to ensure that there has been broad input from relevant organisations and individuals in the Reviews. This input has been invaluable.

The Reviews indicate that there are many common problems faced by each country, related to the development of adequate legal frameworks for the conservation of the natural and social environment and the proper allocation of natural resources. They clearly indicate that some major initiatives in environmental law are required in each country, both in terms of the need to draft new legislation as well as in the implementation and enforcement of existing legislation. Also clear is the need for environmental legal education initiatives specifically aimed at administrators of the environmental legislation.

Each of the Reviews has made extensive suggestions for reform of the law relating to the environment. With more modern environmental legislation and improved enforcement measures, combined with the initiatives set out in the National Environmental Management Strategies and related documents, the goal of sustainable development will become easier to achieve.

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