



*Environmental
Legislation
Review*



Palau

Environmental Legislation Review – Republic of Palau

1994

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*Report for the
South Pacific Regional Environment Programme
and the
Government of the Republic of Palau*

*produced as documentation in support of the
National Environmental Management Strategy (NEMS)
for the Republic of Palau
with financial assistance from the
United Nations Development Programme (UNDP)*



USP Library Cataloguing-in-Publication data:

Pulea, Mere

Environmental legislation review : Republic of Palau/by Mere Pulea. - [Apia, Western Samoa] : SPREP, 1994

xvi, 99 p. ; 29 cm

Includes bibliographical references.

ISBN 982-04-0094-5

1. Environmental Law - Palau 2. Environmental policy - Palau 3. Palau - Environmental conditions - Law and Legislation 4. Environmental protection - Palau - Law and legislation I. South Pacific Regional Environment Programme II. South Pacific Regional Environmental Management Strategy Project (NEMS) II. Title

HC79.E5P84 344.04609966

Prepared for publication by the South Pacific Regional Environment Programme,
Apia, Western Samoa

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Editor
Roslyn Sharp

Cover design by Peter Evans based on
an original design by Catherine Appleton

Printed on 110 gsm Tudor R.P. (100% recycled)
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**Produced with financial assistance from the
United Nations Development Programme (UNDP)**

Foreword

This Environmental Legislation Review for the Republic of Palau has been produced as an important component of the National Environmental Management Strategies (NEMS) Project. The NEMS Project was developed to address sustainable environmental development and planning issues in a number of Pacific island countries. It was funded by the United Nations Development Programme (UNDP) and implemented through the South Pacific Regional Environment Programme (SPREP) as part of a broader UNDP assistance project called Pacific Multi Island (PMI): Planning and Implementation of Pacific Regional Environment Programme which concentrates on regional and in-country institutional strengthening and training of environmental managers.

Pacific islanders have lived in close harmony with their island environment for thousands of years and are well aware of its importance to their way of life. Pacific peoples today face the complex challenge, common to 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 laws, taking into account also traditional customary measures aimed at environmental protection. This review also investigates administrative procedures and policy to determine ways of incorporating and strengthening environmental laws within the existing structure in each of the Pacific island countries associated with this project.

The Environmental Legislation Review for the Republic of Palau looks at laws, administrative procedures and policy in terms of their effectiveness in addressing the major environmental issues existing in Palau. The research has had a particular focus on the development of practical recommendations that build on the findings of the Review. This Review thus represents an important step along the road to improved environmental management and protection of the Pacific region.

This document forms one part of a series of legal reviews undertaken in several Pacific island countries. I would like to thank Ms Mere Pulea for her work in preparing this Environmental Legislation Review.



Vili A. Fuavao
Director
South Pacific Regional Environment Programme

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Acronyms

BMDC	Belau Mariculture Demonstration Center
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
EIA	Environmental Impact Assessment
EEZ	Exclusive Economic Zone
EIS	Environmental Impact Statement
EQPB	Environmental Quality Protection Board
FFA	Forum Fisheries Agency
IUCN	World Conservation Union
NEMS	National Environmental Management Strategy
NPDES	National Pollutant Discharge Elimination System
PFA	Palau Fishing Authority
PMA	Palau Maritime Authority
PNC	Palau National Code
PVA	Palau Visitors Authority
RPPL	Republic of Palau Public Law
SPREP	South Pacific Regional Environment Programme
TCSP	Tourism Council of the South Pacific
TTPI	Trust Territory of the Pacific Islands
UNCED	United Nations Conference on Environment and Development
USDA	United States Department of Agriculture

Acknowledgments

This Environmental Legislation Review for the Republic of Palau has relied on the Palau National Code, reports and interviews to evaluate the effectiveness of the laws. The short period of time spent in-country (February 23 to March 2, 1994) must be kept in mind when reading the Review as it was not possible to analyze in depth the effectiveness of all the laws listed here. Such a review is however the first step — further research by Palauans on the current laws and customary practices affecting the environment is also necessary.

The Review was circulated in draft form to Government authorities, non-governmental organizations and those directly concerned or interested in this area. Their comments were taken into account in finalizing the Review.

The Review was coordinated by the Director of the Bureau of Natural Resources and Development, Mr David Idip, and members of his staff. Discussions were also held with the consultants responsible for the Palau National Master Development Plan. The names of those who kindly agreed to be interviewed are listed below.

I wish to thank all those in the various departments and organizations who provided invaluable assistance in the compilation of this Review. In particular, my appreciation is extended to:

David Idip
Director
Bureau of Natural Resources and Development

Demei Otobed
Chief Conservationist
Division of Conservation and Entomology

Noah Idechong
Chief
Division of Marine Resources

Herman Francisco
Chief
Division of Agriculture and Mineral Resources

Victorio Uherbelau
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I also wish to thank Don Matthews for providing secretarial support. I alone am responsible for any gaps and shortcomings in this Review.

Mere Pulea
March 1994

Conclusions and Recommendations

Chapter 5 Physical Planning and Assessment

1. Conditional uses set out in the zoning provisions be reviewed to take into account current development and practices.
2. Special consideration should be given for the protection of mangrove areas, in forestry, fisheries and earthmoving legislation.

Chapter 6 Agriculture

3. The range of legislation providing for agriculture be reviewed with the objective of bringing the legislation into line with current practices.
4. The existing laws regulating agricultural activities be strengthened to include environmental protection, such as soil conservation measures.
5. The Land Planning Act providing for the zoning of agricultural lands be reviewed and updated to protect good agricultural land from encroachment and other users.
6. A more comprehensive Agricultural Act be considered.

Chapter 7 Forestry

7. A comprehensive framework Forestry Act be developed and introduced.
8. The framework Act should include the various classifications of forests and their management requirements.
9. Provision be made for environmental impact assessments where required.
10. That the draft Palau Forest Practices Bill and the Palau Wildland Fire and Forest Management Bill be amalgamated and broadened to form the basis of a framework Act.
11. That forest planning be made a central function of forest management.
12. Consideration be given to the development of a Code of Logging Practices.

Chapter 8 Fisheries

13. The various pieces of legislation providing for the various aspects of fisheries such as domestic fishing, foreign fishing, the conservation and protection of species be consolidated into one piece of framework legislation.

Chapter 10 Mining and Minerals

14. Environmental content in the draft Mines and Minerals Bill is found to be satisfactory, but the draft Petroleum (Marine Area Exploration and Production) Bill and Regulations need to be reviewed for environmental content. The following further suggestions are made:
- (a) that the Petroleum (Marine Area Exploration and Production) Bill be specifically reviewed for environmental content;
 - (b) that the Earthmoving Regulations and the Building Materials License provisions in the draft Mines and Minerals Bill be reviewed together to reduce overlapping responsibilities;
 - (c) as earthmoving activities such as quarrying are clearly within the responsibilities of the Division of Agriculture and Mineral Resources, under the draft Mines and Minerals Bill, it would appear that this could overlap with the Earthmoving Regulations implemented by EQPB; some consideration may be given at some stage in the future, if considered desirable, to placing the responsibilities for implementing the Earthmoving Regulations under the Division of Agriculture and Mineral Resources;
 - (d) that specific provisions be made for EIAs to be conducted before approval is given for mining operations in the draft Bills and Regulations;
 - (e) although an environmental impact statement is required for the mining phase of minerals, it is further suggested that complementary provisions be required during the reconnaissance and prospecting phases;
 - (f) the draft Mines and Minerals Bill and the draft Petroleum (Marine Area Exploration and Production) Bill make no reference to the question of ownership, particularly of findings in the seabed and the subsoil. It is suggested that to avoid conflicting provisions, the legislation regulating Public Lands (see PNC Title 35), which places the ownership of land below the high water mark in the national government, be considered.

Chapter 12 Biodiversity Conservation

15. When the Republic of Palau considers it desirable to become a Party to the Convention on Biological Diversity, or to the SPREP or Apia Conventions, a more detailed evaluation than the one given here of the current national laws relating to biological diversity will become necessary.

Chapter 13 Wildlife Conservation

16. The Endangered Species Act 1975 and proposed amendments and draft regulations, the draft Palau Forest Practices Bill and draft Mines and Minerals legislation be viewed together for the incorporation of an efficient consultative process to resolve problems that could arise where mining or timber harvesting have been permitted under the relevant legislation. These legal activities could be constrained by the Endangered Species legislation, especially in the areas designated as “critical habitat”, or areas where threatened and listed endangered species are to be found.
17. The provisions in PNC Title 24 dealing with wildlife and the various pieces of draft legislation on wildlife be incorporated under a single piece of umbrella legislation for ease of implementation.

Chapter 14 Protection of National Heritage

18. The use of Heritage Agreements as a device for landowner cooperation to protect heritage properties, if considered desirable, should be given legislative support.

1 Introduction

1.1 Introduction

This Environmental Legislation Review for the Republic of Palau was carried out in Palau from February 23 to March 2, 1994. The Review is part of the South Pacific Regional Environment Programme's (SPREP) National Environmental Management Strategy (NEMS) project undertaken in seven Pacific Island countries. One component of the NEMS project is providing an inventory, description and assessment of laws relevant to the environment to enable governments to make their own decisions on the standards of environmental legislation required and set the pace for appropriate reforms. This Review follows a similar format to those undertaken in other countries under the NEMS project and the SPREP Regional Environment Technical Assistance (RETA) programme.

1.2 Purpose

The purpose of this Review is to assess the present state of the existing laws concerning the protection and conservation of the environment. The view taken here as to what constitutes the environment is a broad one, encompassing not only natural resources in both the terrestrial and marine environment (including ecosystems, wildlife, fauna and flora), but also the built environment. This Review examines the existing environmental laws and their effectiveness as they relate to the environment. It does not seek to examine in detail all aspects of environmental problems and the laws addressing these problems, but rather to identify the existing legal provisions that directly or indirectly seek to prevent environmental harm, and those that conserve and protect the environment.

It is hoped that this overview of the existing environmental provisions in the Palau legal system will allow and encourage Palauans to examine more closely the effectiveness and impact of the existing laws on the environment. This Review is essential for two reasons:

- (1) it should provide a better understanding of the strengths and weaknesses of the existing law to protect and conserve the environment by examining the substantive content of the law and whether the long-standing procedures and practices continue to be useful; and
- (2) it provides the background for changes considered necessary to the existing law.

Environmental problems, however, cannot be solved by the law alone. Sound environmental policies, administrative decisions and directives, enforcement of the law, public participation and community action are all just as important.

1.3 Environment and Sustainable Development

In 1972 the Declaration of the United Nations Stockholm Conference on the Human Environment recognized that the environment could not sustain unlimited development and that environmental protection was inextricably linked with economic development (United

Nations 1972). The World Conservation Union (IUCN) adopted a *World Conservation Strategy* in 1980 which promotes the sustainable utilization of natural resources. Its Foreword is particularly pertinent to this Review:

Human beings, in their quest for economic development and enjoyment of the riches of nature, must come to terms with the reality of resource limitation and the carrying capacities of ecosystems, and must take account of the needs of future generations. This is the message for conservation. For if the object of development is to provide for social and economic welfare, the object of conservation is to ensure Earth's capacity to sustain development and to support all life (IUCN et al. 1980).

The World Charter for Nature adopted by the United Nations General Assembly in 1982 promotes optimal sustainable productivity of all resources coupled with conservation and protection (Birnie & Boyle 1992). The World Commission on Environment and Development in 1987 defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). In further crystallizing the aims of the World Charter to ensure sustainable development at both the national and international levels, economic and social development goals must be clearly defined in order to secure sustainable development. The 1992 United Nations Conference on Environment and Development (UNCED) convened in Rio de Janeiro, Brazil, sought to tackle the complex problems of economic development to ensure that the utilization of natural resources is carried out in a sustainable manner at all levels.

The question of environmental controls in countries where economic development is considered the highest priority does open up a range of issues which developing countries need to grapple with. There is no simple or easy solution. As the concept of sustainable development is basic to survival, there is an increasing consensus among countries that this should be the norm to be applied at all levels of development. Countries need to develop strategies and techniques to deal with the wide-ranging scope of these responsibilities and the growing importance of the environment. It is also difficult not to relate a country's environmental initiatives to the environmental policies and practices carried out at the regional and global levels.

1.4 Agenda 21

Agenda 21, an action strategy for the next decade endorsed by UNCED, encourages the integration of environment and development in the decision-making process. Chapter 8 of Agenda 21 makes the observation that while there is a continuous need for law improvement, many developing countries have been affected by shortcomings of laws and regulations (UNCED 1992). To effectively integrate environment and development in the policies and practices of each country, it is essential to develop integrated, enforceable and effective laws and regulations that are based upon sound social, ecological, economic and scientific principles. It is equally critical to develop workable programs to review and enforce compliance with the laws, regulations and standards that are adopted.

1.5 Environmental Policies – Republic of Palau

The Environmental Quality Protection Act (RPPL 1-58 s.102 PNC Title 24) sets out the environmental policy for Palau in the following way:

The Olbiil Era Kelulau [Legislative Branch of the Palau National Congress], recognizing the profound impact of human 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 technological advances, and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of humankind, declares that it is the continuing policy of the national government, in cooperation with state governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which humankind and nature can co-exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of the Republic.

In order to carry out the above policy it is the continuing responsibility of the national government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate governmental plans, functions, programs, and resources to the end that the inhabitants of the Republic may:

1. Fulfill the responsibility of each generation as trustee of the environment for succeeding generations;
2. Assure for all Palauans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety or other undesirable and unintended consequences; and
4. Preserve important historical, cultural and natural aspects of our Palauan heritage, and maintain wherever possible an environment which supports diversity and variety of individual choice.

The Olbiil Era Kelulau recognizes that each person has a fundamental right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

The scope of the environmental policies set out above emphasizes the recognition of the interrelationship between economic growth and the protection of the environment. The devotion of the whole of Title 24 to the protection of the environment not only implements those policy goals, but also means that such obligations and policy objectives must be taken into account when drawing up new “environmental” legislation.

1.6 Constitutional Provisions

The Preamble to the Constitution of Palau reaffirms the dedication of Palauans to preserve and enhance their traditional heritage. Under Article II, section 3, any agreement or compact between Palau and another sovereign nation or international organization which authorizes the use, testing, storage or disposal of nuclear, toxic chemical, gas or biological

weapons intended for use in warfare shall require the approval of not less than three-fourths of the votes cast in a referendum.

The environmental responsibilities of the national government are further set out in Article VI of the Constitution which states that the "national government shall take positive action to attain these national objectives and implement these national policies: conservation of a beautiful, healthful and resourceful natural environment".

1.7 The Laws of Palau

Crucial to an assessment of the current state of environmental law in Palau is an understanding of the sources from which it derives. Since environmental law is taken in this Review to be all those laws aimed at protecting and conserving the environment and regulating activities which may affect the environment, it involves not only the state's responsibility nationally but its responsibility to protect the regional and global environment.

In terms of legal history, the laws of Palau have been born from different sources as successive foreign powers administered the country. The Spanish introduced laws during their 14-year rule from 1885 to 1899; these were followed by German laws from 1899 to 1914 and Japanese laws from 1914 to the end of World War Two in 1945 under a mandate of the League of Nations. Under Article 75 of the Charter of the United Nations an International Trusteeship System was established for the administration and supervision of territories and under Article 77 of the Charter, the Trusteeship System was applied to territories held under mandate. On December 17, 1920 the Council of the League of Nations (later United Nations) passed a mandate on former German-controlled islands to Japan. Article 1 of the Trusteeship Agreement designated Palau as a strategic area. In 1947 the United States of America became the administering authority of the Trust Territory (Art.2).

As administering authority, the United States was given

full powers of administration, legislation, and jurisdiction over the territory subject to any modifications which the administering authority may consider desirable such of the laws of the United States as it may deem appropriate to local conditions and requirements (Art.3).

The responsibility for administrative, executive, judicial and legislative matters was vested in the Secretary of the Navy and later the Secretary of the Interior. The executive authority of the government of the Trust Territory was later vested in a High Commissioner. Legislative authority was vested in the Congress of Micronesia (established in 1965) which consisted of two houses: the Senate and the House of Representatives. Any legislation passed by the Congress of Micronesia was not to be inconsistent with:

- (a) Treaties or International Agreements of the United States;
- (b) Laws of the United States applicable to the Trust Territory;
- (c) Executive Orders of the President of the United States and Orders of the Secretary of the Interior; or

- (d) Section 1 through 12 of Title 1 of the Trust Territory Code which deals with the Bill of Rights.

Secretarial Order No. 3027 issued on October 1, 1978 provides for the interim transition to governments based on locally developed Constitutions. The Congress of Micronesia was replaced by the Interim Congress of the Federated States of Micronesia, the Palau Legislature and the Marshall Islands Nitijela. The Trust Territory statutory laws were to continue in full force and effect unless modified or repealed by any Trust Territory Legislature for its respective jurisdiction.

1.8 The Palau National Code

The Palau National Code (PNC) adopted in 1985 has a mixture of laws passed by the Olbiil Era Kelulau (Legislative Branch of the Palau National Congress), the Trust Territory Codes and the laws of the United States which are made applicable to Palau. Some Trust Territory laws have been adopted without modification while some have been amended to suit the circumstances of Palau. Laws of the United States made applicable to Palau, for example the Clean Water Act, continue in force until such time as the Trusteeship arrangement terminates and when the Olbiil Era Kelulau adopts or renders them inapplicable to Palau.

1.9 Customary Law

The Constitution of Palau is the supreme law and any law, act of government, or agreement to which a government of Palau is a party, shall not conflict with the Constitution and shall be invalid to the extent of such conflict (Art.II). Under Article V of the Constitution, statutes and traditional law are to be equally authoritative. In case of conflict between a statute and a traditional law, the statute shall prevail only to the extent that it is not in conflict with the underlying principles of the traditional law (s.2). It would appear that in some circumstances traditional law could rank higher than statutory law.

1.10 Law by Initiative

An interesting law-making provision in the Constitution of Palau gives rights to citizens of Palau to enact or repeal national laws by initiative, except for laws concerning appropriations. Under Article XIII (s.3) of the Constitution of Palau, an initiative petition containing the text of the proposed law or the law to be repealed must be signed by not less than ten percent of the registered voters. An initiative petition shall take effect, if approved, at the next general election by a majority of the persons voting on the initiative. A law enacted by initiative or a repeal of a law by initiative may be subsequently amended, repealed or re-enacted only by another initiative.

1.11 Palau National Master Development Plan

The drafting of the Palau National Master Development Plan (Master Plan) was in progress during the period of this Review. The environmental component to be considered in the Master Plan as set out in the Statement of Work (May 14, 1993) includes a Rapid

Ecological Assessment of Palau to identify fragile ecosystems worthy of protection, establish strategies for the sustainable exploitation of natural resources and assess proposed development projects to ensure efficient spatial distribution to minimize their adverse effects on the environment. The Master Planner will coordinate a comprehensive review of Palau's legislative and institutional needs related to the environment, taking into account the requirements of the United States National Environmental Policy Act. The Master Plan will include:

- a process for the establishment of a park or nature reservation system;
- a process for timely environmental impact review of all significant projects;
- draft legislation on mitigation and impact and user fees to limit human and development pressures on the environment; and
- a conservation strategy to include endangered species conservation and law enforcement capability.

1.12 Scope of the Review

There already exists a substantial body of environmental law in Palau. Environmental provisions are scattered throughout a number of pieces of legislation and State laws. In addition, Title 24 is devoted to environmental protection.

As the primary focus of this Review is on legislation, some assessment, where possible, has been made of its effectiveness and enforcement capabilities. A brief chapter describing the land tenure system has been included to indicate the complexities of landholding rights and that environmental laws, particularly those relating to land use, cannot be fully understood without some appreciation of land tenure.

The laws examined in the Review include both current and proposed laws. The proposed laws were reviewed principally for environmental content. The environment-related provisions of the Compact of Free Association between the Government of the Republic of Palau and the United States of America have also been included because of their far-reaching environmental implications. The Review includes recommendations on the environmental content of both existing and proposed laws; and suggestions have been made for their interrelationships to be taken into account for ease of implementation. It must be stressed that the recommendations made are no more than recommendations. The final decisions on any changes to the legislation considered desirable are made by the national authorities.

2 *Constitutional and Administrative Structure*

2.1 *Relevant Legislation and Legal Instruments*

Constitution of Palau
Compact of Free Association
Trusteeship Agreement

2.2 *Introduction*

The islands of Palau were settled by immigrants from South-East Asia as far back as 1000 BC and have had regular contacts with Europeans from about 1783 AD (Ottley 1993). The expansion of Spanish and German influence in the Pacific in the 1800s led to disputes over control of the Caroline Islands, including Palau. The dispute was submitted for arbitration to Pope Leo XIII, who confirmed Spanish sovereignty over Palau. Following the defeat of Spain in the Spanish-American War in 1899, Spain sold Palau to Germany who administered the islands until 1914 when Palau was invaded by Japan and passed to Japanese control during World War One. In 1920 the League of Nations mandated Palau as well as other islands in the Micronesian group to be administered by Japan, with Palau becoming the administrative center for its Micronesian possessions. Large-scale immigration, plantation agriculture, mining of phosphate and bauxite, and commercial fishing radically changed traditional Palauan culture (Ottley 1993).

During World War Two in the Pacific, the United States forces captured Palau and other Micronesian islands held under Japanese control. In 1947 the United Nations Security Council authorized the United States to administer Palau, the Federated States of Micronesia, the Northern Mariana Islands, and the Marshall Islands as "strategic trusts" to be called the Trust Territories of the Pacific Islands.

Article 3 of the Trusteeship Agreement gave the United States as administrative authority full powers of legislation, administration and jurisdiction over the territory, subject to any modification considered desirable such as the laws of the United States as it deemed appropriate to local conditions and requirements. Under Article 6, the administering Authority was charged with the responsibility of fostering the development of political institutions and promoting development towards self-government, giving due recognition to the customs of the inhabitants in providing a system of law for the territory. Other obligations included the promotion of economic advancement and self-sufficiency of the inhabitants; to this end, the Authority should regulate the use of natural resources, encourage the development of fisheries, agriculture, industries and the protection of the inhabitants against the loss of their lands and resources.

In 1951 the administration of Palau was transferred from the US Secretary of the Navy to the Secretary of the Interior. The islands were then governed by a High Commissioner appointed by the President of the United States. In 1965, the Congress of Micronesia, a bicameral legislature, was established for the Trust Territory. In 1969, the United States began negotiations with the Congress of Micronesia on the political future of the Trust

Territory. By 1981 Palau had achieved semi-self-government when the Constitution of Palau was adopted by referendum. In 1982, Palau and the United States signed a Compact of Free Association but because the provisions in the Compact conflict with Palau's Constitution, the Compact had not been implemented at the time of this Review.

Article II(3) of Palau's Constitution states that any treaty, compact or agreement "which authorizes use, testing, storage or disposal of nuclear, toxic chemical, gas or biological weapons intended for use in warfare shall require approval of not less than three-fourths (3/4) of the votes cast in (a) referendum". Article XIII(6) of the Constitution further provides that:

Harmful substances such as nuclear, chemical, gas or biological weapons intended for use in warfare, nuclear power plants, and waste materials therefrom, shall not be used, tested, stored, or disposed of within the territorial jurisdiction of Palau without the express approval of not less than three-fourths (3/4) of the votes passed in a referendum submitted on this specific question.

The Palau Constitution requires the Compact to be approved by referendum. After seven previous failures to attain the constitutional requirement of three-fourths majority, in November 1992, the voters approved the holding of a referendum that would allow an amendment of the nuclear-free provisions in the Constitution by a simple majority instead of 75 percent (Ottley 1993).

The Compact of Free Association gives Palau full internal autonomy and the authority to conduct its own foreign affairs in "free association" with the United States. The United States assumes full responsibility for the security and defense of the country for up to 50 years. The Compact also requires the United States to provide substantial economic and technical assistance.

2.3 Environmental Provisions Incorporated in the Compact

Article VI of the Compact declares that it is the policy of the United States and the Government of Palau to promote efforts to prevent or eliminate damage to the environment and biosphere and to enrich understanding of the natural resources of Palau (s.161). In respect of activities carried out by the Government of the United States in Palau and "with respect to substantively equivalent activities of the Government of Palau, each of the Governments shall be bound by such environmental standards as may be mutually agreed for the purpose of carrying out the policy set forth in the Compact" (s.162).

In order to carry out the policies set out in Article VI of the Compact, the Government of the United States and the Government of Palau agree to the following undertakings:

(a) The Government of the United States:

- (1) shall apply environmental standards substantively similar to those in effect on the day preceding the effective date of this Compact to any activity requiring the preparation of an Environmental Impact Statement under the provision of the

National Environmental Policy Act of 1969, 83 Stat. 852, 42 U.S.C. 4321 et. seq.

- (2) shall develop, prior to conducting any activity included within the category described in this Section, [mechanisms] including regulations or other standards and procedures, to regulate such activity in Palau in a manner appropriate to the special governmental relationship set forth in this Compact. The Government of the United States shall provide the Government of Palau with the opportunity to comment formally during the development of such mechanisms.
- (b) The Government of Palau shall develop standards and procedures to protect the environment of Palau. As a reciprocal obligation to the undertakings of the Government of the United States under this Article, the Government of Palau, taking into account the particular environment of Palau, shall develop standards for environmental protection substantively similar to those required of the Government of the United States by Section 163(a)(1) prior to conducting activities in Palau substantively equivalent to activities conducted there by the Government of the United States and, as a further reciprocal obligation, shall enforce those standards.
- (c) Section 163(a), including any standard or procedure applicable thereunder in Section 163(b) may be modified or superseded in whole or in part by agreement of the Government of the United States and the Government of Palau.
- (d) Disputes arising under this Article, except for Section 163(e), shall be resolved exclusively in accordance with Article II of Title Four.
- (e) The President of the United States may exempt any of the activities of the Government of the United States under this Compact and its related agreements from any environmental standard or procedure which may be applicable under this Article if the President determines it is to be in the paramount interest of the Government of the United States to do so, consistent with Title Three of this Compact (Security and Defense Relations) and the obligations of the Government of the United States under international law. Prior to any decision pursuant to this subsection, the views of the Government of Palau shall be sought and considered to the extent practicable. If the President grants such an exemption, to the extent practicable, a report with his reasons for granting such exemption shall be given promptly to the Government of Palau.

The Compact is due to be implemented in 1994.

2.4 System of Government

Palau has adopted a modified federal system of government. Under the Constitution, governmental responsibilities are shared by the national government and 16 States (Art.XI) which are:

Aimeliik
Angaur
Ngardmau
Ngaremlengui
Ngaraard
Ngaremlengui
Ngchesar
Sonsorol

Ngatpang
Airai
Kayangel
Melekeok
Koror
Peleliu
Tobi
Ngiwal

Each of the 16 States has a Constitution providing for a Governor and State Government. Under Article XIII of the Constitution of Palau, no State may secede from Palau but a new State may be created upon the approval of the Olbiil Era Kelulau and not less than three-fourths of the States.

Article XI of the Constitution of Palau provides for state governments to be structured and organized on democratic principles and traditions of Palau. All governmental powers not expressly delegated by the Constitution to the States nor denied to the national government are powers of the national government. The national government may delegate powers by law to the state governments. The Constitution empowers the State legislature to impose taxes and, subject to the approval of the Olbiil Era Kelulau, borrow money to finance public programs or settle public debt.

2.5 National Government

The Chief Executive of the National Government is the President assisted by a Vice President (Art.VIII). Under Article VIII of the Palau Constitution, any citizen of Palau who is at least 35 years of age or over and has been resident in Palau for five years is eligible to hold office as President or Vice President. The President and Vice President are elected for four-year terms and the President may not serve for more than two consecutive terms.

In addition to the President and Vice President, the executive also consists of a Cabinet of Ministers who are heads of the major executive departments created by law. Members of Cabinet are appointed by the President with the advice and consent of the Senate and shall serve at the will of the President. No person shall serve in the Legislature and the Cabinet at the same time.

2.6 Legislature

The legislative power of Palau is vested in the Olbiil Era Kelulau which consists of two houses: the House of Delegates and the Senate. Senators and Delegates are elected for a four-year term (Art.IX). The House of Delegates is composed of one delegate popularly elected from each of the States of Palau (Art.IX s.3).

One of the functions of the Olbiil Era Kelulau is to regulate the ownership, exploration and exploitation of natural resources. No law may be enacted by the Olbiil Era Kelulau except by the introduction of Bills passed by each House. A Bill may only become law if adopted

by a majority of the members of each House present on three separate readings. A Bill adopted by each House becomes law on the signature of the President. A Bill may be vetoed by the President or referred to each House with recommendations for amendment. The President may not refer a Bill for amendment a second time. A Bill not signed, vetoed or referred within 15 calendar days of presentation to the President shall become law (Art.IX ss.14,15).

2.7 Traditional Aspects of the Constitution

A Council of Chiefs composed of traditional chiefs from each of the 16 States is established under Article VIII(6) of the Constitution of Palau. No-one can become a member of the Council of Chiefs unless he has been appointed and accepted as a chief in a traditional manner and recognized by the traditional Council of Chiefs of his State. The function of the Council of Chiefs is to advise the President on matters concerning traditional laws, customs and their relationship to the laws of Palau and the Constitution.

Under Article V of the Constitution of Palau, the government shall take no action to prohibit or revoke the role or function of a traditional leader as recognized by custom and tradition which is not inconsistent with the Constitution nor prevent a traditional leader from being recognized, honored, or given formal or functional roles at any level of government. Article V(s.2) accords statutes and traditional law to be equally authoritative. In case of conflict between a statute and a traditional law, the statute prevails only to the extent it is not in conflict with the underlying principles of the traditional law.

Only citizens of Palau and corporations wholly owned by citizens of Palau may acquire title to land or waters in Palau (Art.XIII(8)). A citizen of Palau is defined in Article III of the Constitution to include a person who is a citizen of the Trust Territory prior to the coming into effect of the Constitution and who has at least one parent of recognized Palauan ancestry (s.1); or a person born of parents one or both of whom are citizens of Palau (s.2); or a person born of parents one or both of whom are of recognized Palauan ancestry may reside in Palau and enjoy rights and privileges as provided by law which shall include the right to become a naturalized citizen (s.4). Article III prohibits a person from holding dual nationality as there is specific provision to renounce other citizenship on becoming a citizen of Palau (ss.2,3,4).

2.8 Sources of Law – Summary

Article II of the Constitution of Palau makes the Constitution the supreme law and no law, act of government, or agreement to which the government is a party may conflict with the Constitution. The Palau National Code (PNC) adopted by the Olbiil Era Kelulau in 1985 codifies all national laws applicable to the Republic. The Code is a compilation of the following laws:

- (1) Laws of the United States of America specifically made applicable to Palau;
- (2) The laws of the Palau District Code, which is a compilation of those laws of the Palau Legislature in effect in the Palau District in March 1971;

- (3) The Trust Territory Code, which is a compilation and codification of laws of the Congress of Micronesia in effect throughout the Trust Territory;
- (4) The laws of the Fifth, Sixth, and Seventh Palau Legislatures; and
- (5) The Republic of Palau Public Laws of the Olbiil Era Kelulau.

Section 301 of the Palau National Code (PNC) also gives the effect of law in Palau to the following:

- (1) The United Nations Trusteeship Agreement;
- (2) Laws of the United States that are applicable to Palau, including Executive Orders of the President of the United States and the Orders of the Secretary of the Interior;
- (3) Laws of the Trust Territory and amendments to them, to the extent they have not been repealed by the Olbiil Era Kelulau;
- (4) District Orders and Emergency District Orders promulgated by the District Administrator of the Palau District and in accordance with the Trust Territory Code;
- (5) The Acts of the Olbiil Era Kelulau; and
- (6) State laws.

The Palau National Code repeals all laws, regulations, and ordinances enacted by the Spanish, Germans, and Japanese except those concerning the ownership, use, inheritance, and transfer of land that were in effect on December 1, 1941, and that have not been changed by express written agreement.

Two supplements have been issued to the Palau National Code since its publication in 1985. Supplement One contains all laws enacted from the initial publication of the Code up to March 1, 1986. Supplement Two contains all laws enacted between March 1, 1986, and April 1, 1987. The Palau National Code is divided into Titles according to subject matter, so most Titles incorporate several Acts of the Legislature (Ottley 1993).

2.9 Continuation of Existing Laws

All existing laws in force and effect in Palau immediately preceding the coming into force of the Constitution shall, subject to the provisions of the Constitution, remain in force and effect until repealed, revoked, amended or until they expire by their own terms. Any provision of the Constitution or a law enacted pursuant to it which is in conflict with the Trusteeship Agreement between the United States of America and the United Nations Security Council shall not become effective until the date of termination of the Trusteeship Agreement (Art.XV s.3,10).

2.10 Status of National Laws, State Laws and Customary Law

Although the Constitution of Palau makes "statutes and traditional law...equally authoritative" (Art.V), it also states that when statute and customary law conflict, statute prevails only to the extent that it does not conflict with the "underlying principles of traditional law". Section 302, Title 1 of the PNC resolves this conflict in favor of the written law through the following provision:

The customs of the people of Palau not in conflict with the legal authority set out in section 301 (of the PNC) shall be preserved. The recognized customary law of the Republic shall have the full force and effect of law so far as such customary law is not in conflict with such legal authority.

With the advent of independence, countries such as Palau have had to make decisions as to the status of introduced laws and other sources of law such as common law and customary law. The Constitution of Palau does provide some direction on the ranking of statutes and customary laws. Where customary law is given recognition as part of the legal system, the extent and nature of recognition would require interpretation by the courts, as customary law, unless codified, is by and large unwritten by nature. Where codification exists these would generally relate to matters of land, marriage, divorce and adoptions. How widespread acceptance of a custom must be before the courts can decide that it is customary law is a question often requiring judicial interpretation.

As a general rule, the Constitution ranks as supreme law, to be followed by statute law promulgated by the legislature (if the interpretation of section 301 in the PNC is accepted), followed by customary law, but a more positive interpretation is necessary by the courts in Palau.

The other question that needs to be addressed is the relationship between the laws passed by the Olbiil Era Kelulau and those passed by State governments. Although State Legislatures have the power to make laws as provided for under their respective Constitutions, which is the supreme law of the State, some State Constitutions are however subject to the Constitution of the Republic of Palau (e.g. Article VII Aimeliik State Constitution; the Preamble and Article 1, Airai State Constitution; Ngchesar State Constitution Art.II), while others are silent on the matter. The Ngchesar State Constitution provides as follows:

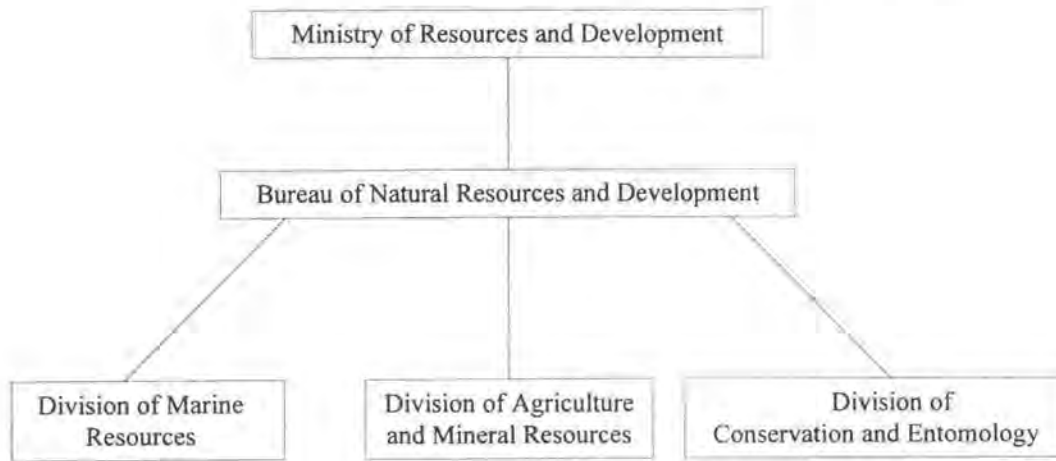
Subject to the Constitution and laws of the Republic of Palau, this Constitution is the supreme law in the State of Ngchesar (Art.II (1)).

When any law passed by the State of Ngchesar is in conflict with national laws passed by the Olbiil Era Kelulau, the national law prevails.

2.11 Administrative Structure

There are currently eight Ministries in the Government of Palau, namely the Ministry of Administration, Ministry of State, Ministry of Community and Cultural Affairs, Ministry of Education, Ministry of Health, Ministry of Commerce and Trade, Ministry of Resources and Development and Ministry of Justice (Executive Order No.116, January 1993).

Each Ministry is responsible for Bureaus and Divisions, for example:



Administrative responsibilities for environmental matters are the joint responsibility of the Environmental Quality Protection Board (EQPB) and the various government departments, for example sanitation matters are within the responsibility of the Ministry of Health as well as that of EQPB which implements the Solid Waste and Water Quality Regulations. Environmental concerns also appear on the agenda of other Ministries, such as the Ministry of Resources and Development and the Ministry of Community and Cultural Affairs.

The Division of Conservation and Entomology provides not only leadership in conservation and entomological matters but also maintains a collection of Palauan fauna and flora and initiates laws on environmental matters. The Ministry of Community and Cultural Affairs, through the Division of Cultural Affairs, actively pursues preservation programs for historic and archeological sites and also encourages those people with traditional knowledge to record music, songs, dances, myths and legends in a data bank for present and future generations. The Bureau of Natural Resources and Development through the Division of Marine Resources administers the Belau Mariculture Demonstration Center at Malakal for conservation of certain species, especially clams.

2.12 Environmental Quality Protection Board

The Environmental Quality Protection Board (EQPB) implements a range of environmental regulations such as the Solid Waste and Water Quality Regulations. Programs for 1994 as set out in its 1993 annual report include drinking water, water pollution prevention (including earthmoving permitting activities, National Pollutant Discharge Elimination System (NPDES) permits, water quality certifications), waste management programs (solid waste, pesticides, storage tanks, other hazardous waste programs), environmental assessment programs, public education and training programs. EQPB considers that there is a clear need for increased inspection, monitoring and enforcement in all areas of environmental regulations; there is a recognized need to increase staff levels to perform these functions. In addition, with the possibility of the Compact of Free Association taking effect in 1994, a top priority for EQPB is to promulgate regulations in those areas for

which the United States Environmental Protection Agency currently has direct responsibility, and in those areas for which there are no existing regulations.

2.13 Conclusions

The Constitution of Palau and the environment policy for Palau set out in the Environmental Quality Protection Act clearly define the obligations for government to protect and preserve the environment of Palau. There are ongoing initiatives to provide environmental protection, and some Divisions, such as the Division of Conservation and Entomology, implement policy objectives through the drafting of specific legislation. The range of responsibilities for environmental law matters through EQPB and the various government Ministries is sufficiently broad and the legal powers incorporated in the existing range of legislation is considered adequate; however, the effective exercise of these powers and the enforcement of the law needs continual encouragement.

3 Environmental Conventions and Treaties

3.1 Introduction

The management of the environment and the way in which a country uses its natural resources have increasingly become matters of regional and international concern. Treaties are the main means of creating binding regional and international obligations in all matters, including the protection and conservation of the environment. As treaties are essentially agreements between states, or states and international organizations, they can be called by a variety of names such as convention or covenant. Some treaties are very general in nature and they are no more than a "framework" within which states undertake further action to prescribe specific requirements in domestic legislation. Some treaties are more detailed in nature and could form the basis of domestic law.

The Compact of Free Association between the Government of the United States and the Republic of Palau, when implemented, gives Palau full internal autonomy and the right to conduct its foreign affairs in "free association" with the United States.

This chapter provides information on some of the regional and international environmental conventions which cover areas that may be of interest to Palau. Some international conventions signed by the United States also extended to Palau but it was not possible to ascertain during the course of this Review which treaties were applicable.

3.2 Atmosphere

3.2.1 Convention for the Protection of the Ozone Layer (Vienna, 22 March 1985)

The Vienna Convention for the Protection of the Ozone Layer is at present the most important designed to protect one of the major components of the atmosphere. The depletion of the ozone layer, damaged by chlorofluorocarbons (CFCs), halons and other substances, has been identified as an environmental problem of global character.

The Convention requires the Parties to take all appropriate measures, in accordance with the Convention and related Protocols, to protect human health and the environment against adverse effects resulting from human activities which modify the ozone layer (Article 2). The Parties are not only required to cooperate on the formulation of agreed measures, procedures and standards to implement the Convention, Protocols and Annexes, they must adopt appropriate policies to control, limit, reduce or prevent human activities under their jurisdiction and control that are likely to have adverse effects on the ozone layer.

The Convention provides for the exchange of scientific, technical, socioeconomic, commercial and legal information, taking into account the particular needs of the developing countries (Article 4).

The Protocol on Substances that Deplete the Ozone Layer (commonly called the Montreal Protocol and established under the Convention for the Protection of the Ozone Layer) sets

out in Article 4 the restrictions on trade with countries who are not Parties to the Convention and Protocol. Article 4 provides that:

within one year of the entry into force of this Protocol, each Party shall ban the import of controlled substances from any State not a Party to the Protocol;

Beginning on 1 January 1993, no Party operating under paragraph 1 of Article 5 may export any controlled substances to any State not a Party to the Protocol. (The list of substances are set out in Annex A of this Protocol.)

The Montreal Protocol establishes precise quantitative restrictions on the use of CFCs and halons, and also provides for the definition of the substances to be controlled. It provides special treatment for developing countries by requiring the Contracting Parties to:

facilitate access to environmentally safe substances and technology for Parties that are developing countries and assist them to make expeditious use of such alternatives (Article 5(2));

and

undertake and facilitate bilaterally or multilaterally the provision of subsidies, aid, credits, guarantees or insurance programs to Parties that are developing countries for the use of alternative technology and for substitute products (Article 5(3)).

3.2.2 Convention on Climate Change (Rio de Janeiro, 9 May 1992)

The Convention on Climate Change was adopted on 9 May 1992 by the Intergovernmental Negotiating Committee established by the General Assembly of the United Nations. This Convention was opened for signature at the United Nations Conference on Environment and Development (UNCED) at Rio de Janeiro and remained open at UN Headquarters until 19 June 1993.

The aim of the Convention is to protect the atmosphere from the build-up of anthropogenic gases that trap heat from the sun, causing the "greenhouse" effect that will result in global warming and affect natural ecosystems and humankind.

One of the strategies incorporated in the Convention is for Parties to adopt measures to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame to allow ecosystems to adapt naturally to climate change, ensure that food production is not threatened, and enable economic development to proceed in a sustainable manner.

3.3 Marine Environment

The protection of the marine environment is high on the agenda in Palau as traditional Palauan life and economic development are intimately tied to the sea.

3.3.1 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention, 1972)

The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention, 1972) sets out the obligation of Parties to prohibit the dumping at sea of wastes. Under Article 4, the Parties are required to prohibit the dumping of wastes or other matter except as specified in the Annexes. The dumping of wastes listed in Annex I is prohibited. The dumping of wastes listed in Annexes II and III requires special permission. Periodic meetings of the Parties are held to update the list of noxious substances.

Kiribati and Nauru initiated a strong move for a complete ban on dumping of nuclear wastes in the ocean at the 1983 meeting on the London Dumping Convention. As there was opposition to the Kiribati/Nauru proposal from nuclear nations, Spain proposed a moratorium on all kinds of ocean dumping of radioactive wastes as a compromise until the Kiribati/Nauru proposal was reviewed by an expert group.

3.3.2 Convention on the Prohibition of Fishing with Long Driftnets in the South Pacific (Wellington, 24 November 1989)

The Convention on the Prohibition of Fishing with Long Driftnets in the South Pacific (Wellington, 24 November 1989) restricts the use of driftnets in the South Pacific region in order to protect and conserve marine living resources. Under Article 3, each Party is required to take measures not to encourage the use of driftnets, by prohibiting their use and the transshipment of such catches, and to restrict access to ports of vessels using driftnets. Each Party is to take appropriate measures to implement and apply the provisions of the Convention and to cooperate in surveillance measures (Article 4).

3.3.3 South Pacific Forum Fisheries Agency Convention 1979

The 1979 South Pacific Forum Fisheries Agency Convention established the Forum Fisheries Agency which is located in Honiara, Solomon Islands. The objectives of the Agency are to harmonize fishery management policies; facilitate cooperation in surveillance and enforcement, and the processing and marketing of fisheries with States outside the region; and to arrange for reciprocal access by member States to their respective 200-mile exclusive economic and fishery zones.

Palau is a Party to this Convention.

3.3.4 International Convention for the Prevention of Pollution from Ships, London, 1973 and as modified by the Protocol of 1978

The Convention for the Prevention of Pollution from Ships 1973 and as modified by the Protocol of 1978 seeks to achieve the elimination of international pollution of the marine environment by oil and other harmful substances and minimize their accidental discharge. Accidental releases of oil and other harmful substances from ships have been recognized as a serious source of pollution. A Party to this Convention is obliged to take action for any

violation by ships flying its flag or within its jurisdiction. Annexes to this Convention contain detailed technical rules covering such matters as pollution by oil, noxious liquid substances, sewage and garbage from ships.

3.3.5 United Nations Convention on the Law of the Sea (Montego Bay, 1982)

The United Nations Convention on the Law of the Sea 1982 was drafted with specific objectives to protect and preserve the marine environment. The Convention introduces the concept of the 200-mile Exclusive Economic Zone (EEZ) and there are detailed provisions safeguarding marine species as well as protecting the environment from pollution by dumping from vessels, exploration and from land-based sources. The Convention places a duty on State Parties to conduct environmental impact assessments on proposed activities in the marine environment and places on State Parties a duty of care to take all necessary measures to prevent pollution from damaging the coastlines, flora and fauna and interfering with the ecological balance of the marine environment.

3.4 Nuclear

3.4.1 South Pacific Nuclear Free Zone Treaty, (Rarotonga, 1985)

The objective of the South Pacific Nuclear Free Zone Treaty is to establish a nuclear-free zone in the region and keep the region free from environmental pollution by radioactive wastes. The Parties are required not to dump radioactive wastes at sea within the South Pacific Nuclear Free Zone (Article 7(a)); to prevent the testing of any nuclear explosive devices in their territories (Article 6(a)); and to prevent the stationing of nuclear weapons in their territories (Article 5(1)).

The Treaty is supplemented by three Protocols. The first invites France, the United Kingdom of Great Britain and Northern Ireland and the United States of America to apply prohibitions contained in Articles 3, 5 and 6 to territories within the South Pacific Nuclear Free Zone for which they are internationally responsible. The other two Protocols respectively invite France, the People's Republic of China, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland and the United States of America not to use nuclear explosive devices within the zone.

3.5 Biological Diversity

3.5.1 Convention on Biological Diversity (Rio de Janeiro, 1992)

The Convention on Biological Diversity, which opened for signature in Rio de Janeiro at the United Nations Conference on Environment and Development (UNCED) in 1992, requires countries to take appropriate action through regulations and management to control the destruction of biological species, habitats and ecosystems within their jurisdiction. The Convention places an obligation on Contracting Parties to establish a system of protected areas, rehabilitate and restore degraded ecosystems and promote the recovery of threatened species.

Sustainable use of biological resources must be promoted through cooperation between government authorities and the private sector. The support of the local population is promoted by encouraging the use of customary practices that are compatible with conservation or sustainable use requirements. The Convention places an obligation on individual countries to assist developing countries financially and through provision of technical expertise to conserve their biological resources.

3.5.2 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington, 3 March 1973)

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington, 3 March 1973) requires the Contracting Parties to take appropriate measures to prohibit trade in specimens and shall include measures to penalize trade in or possession of such specimens. Appendix I includes all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species is subject to strict regulation in order not to endanger their survival and must only be authorized in exceptional circumstances.

3.6 Protection of Natural Resources and Environment

3.6.1 Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (Noumea, 1986) (SPREP Convention)

The Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (SPREP Convention) and two Related Protocols, namely the Protocol for the Prevention of Pollution of the South Pacific Region by Dumping and the Protocol Concerning Co-operation in Combating Pollution Emergencies in the South Pacific Region, set out a comprehensive legal framework to protect the environment of the Pacific region.

The Convention places an obligation on Contracting Parties to take all appropriate measures to prevent, reduce and control pollution in the area covered by the Convention. Pollution caused by discharges from vessels, land-based sources, seabed activities, the disposal of wastes, the storage of hazardous wastes and the testing of nuclear devices has been specifically mentioned for special attention. Article 16 promotes the use of environmental impact assessments to assess the potential effects of projects on the marine environment.

Palau has signed but not ratified this Convention and Related Protocols.

3.6.2 Convention on Conservation of Nature in the South Pacific 1976 (Apia Convention)

The Convention on Conservation of Nature in the South Pacific (Apia Convention) encourages the creation of protected areas to safeguard representative samples of the natural ecosystems, particularly endangered species, as well as superlative scenery, striking geological formations, and regions and objects of aesthetic interest or historic, cultural or scientific value (Art.II). The Convention prohibits the exploitation of resources in national parks for commercial profit and further prohibits the hunting, killing and collection of

specimens of the fauna and flora unless authorized for scientific purposes (Art.III). In addition, Contracting Parties are urged to use their best endeavors to protect such fauna and flora with special attention given to migratory species and to safeguard them from unwise exploitation and other threats that may lead to their extinction (Art.V).

3.6.3 Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 23 November 1972)

The objective of the Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 23 November 1972) is to ensure that effective and active measures are taken for the protection, conservation and preservation of the cultural and natural heritage situated on an individual country's territory. Each Party to the Convention is required to adopt a general policy which aims to give cultural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programs. Appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation and preservation of this heritage must also be taken.

4 Land Tenure System

4.1 Relevant Legislation

Public Land (PNC Title 35)
Subdivision of Public Lands (PNC Title 35)
Palau Land Commission (PNC Title 35)

4.2 Introduction

The effective enactment and implementation of laws on land use planning are dependent upon understanding and appreciation of the land tenure system. This chapter gives a very brief description of land tenure patterns as described by Kaneshiro (1958). This chapter also briefly describes the legal designation of land as provided in the Palau National Code. Although the Kaneshiro study was carried out over forty years ago, it is useful to include his findings in this Review as only a few authoritative written studies of Palau land tenure patterns exist and this background information is of interest to indicate the complexities involved in planning land use.

4.3 Foreign Occupation

According to Kaneshiro, the coming of the Japanese colonists brought about radical changes not only to Palauan demography but also to Palauan society. As most of the foreign population occupied commercial centers such as Koror, the local population also concentrated at the mining camps of Angaur and Peleliu. As a consequence, villages in the interior were abandoned and re-established, in some cases along the coastal areas. During that time, the native population was still heavily concentrated on Babeldaob.

During the American period from 1947, Koror became attractive as the business center and for employment and education. The cessation of phosphate mining on Angaur and the depletion of non-ferrous scrap metals from military installations and equipment, which boosted the Palauan economy, increased the influx of people into Koror. Forty years ago Palauan demography showed a small concentration of the population on Kayangel Island, in villages and hamlets near the coast of Babeldaob, and a heavy concentration of the population in the Koror-Arakabesang area.

4.4 Public Domain

In Palau, land under traditional tenure is divided into the public domain and clan lands. The public domain consists of the “chutem bwai” – the land in the interior of Babeldaob, and for Koror, Peleliu and Airai, the numerous islands in the Chelebacheb complex, the mangrove swamps and the sea and reefs” (Kaneshiro 1958). Kaneshiro defines the Chelebacheb complex to include the islands in the Palau group stretching from Ngaruangi atoll a hundred miles southward to Angaur. The public domain was controlled in most cases by the ‘Klobak’ (village council), but there were cases where control was exercised by the District Council or a group of villages within a district. In areas designated as the

public domain, members of a village could enter and harvest resources such as timber, wild pigeons and yams without obtaining prior approval of the Council. Other villages were required to first obtain approval of the Council or make a payment of Palau money before exploiting the resources within the public domain.

Mangroves were also available to any member of the owning village. Any villager who planted Nipa palms in the tidal flats gained perpetual use right to the planted area. Titles to fish weirs were also recognized.

Boundaries of public lands were determined by tradition, warfare, legends of migration and settlement. Kaneshiro states that it is doubtful if reef boundaries were aboriginally clearly defined as at present: "It would appear that not until foreign administrations, and following the establishment of the trochus industry, that clear delineation of reef rights...were determined."

4.5 *Clan Lands*

Clan lands comprise most of the private lands of aboriginal Palau. These include home sites, taro paddies, woodlots and palm forests. Clan lands were assigned to the member lineages, each of which had its principal house site that generally bore the name of the lineage. Along with house sites, the lineage was assigned use rights to garden lands. Lands assigned to a lineage were controlled by the male lineage head who in turn assigned land to members. Any action to alienate land required the prior approval of adult clan members. With the extinction of any of the member lineages, lands used by them reverted to clan control for reassignment. Clan lands included two parcels of special importance. The house site of the clan chief, occupied by the senior male member in matrilineal descent, and the chief's taro paddy which went with the title of clan chieftainship. The village and district chiefs through the councils had claim to parts of the produce from clan lands. Within the village were lands used in severalty (individual or unshared tenure of an estate): the club house sites, canoe house sites, piers and paths. These were controlled by the village council but ultimate title to such lands remained with the owning clan which was sometimes compensated with Palau money.

4.6 *Changing Concepts of Land Ownership*

The clan as a group retains ultimate title to its lands and individual members or lineages could not alienate land without the approval of the clan. Land could be alienated through the workings of the 'omeluchel' system (in which land could be substituted for money by being obligated to other lineages and clans because of excessive gifting of food and repeated services where compensation with money was not possible and land had to be used). Land could also be alienated by meeting a damage payment on divorce or death or by exchange.

It appears that very little land was alienated during or prior to the Spanish period (1885–1899). The German administration from 1899 to 1914 considered all lands not occupied or cultivated to be government lands. While no official record of such determination by the German Government was found by Kaneshiro during his survey, he claims that the assumption seemed plausible on the basis of the official German decree that lands planted in

coconut were to be individually owned by the planters. The discovery of phosphate ore on Angaur in 1903 was followed by the forcible purchase, from the local inhabitants, of mining rights by the German officials. Land on Angaur in 1954 was officially declared to be owned by the government. During the German period Ngerchong was purchased by the German Phosphate Mining Company and other lands in Koror were purchased by German officials.

The Japanese period from 1914 to 1944 declared all lands below high water mark to belong to the Imperial Navy. Following German precedent, the Japanese naval officials also declared the public lands of Airai, Koror and Peleliu to be government land.

The South Seas Government that succeeded the Naval Administration surveyed land on Babeldaob for the purpose of separating private lands from the public domain. After the survey, the Japanese officials proposed to the Palauans that lands within implanted markers were temporary government lands. Clan lands were held to be within government markers, which created problems for both the Japanese officials and the Palauan people. The Japanese government exercised its right of eminent domain in purchasing additional lands, while other lands were appropriated as gifts to the Emperor for government buildings, experimental stations and military use. The extension of phosphate mining in Peleliu placed more land under Japanese control. The loss of lands to phosphate mining was followed by complete evacuation of villages for the construction of an airfield. Bauxite mining in West Babeldaob took more land out of Palauan control, although most of the land involved had already been included within government markers. Increasing demands by the military to fortify the islands made for more land alienation. By 1955 some 73 percent of the total land area of Palau fell into the category of public domain.

4.7 Statutory Background

Public lands are defined under PNC Title 35 as those lands which were owned or maintained by the Japanese administration or the Trust Territory Government as government or public lands and such other lands as the national government acquires for public purposes (s.101).

The part of the law established during the Japanese administration, which provided that all marine areas below the ordinary high water mark belonged to the government, is confirmed as part of the law of the Republic with the following exceptions:

- (a) the right to fish weirs or traps as were recognized by local customary law but abolished by Japanese administration are re-established provided that the weirs and traps do not interfere or obstruct established routes of water travel;
- (b) the rights of the owner of abutting land to claim ownership of all materials, coconuts or objects deposited on the shore by wave action and such fishing rights on and in the waters over reefs where the general depth of the water does not exceed four feet at mean low water as were recognized by local customary law and abolished by Japanese

administration are re-established provided that such rights are not in conflict with the rights of the national government as owner of all marine areas below the high water mark;

- (c) the owners of land abutting the ocean or lagoon have the right to fill in, erect, construct and maintain piers, buildings or other construction on or over the water or reef and shall have ownership and control provided written permission was first obtained from the President;
- (d) the rights described in sections (a), (b), and (c) above are granted to persons or groups who held those rights under customary law but which were abolished by the Japanese administration. The extent of each right is governed by local customary law in effect at the time the rights were abolished. The rights described in these sections do not disturb the traditional and customary right of individual land owners, clans, family or state to control the use of marine areas below the high water mark subject only to the limits placed by national government as the owner of such marine areas. These sections do not create any right in the general public to misuse or destroy mangrove trees or land or to commit any act that would cause damage to the land and the mangrove. Any legal interest or title in marine areas specifically granted to an individual or group by the Trust Territory or any previous administration is not affected by this section (s.102). Public lands not reserved for other purposes may be granted by the President in payment or exchange for the use and occupation of privately owned lands. The President is authorized to designate areas of public land within the Republic.

4.8 Palau Public Lands Authority

Section 201, Chapter 2 of Title 35 creates the Palau Public Lands Authority to administer the public lands of the Republic. The Authority is governed by a Board of Trustees consisting of 16 members appointed by the President with the advice and consent of the Olbiil Era Kelulau. Each State is represented by a member. The Authority has power to administer and manage the use of lands as well as receive and hold title to public lands within the Republic. The Authority also exercises power of eminent domain to acquire land for appropriate public purposes, establish a program of homesteading on public lands and administer such programs provided that prior approval is obtained from the State within whose boundaries the lands are situated.

Eminent domain is defined in Chapter 3 of Title 35 to mean “the right of the national government to condemn property for public use or purposes and to appropriate the ownership and possession of such property for public use upon paying the owner compensation”. Public use is construed to cover any use determined by the President to be a public use. In the event that there is a dispute over the ownership of the property which is the subject of an eminent domain, the Court is required to adjudicate and determine ownership.

Land may be acquired by national government, state government or an agency of government for use in any project or program. In acquiring real property the government

will offer just compensation based on the fair market value including any improvements. Where construction or development of a public improvement requires persons lawfully occupying real property to move, a 90-day written notice must first be issued.

4.9 Subdivision of Public Lands (Title 35, Ch.6)

No public land can be subdivided into smaller parcels, tracts or lots for sale, lease, homestead, exchange or be allocated, unless the Chief of the Division of Lands and Surveys first lays out and establishes on public lands a reasonable number of public roads and parks to ensure public access to those lands created by the subdivision (s.601). This rule also affects any parcel of public land abutting the sea or tidal areas before being offered for sale, lease, homestead, exchange or allocation for any other purpose. The President has the power to lease public lands to citizens or to corporations for periods of not more than 25 years, including renewals. Leases and other use agreements must be in conformity with the policies issued by the Palau Public Lands Authority and approved by the President.

4.10 Homesteads

The President of the Republic may designate areas of public lands for homesteading which are suitable for agricultural or grazing purposes or for the establishment of community sites. The President, upon advice of the Palau Public Lands Authority, shall determine and establish:

- (1) the maximum area of land allowable for agriculture, grazing, or village lot homestead tract;
- (2) standards and requirements for the use and development of homestead tracts; and
- (3) the amount of land which a person, clan, lineage, family or group may own and anyone who owns land in excess of those determined by the President is prevented from acquiring land for homesteading.

Section 803 sets out the criteria for those eligible to homestead:

- (1) any person who is 18 years or over and who is a citizen of the Republic, provided that no person is authorized to acquire any rights in public land which exceeds the maximum area of a homestead established by the President;
- (2) no-one is permitted to acquire more than one homestead, except those persons qualified may enter one village lot in addition to a farm tract;
- (3) no-one who owns land which exceeds the maximum area established by the President is permitted to enter and acquire any homestead tract. Homesteads shall not be granted to an individual person if clan, lineage, family or group ownership is the custom of the specific area in question.

Application for permits to homestead land must be made to the Palau Public Lands Authority which is required to verify the eligibility of the applicant and recommend approval or disapproval of the application to the President. On approval of the application, the President must issue a permit to use and improve the land and include reservations for those lands required for public roads, rights of way, easements, mineral rights and uses

essential to the public welfare. A homestead permit may be revoked if the homesteader has abandoned the land or has failed to comply with the rules and the conditions of the permit (s.809).

4.11 Palau Land Commission

Section 901 of Title 35 creates the Palau Land Commission. The primary purpose of the Commission is to proceed on a systematic geographical basis with the registration of land, determine the ownership of any land but avoid becoming involved in lengthy consideration of disputed claims. The Commission consists of a Senior Commissioner and two additional Commissioners appointed by the President. A land registration team is appointed by the Commission to register land. The Commission is under the administrative supervision of the Chief of the Division of Lands and Surveys. The Commission is required to designate a registration area which it believes will be desirable and practicable to register within one year. The Commission shall continue this designation process until all parts of the Republic have been registered.

4.12 Alien Property

Alien property is defined in section 1001 of Title 35 to include property which was formerly owned by private Japanese nationals, organizations or by the Japanese government. Such property includes both tangible and intangible assets as well as any right, title or interest in them. The Attorney General acts as alien property custodian and is authorized to vest title in the Republic of all alien property and take immediate possession of it. Under such vesting order, the Attorney General is empowered to hold, use, administer, liquidate, sell or otherwise deal with such properties in the interests of the indigenous inhabitants.

4.13 Conclusion

Managing land for multiple use in accordance with the principles of sustainable development must take into account the intricate weave of customary rights and practices and the law and the complexities of land tenure issues. Although tenures are human-made and shaped by external forces and the society they serve, tenure rights and customary practices are also changed by the intervention of statutes. Environmental protection is really dependent upon adherence to specific land use planning requirements, zoning laws and traditional conservation practices that are sensitive to the environment.

5 Physical Planning and Assessment

5.1 Relevant Legislation

Land Planning Act P.L.No.40-76,1 (PNC Title 31)
Koror Municipal Zoning Law 1976
Koror Municipal Subdivision Law
Environmental Quality Protection Act (PNC Title 24)
Draft Palau Forest Practices Bill

5.2 Introduction

The Trust Territory Land Planning Act incorporated in the Palau National Code under Title 31 and cited as the Land Planning Act is the current law providing for land use planning until modified, amended or repealed by the Legislature of Palau. In terms of the history of this law, the Congress of Micronesia passed the Trust Territory Land Planning Act in 1972. This Act formally established a planning mechanism through a Master Plan which basically is a document to be utilized in public policy decisions with legal backing for its recommendations. The Act enabled the District Legislatures to establish Planning Commissions, and for the Planning Commissions to make and recommend Master Plans to the legislatures for adoption (Republic of Palau 1976). These provisions still remain the central core of the Land Planning Act of Palau.

The responsibilities for land use planning and implementing the Land Planning Act are shared by several authorities – the National Government through the Bureau of Lands and Surveys under the Ministry of State; the Palau Planning Commission established under the Act; and state governments through the various State Planning Commissions.

5.3 Purpose

Land use planning is one of the most challenging issues faced by governments of Pacific Island states, charged as they are with managing land on the basis of multiple use versus the increasing demand for environmental factors and the principles of sustainable development to be taken into consideration. The purpose of the Land Planning Act is to develop comprehensive planning programs to encourage the most appropriate use of land, both public and private; provide adequate open spaces about buildings for light and air; prevent undue concentration of population; preserve and protect the natural environment; and assure adequate provision for community utilities and facilities such as water, housing, schools, parks, transportation and thoroughfares and other public requirements (s.102).

5.4 Statutory Background

The Land Planning Act provides for both state and national authorities to have extensive responsibilities for land use planning through the development of Master and Subsidiary

Plans and through the Planning Commissions, in order to promote the development of comprehensive planning programs to meet the minimum regulations required for the protection of public health, safety and general welfare (s.102).

5.4.1 Planning Commissions

The Palau Planning Commission was established to implement the Master Plan and to further study, revise and develop it to ensure that the implementation of the Plan and its requirements are in accordance with the wishes and welfare of the people. According to the Act, provision is made for Planning Commissions to be established in Aimeliik, Angaur, Koror, Melekeok, Ngaraard, Ngardmau, Ngerchelong, Ngiwal and Peleliu.

The Act sets out the wide range of powers and duties of the Planning Commissions which includes the following:

- to prepare and develop a Master Plan;
- to prepare and develop such subsidiary plans, and development programs as may be considered desirable for the implementation of the Master Plan;
- to develop any land use control law necessary for the implementation of the Master Plan;
- to prepare and develop any capital improvement program for the Master Plan area and a budget for its implementation;
- to conduct reviews of the entire Master Plan and land use control laws at least once every two years; and
- to prepare advice on the development of public land within the Master Plan area.

5.4.2 Master Plans

A Master Plan is a plan to regulate land use and development only in areas declared to be a Master Plan Area. The Plan includes statements of goals, standards, principles and social, economic, and cultural considerations expressed in the Development Plan for the Area. A Master Plan must take into account the topography, climate, soil and subsoil conditions, water courses, trends in the economy and demography, the habits, environmental needs, customs and standards of life of the people in the Master Plan Area, and the relation of land use to broader developmental needs. A Master Plan must include the following elements:

- (a) a land use element showing the distribution, location and extent of existing and proposed uses of land for housing, industry, agriculture, recreation, education, public buildings and private grounds and other categories of public and private land use. The land use element must also include a statement on standards of population density and building intensity recommended for the area;
- (b) a transportation, circulation, and communication element showing the location of existing and proposed roads, terminals, shipping routes, airports, and harbors;
- (c) a conservation element: planning for the conservation, development, utilization and protection of natural resources, including forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals and other natural resources. A conservation element may also cover reclamation of land and waters, flood control measures,

- prevention and control of pollution in the waterways, prevention and control of the erosion of soils, beaches and the protection of watersheds;
- (d) the recreation element showing the location and proposed development of recreation sites, natural preserves, parks, beaches, historical areas and areas of scenic importance;
 - (e) a public services and utilities element showing the locations for sewerage, refuse disposal, drainage and local utilities, water supply sources, electric power sources;
 - (f) a public facilities element showing locations for civic and community centers and other public service facilities;
 - (g) a community design element consisting of standards and principles governing the subdivision of land, and showing recommended designs for neighborhood and community development including parks and playgrounds;
 - (h) a housing element consisting of standards and plans for the improvement of housing and for provision of adequate housing sites;
 - (i) a safety element for the protection of the community from fire, rain, wind and earthquake damage, including such features as shelter areas, peak load water supply requirements, minimum road widths, clearances around structures and optimum dwelling design.

In the implementation of the Master Plans, the legislatures at the national and state levels are authorized to enact zoning and land use laws.

As far as can be ascertained, two Master Plans have been developed for Koror – the first in 1968 by Hawaii Architects and Engineers, Inc., and the second, the Koror Master Plan in 1976. The 1976 Master Plan states that many elements of the 1968 Plan had been implemented and the Plan itself had “formed the basis for capital improvement projects...(and that) various governmental projects have looked to the Plan for guidance” (p.1).

5.5 Koror Master Plan 1976

The Koror Master Plan 1976 predicts that if the present population growth rates continue, Palau's population is expected to reach 30,000 by the year 2000; development in the agriculture and marine resource areas will accelerate in the next ten to fifteen years, but the greatest potential for economic growth lies in the tourism area. The key objective of the 1976 Plan was to guide and direct physical development for the present and future and to make efficient and effective use of the scarce land resources. For example, the Plan does make the observation that certain areas such as the industrial areas on Malakal were reaching full development capacity, especially along the waterfront areas, and suggested that if there were to be significant industrial development in the future, a new and larger industrial area would need to be established (Republic of Palau 1976).

The Plan not only provides for the improved development of the physical environment but also for the integration of the physical development with the vital ecological systems to ensure the long-term biological viability of the area. The underlying philosophy is succinctly set out in the Plan as follows:

To recognize that the man-made environment will outlast our generation, and to incorporate in the Plan the needs and physical requirements for generations not yet born as best as information permits (p.31).

5.6 Zoning

Zoning is central to planning physical development, as it defines the kinds of development permitted in areas zoned for particular uses. The Koror Municipal Zoning Law 1976 sets out the permitted land uses in the various zones. Regulating land uses in specific areas allows for the orderly development of the community, as the health, welfare and quality of life of the community is dependent on zoning regulations. Vulnerable and environmentally sensitive areas are generally protected under zoning laws. Zoning categories set out under the law are similar to those set out in the Land Planning Act.

Each Planning Commission is required to prepare a comprehensive zoning law to conform with the Master Plan adopted by the legislature. The zoning laws must include maps delineating zone boundaries. At least one public hearing on the proposed zoning law must be held before enactment.

No land can be used contrary to zoning laws. Each zone sets out both "permitted" and "conditional" uses (i.e. uses which are permitted if the conditions are met), and "area and bulk requirements" which are standards for the development on the lot (a parcel of land with main building, yards and open spaces). The following 15 classifications have been adopted in the Act as use zones:

- (1) Residential (R-1), (R-2), (R-3)
- (2) Residential commercial (RC)
- (3) Commercial (C): with restriction on size of warehouses
- (4) Resort center (RV): visitors' facilities
- (5) Transportation center (TC): transportation facilities
- (6) Industrial - 1 (I-1): industrial, including warehousing and limited commercial
- (7) Industrial - 2 (I-2): offensive industrial uses e.g. slaughterhouses, fish canneries, sewage treatment plants
- (8) Public (P): public and quasi-public facilities
- (9) Village (V): low-density areas of limited size with multiple land uses
- (10) Agriculture (A): all types of agricultural uses
- (11) Conservation (CD): public open spaces, recreation areas, wilderness and beach areas, land reserved for control of flooding and soil erosion, and other uses not detrimental to a multiple-use conservation concept
- (12) Watershed (W): areas reserved to protect domestic water resources with no development allowed
- (13) Historic preservation (HP): sites of historical, archeological and biological interest
- (14) Planned development (PD): relatively large residential, commercial and other use areas planned as integrated developments
- (15) Floating zone (F): future non-conforming uses in the public interest e.g. to allow future electrical substations in R zones.

Any proposed capital improvement program in the Master Plan Area must be submitted to the appropriate Planning Commission for review and comment. Any administrative act or proposed legislation which would affect the Master Plan or land use control laws, such as zoning, must also be submitted to the appropriate Planning Commission for review before any legislation is enacted or program initiated.

No land, open space, water resources, buildings, or structures can be acquired, developed, leased or disposed of unless it is in conformity with the Master Plan and land use laws (s.181).

5.6.1 Conservation Zone

Koror State has established a comprehensive law for the conservation zone (CD) which is intended to provide for the preservation and protection of land and shoreline areas in their natural state in order to conserve these areas for their scenic and recreational qualities, for the prevention of floods and erosion, and for the protection of the natural environment. In the CD Zone no land or building can be used or erected except for specific uses related to parks, wilderness and shoreline preserves, flood and erosion prevention activities, and other conservation activities. Other uses may be permitted in the CD zone, such as controlled forestry, agriculture or aquaculture, if considered not detrimental to the conservation value of the land.

5.6.2 Procedure for Zoning Permission

No structure or building can be erected within a zone without a permit (s.1901(1)). A zoning application form must be submitted to the Building and Zoning Official who in turn is required to submit copies of the application to the Land Office, the Environmental Health Inspector and the Director of Public Works for comments. If all the legal requirements are met, and the consulting departments make no objections on health or safety grounds, a zoning permit will be issued and will remain valid for a period of two years. The building and zoning official is also required to make periodic inspections to ensure that there are no breaches of the permit conditions, as any breaches can be reported to the Planning Commission. The law provides for appeals against decisions of the building and zoning official to the Planning Commission whose decision will be final (s.1901).

5.7 Koror Subdivision Law

Chapter 40 of PNC Title 31 provides for a subdivision law for Koror State cited as the Koror Municipal Subdivision Law. Unlike the zoning law which regulates the development within each zone, the purpose of the subdivision law is to control land subdivisions for orderly development and proper land use to serve individual property lots, adequate traffic circulation, water supply, drainage, sanitary sewerage, recreational areas, school sites and other public facilities (Art.1.s.101). The subdivision law ensures that natural features are considered and that the lands subdivided are of adequate size and usable for the purposes stated.

5.7.1 Procedure to Subdivide Land

As a general rule, the Law on the subdivision of land controls the use to which the subdivided allotment may be put. For example, residential subdivisions cannot be used for other purposes such as industrial development, although there may be some “permitted” or “conditional” uses approved for the same allotment. The types of buildings erected on allotments are subject to separate planning controls. In Koror, some concern has been raised over the encroachments of other types of development onto agricultural land (H. Francisco, pers. comm., February 1994).

Under the Koror Subdivision Law, no land can be subdivided without the approval of the Planning Commission. Anyone wishing to subdivide land must lodge with the Koror building and zoning official an application, together with two copies of a preliminary plan (map indicating proposed layout of subdivision) and an overall map showing the relationship of the subdivision to its surroundings (s.301). Information of an environmental nature that must be incorporated in the preliminary plan includes the location of all major physical features including streams, swamps, cliffs, large trees and other features (s.301(2)(h)).

The building and zoning official, on being satisfied that the application is complete, is required to place the application before the next regular Planning Commission meeting, with copies sent to the Environmental Quality Protection Board, the district sanitarian, Director of Public Works and the local Planning Office for their technical review and comments. The Planning Commission, on being satisfied that the application meets the requirements of the Master Plan, and the zoning and subdivision laws, may give its approval which is valid for one year and enables the applicant to proceed with the subdivision and make the improvements required by law (e.g. sewage disposal, water lines, streets etc.). A final plan must be submitted to the Planning Commission on completion of the improvements in the subdivision. No lots can be sold or leased or buildings constructed until the final plan is approved by the Planning Commission and filed with the Clerk of Court for registration (s.303).

5.8 Control of Land Uses other than Development

One of the objectives of the planning law, apart from the control of development and land use, is to preserve as far as possible areas of natural beauty and sites of historical or scientific interest. For example, Chapter 42 of PNC Title 31 provides not only for design standards of streets, lots and blocks, but also for the natural features and character of land which must at all times, where possible, be preserved, taking into account such features as large trees, natural groves, water courses and similar community assets.

Under Article XIV of the Koror Municipal Zoning Law, the Historic Preservation Zone (HP) is designed to protect sites and structures of outstanding historic, archeological, scientific or biological interest from mutilation or encroachment by undesirable uses in order to preserve the sites, because of their irreplaceable value as expressions of Koror

history, for future generations. In this zone, no building can be erected or the land and buildings used except for historic and scientific purposes and those purposes necessary to restore and rehabilitate the sites (s.1401).

5.9 Controls over the Littoral Zone

There are special problems associated with development in the littoral zone. Under PNC Title 24, EQPB has developed a set of Earthmoving Regulations to regulate activities such as dredging and quarrying which take place anywhere, especially in vulnerable parts of the littoral zone. Earthmoving is defined in the Regulations to mean any construction or activity which disturbs or alters the surface of the land, coral reef or bottom of a lagoon, including but not limited to excavations, dredging, embankments, land reclamation in a lagoon, land development and subdivision, mineral extraction, ocean disposal, and the moving, depositing or storing of soil, rock, coral or earth (r.1.3(h)).

There are a number of activities which are excluded from this definition and these include plowing and tilling for agricultural purposes and the construction of a solid waste landfill site permitted under the Solid Waste Regulations (4.1.(1)).

5.9.1 Permit Requirements

Any person wishing to engage in an earthmoving activity must apply for a permit from the EQPB. The application must be supported by an Erosion and Sedimentation Control Plan and any other document required by the EQPB. It is mandatory to obtain all necessary clearances from the Historical Preservation Office, the State Planning Commission and other relevant departments as may be required, prior to the approval of the application. Before a permit is issued, the Regulations mandate that a public hearing be called. If the EQPB considers that the activity will result in significant environmental degradation, conditions can be incorporated in the permit to protect the environment or the permission denied altogether (r.4.3).

5.10 Other Laws

The Koror Municipal Zoning Law also makes provision for conservation zones (CD) to protect land and shoreline areas so they may be left in their essentially natural state and conserved for their scientific and recreation qualities; and to prevent those activities which could cause erosion and floods.

5.10.1 Mangrove Land

The intertidal and coastal lands where mangroves are generally found are often under constant pressure for development and as sites for the disposal of waste. The mangrove areas require special consideration and should be covered by the draft Palau Forest Practices Bill, Fisheries and Earthmoving Regulations.

5.11 Environmental Impact Assessment

The Environmental Quality Protection Act (RPPL No.1-58) PNC 24 implements the Environmental Impact Statement Regulation (EIS) which establishes general standards for environmental review of projects by EQPB to ensure that environmental concerns are given appropriate consideration in decision making, together with economic and technical considerations. An Environmental Impact Assessment is required for any and all actions which propose to use national or state land, any land which is classified as a conservation zone, any use directly or indirectly impacting upon coastal waters, wetlands, historic sites or any other area of environmental significance.

5.12 Conclusion and Recommendations

The existing laws on physical planning and the laws on zoning and subdivision appear to be adequate in terms of environmental content. As laws are required to keep pace with development, a number of problems can be foreseen. For example, increases in population can bring about the spread of residential areas and towns. Some concern has already been expressed with regard to encroachments on good agricultural land. It is therefore suggested that the conditional uses in zoning provisions be reviewed in the light of current developments.

It is therefore recommended that:

1. Conditional uses set out in the zoning provisions be reviewed to take into account current development and practices.
2. Special consideration should be given for the protection of mangrove areas, in forestry, fisheries and earthmoving legislation.

6 Agriculture

6.1 Relevant Legislation

Agriculture (PNC Title 9)
Pesticides Regulations
Land Planning Act (PNC Title 31)
Draft Animal and Plant Quarantine Bill
Public Health, Safety and Welfare (PNC Title 34)
Environmental Protection (PNC Title 24)

6.2 Introduction

The main focus of agriculture in Palau is on subsistence agriculture for domestic use, although some commercial agriculture is carried out on a small scale. The main crops grown for domestic use are taro, sweet potato, cassava and breadfruit. Agricultural production for domestic consumption is encouraged to reduce the imports of fruits and vegetables. The Division of Agriculture and Mineral Resources encourages farmers to grow fruit such as pineapples and papaya as there is an export market to nearby islands such as Guam. There is a limited domestic production of poultry, pork and beef cattle to supplement what is otherwise imported. It is understood that an agricultural census has been carried out and the results will be available in three months' time. An agricultural census should determine, amongst other things, the percentage of the population that is agriculturally active, identify the main subsistence crops grown, the main agricultural activities carried out and the percentage of land under agriculture.

It was not possible to ascertain during the course of this Review whether traditional methods of agriculture were being replaced, at least in Koror State, by more mechanized methods such as the use of tractors. The impact of mechanical methods of agriculture on surface soil and fragile ecosystems also remains unknown.

The *Comprehensive Conservation Strategy for the Republic of Palau* (Cassell et al. 1992) devotes a sector to the Division of Agriculture and Mineral Resources' resource management program which includes the promotion of sustainable agricultural methods by providing extension education on agroforestry methods, the controlled use of pesticides and fertilizers and methods for soil conservation. A large component of the work lies in the assistance given to farmers with regard to the provision of seedlings grown under experimental conditions, advice on the use of composting, and farming methods on different terrains (H. Francisco, pers. comm., March 1994).

6.3 Statutory Background

The agricultural legislation incorporated under PNC Title 9 was enacted for the purpose of creating an Agricultural Commission "to assist the people in the outer villages of the Republic in developing commercial agriculture" (s.101).

The Commission, under the general direction of the President, is charged with the responsibility of establishing farmers' cooperatives, developing policies and regulations to operate the Palau Central Produce Market and assisting persons, departments, agencies and institutions in the development of agricultural programs for commercial purposes (s.103). Although the Commission was created to work closely with the Division of Agriculture and Mineral Resources, it is understood that the Commission has been inoperative for the last 10 years (H. Francisco, pers. comm., February 1994).

6.4 Agricultural Zones

As agriculture is dependent on land available for such purposes, the Land Planning Act establishes Agriculture Zones (A) in Koror State for the purpose of providing areas for growing crops, raising animals and low-density housing (s.3101).

In areas classified as agricultural zones, the Act specifically stipulates that no buildings or land shall be used and no building should be erected except for one or more of the following uses:

- agriculture and aquaculture;
- single family dwellings;
- parks and public recreation facilities;
- accessory buildings and uses including barns, garages, agricultural outbuildings, storage sheds and boat piers customarily incidental to the above uses (s.3102).

The legislation also sets out "conditional uses" in agricultural zones, that is uses which may be permitted subject to conditions as determined by the Planning Commission. The conditional uses set out in the Land Planning Act for A zones include:

- utility and public service buildings and uses;
- cemeteries, provided the site is adequately screened from any surrounding uses;
- commercial piggeries or chicken farms, provided no structure housing pigs or chickens is located closer than 35 meters from any property line; and
- other uses determined by the Planning Commission to be consistent with the intent of this zone (s.3103).

One of the problems of agricultural development is the competing uses found for good agricultural land (H. Francisco, pers. comm., February 1994). Residential development brought about by population increases also puts considerable strain on good agricultural land; in island communities, this is an inevitable process.

6.5 Quarantine of Plants and Animals

A bill to provide for the quarantine of plants and animals has been drafted for the purpose of providing stricter controls on the importation of plants and animals (Draft Animal and Plant Quarantine Bill). Section 2 of the Bill provides that no animals and plants can be imported into Palau without a permit. The prohibition extends to live cultures, animal vaccines and serums, and certain classes of animals. Section 5 of the Bill specifically

stipulates that ruminants (defined to mean animals which chew the cud such as cattle, goats etc.) are prohibited imports except if they originate from the United States, Hawaii, Canada, Guam, Fiji and New Zealand. The import of swine is prohibited from any part of the world except from areas of the United States certified "hog cholera free" by the United States Department of Agriculture (USDA), Australia, Canada and New Zealand. The importation of live poultry must be accompanied by a certificate stating that it is free of certain diseases and the importation of meat, fish and poultry is strictly regulated (s.6). Provision is made for the appointment of quarantine inspectors to implement the provisions of the legislation.

It is clear that the draft Bill has extensive provisions to prohibit and control the importation of plants and animals, designed to prevent the introduction of pests and diseases into Palau. The importation of exotic plants and animals is also prohibited under the Endangered Species Act 1975 (s.1010), except by way of a permit.

6.6 Pesticides

The use of chemicals to control agricultural diseases and pests is regulated under the Pesticides Regulations implemented by EQPB. The uncontrolled use of pesticides is potentially dangerous to fragile ecosystems, water sources, soils and natural resources in general.

Under the regulations, applicators (i.e. users) are classified as commercial or private and anyone who uses or supervises the use of restricted-use pesticides for agricultural crops, vegetables, small fruits, trees and nuts, as well as on grass lands and non-crop agricultural lands, is classified as a commercial applicator (r.4.1). A written examination is necessary to assess competence in the handling of pesticides, and applicators must demonstrate practical knowledge of crops grown and the specific pests of those crops for which they may be using the pesticides. Practical knowledge is required concerning soil and water problems, pre-harvest intervals, phytotoxicity and the potential for environmental contamination, injury, and community problems resulting from the use of restricted pesticides in the agricultural area (r.4.2.(8)(b)).

6.6.1 Restricting and Banning Pesticides

EQPB may restrict the use of any pesticide when it is considered that the pesticide is likely to have adverse effects on human health and the environment. The prohibition also extends to the importation, sale and distribution of pesticides (s.8.2).

Part 10 of the Pesticides Regulations provides for "stop sale orders" of pesticides when there is violation of the provisions of the regulation. Part 10 further details the enforcement powers of EQPB which include observing and monitoring the use and disposal of pesticides and investigating any misuse.

It is understood that the Pesticides Regulations are being currently updated by EQPB (T. Musheff, pers. comm., February 1994).

6.6.2 Biological Controls

The long-term benefits of biological controls as a means for eradicating agricultural pests have been stated to be that they are cheaper and safer, as less chemical spraying is required and the surrounding air is free from chemical pollution. No experiments have been conducted in Palau as yet, on the introduction and use of biological controls, but this may be a likely development in the future (H. Franscisco, pers. comm., February 1994).

6.7 Conclusion and Recommendations

The Division of Agriculture and Mineral Resources provides an advisory service to farmers which includes the use of pesticides, crop rotation and management and soil conservation. It was not possible to analyze the effect of the legislation relating to agricultural activities, as the identification of the laws in this area is just the first step in the process. It then remains to determine those aspects of agricultural activities covered by legislation, the focus of the legislation, and the ability of the laws to control and prevent environmental harm that might be brought about by agriculture-related activities.

Some of the laws, such as the zoning provisions for agriculture under the Land Planning Act, need to be reviewed. As encroachment on good agricultural land is inevitable given population increase, the permitted and conditional uses within the agricultural classification should be reviewed to provide greater protection to land zoned for this purpose.

The use of pesticides in the agricultural sector for the control of pests and diseases remains significant and is likely to increase in the future. The toxic properties that make pesticides valuable to the agricultural sector frequently pose potential threats to human health and the environment if not controlled. It is not possible to comment further on the Pesticides Regulations as they are being currently updated.

It is therefore recommended that:

1. The range of legislation providing for agriculture be reviewed with the objective of bringing the legislation into line with current practices;
2. The existing laws regulating agricultural activities be strengthened to include environmental protection, such as soil conservation measures;
3. The Land Planning Act providing for the zoning of agricultural lands be reviewed and updated to protect good agricultural land from encroachment and other users;
4. A more comprehensive Agricultural Act be considered.

7 Forestry

7.1 Relevant Legislation

Draft Palau Forest Practices Bill
Palau Wildland Fire and Forest Management Bill
Land Planning Act (PNC Title 31)
Public Lands (PNC Title 35)
Natural Heritage Reserves System Act 1991
Wildlife Protection (PNC Title 24)
Parks Recreation and Parks Board (PNC Title 34)

7.2 Introduction

The vegetation survey of Palau conducted in 1987 states that at one time Palauan islands may have been completely covered in native forest and now only 75 percent forest exists. The remaining land is classified as grassland (its origins remain uncertain), agro-forest (generally found along the coast and near dwellings) and secondary vegetation. During the Japanese administration (1914–1945) large areas of native forest were cleared for pineapple and sugar fields on Babeldaob and bauxite mining in Ngardmau State (Cole et al. 1987).

The survey classified forest as upland forest, swamp forest, mangrove forest, atoll forest, casuarina forest, limestone forest and Rock Island forest (Cole et al. 1987). Some forest species such as mahogany and eucalyptus were introduced for economic purposes to provide timber; although the growth of these plants has been patchy there are plans to encourage the growth of trees with lumber value, particularly for the domestic market and to improve the forest cover in the watershed areas for conservation purposes (M. Brel, pers. comm., March 1994).

7.3 Forestry Administration

The Department of Forestry is located within the Division of Agriculture and Mineral Resources, under the direct responsibility of the Head Forester, the Chief of the Division of Agriculture and Mineral Resources, and the Director of the Bureau of Natural Resources and Development. It bears responsibility for the management and fate of forests in some of the most beautiful and pristine areas of Palau. The Department of Forestry is charged with a number of responsibilities including forest management programs (e.g. species trials, spacing of plants and the control and prevention of fire), the management of the Forestry Demonstration Station at Nekking on Babeldaob, and balancing the claims of a nation's development of natural resources for commercial purposes and the conservation habitat of wildlife species, fragile ecosystems and areas for use and enjoyment of the Palauan people.

The Department of Forestry administers a forest system which is composed of those previously stated classifications (e.g. upland forests, mangrove forests etc.) and covers approximately 31,259 ha (Cole et al. 1987).

The management of the national forest system is complex due to the scattered nature of the Palauan islands; the Department of Forestry therefore relies upon local State management of forests located in the individual states, although for effective management purposes, closer cooperation between States and the national government would be desirable (M. Brel, pers. comm., March 1994).

7.4 *Statutory Background*

There is currently no statutory mandate for forests. There is a draft Palau Forest Practices Bill and a Palau Wildland Fire and Forest Management Bill 1988. The latter had passed its Second Reading in the Olbiil Era Kelulau at the time of this Review.

The draft Palau Forest Practices Bill sets out, among other things, forest policies, the details of the requirements of a comprehensive forest plan which would include an inventory of forest resources and sites, and forest practices standards to regulate harvesting and logging, establish buffer strips to protect waterways and wildlife, and develop other standards to ensure that forest management is consistent with the goals set out in the law. The draft Bill gives the Minister responsible for forests the power to make regulations to establish a threshold minimum for forest operations (s.9(1)). Under section 10, the national government has the primary authority for regulating the conservation and exploitation of forest resources and any state law in conflict with this provision will be void to the extent of the conflict.

7.4.1 *Discussion on the draft Palau Forest Practices Bill*

Although the draft Palau Forest Practices Bill provides for important aspects of forest management practices in a legal framework, it only encompasses some areas of the law relating to forestry, while the Palau Wildland Fire and Forest Management Bill, which will be discussed later, provides for other aspects of forestry management. Nevertheless, the draft Palau Forest Practices Bill not only sets policy goals for management but also provides for a set of controls through a permitting system. This represents a major legal advance to produce a coordinated set of rules and a gradual formulation of policies, goals, forestry practices, standards and principles, although within a limited sector of forestry. If a broader view is taken, other aspects of forestry management practices need consideration for integration into a framework national legislation.

(a) *Forest Categories*

In designing natural resource legislation, and forestry law is no exception, a balance must be achieved between the protection of the resource and development. National forest conservation strategies must be integrated within the various types of use demands. One way in which this balance may be achieved is through the categorization or classification of forests in the national legislation, such as protected forests, reserve forests, nature reserves, and production forests which emphasizes the particular resource values, the various management prescriptions, and the acts permitted or prohibited in each category of forest land. For example, some areas of wetland forests may be nominated into the reserve system because of their functional values to contain erosion and maintain the wetland

ecosystem, while other forests may be nominated into other categories depending on their use value and the criteria set for temporary protection for regeneration purposes or for commercial and domestic use. The degree of protection for each category is usually set out in a national framework legislation. The prohibition of activities in the various categories would vary in terms of strictness.

(b) Comprehensive Forest Plan

The draft Palau Forest Practices Bill provides for the development of a comprehensive forest plan for management purposes (s.6). The forest planning process determines the forests that are not suitable for harvesting and production, because of environmental reasons and other pertinent factors, and those that are suitable for harvesting and other uses. The plan removes certain forest lands from timber production considerations, such as those in the watershed areas (a), or those located in scenic areas for tourism attraction (d), or those whose removal will cause irreparable damage to the soil (b).

The plan, developed by the Chief responsible for forestry (Head Forester), must be submitted to the Director of the Bureau of Natural Resources and Development for transmission to the President, the Olbiil Era Kelulau and the Minister for Resources and Development for comments. A 30-day public comment period is also required. On the approval of the Plan by the Minister, the comprehensive forest plan becomes the official national planning document (s.6(2)(3)).

(c) Logging Practices

Soil erosion, disturbed and bare land surfaces, the impact on wildlife and water sources and the ability of forests to regenerate are issues associated with logging practices. Under the draft Palau Forest Practices Bill, the Minister has power to make regulations to establish a threshold minimum for forest operations which could be interpreted to include the power to regulate logging operations and practices (s.9)(1)). Section 7(1)(a) of the draft Bill also provides for standards to be developed by the Chief of the Division of Agriculture and Mineral Resources (who is currently administratively responsible for forests) for logging techniques and equipment. Although a "threshold minimum" is not defined in the draft Bill, it would appear that it sets the standards for those operations considered minor, such as forest sampling which does not cause any significant surface damage and does not involve the cutting of timber, which would be exempt from the provisions of the Bill; and those operations above the minimum standards which are subject to the provisions of the Bill.

As the Minister is given the power to make regulations under section 5 of the draft Bill, other regulations setting forest practice standards (s.7) should also receive the Minister's approval, and the following amendment to section 7 of the draft Bill is suggested for consideration, as follows:

Section 7. Forest Practice Standards:

- (1) The Chief shall develop proposed minimum national standards for forest practices for the approval of the Minister, which shall include the following:...

The rest of the section follows.

It is also suggested that section 8 of the draft Bill be reviewed, as any system established for monitoring and inspection of export timber products may also require Ministerial approval.

(d) Penalty Clauses and Enforcement

Section 12 of the draft Bill provides for penalties for breaches of the provisions. Where an operator has committed a violation of the provisions, the operator and the landowner will be served with a citation specifying the nature of the violation. The Chief responsible for forestry also has the power to serve a "cease and desist" order on the operator to desist from further violation. Continued violation shall be reported to the Minister who may request the Attorney General to petition the Supreme Court to issue an injunction against the operator (s.12(c)).

Forfeiture of any bond posted by the operator (s.12(b)) and an order to repair the damage, where practicable and economically feasible (s.12(f)), are likely to result.

(e) Fire

Fire is one of the principle causes of deforestation, particularly during dry conditions. The Palau Wildland Fire and Forest Management Bill empowers the Head Forester to provide overall leadership for wildland fire prevention and suppression (s.5(d)); to suppress wildfires in areas within one mile of roads and in other areas deemed, by the Minister of Resources and Development or in his absence the Director, to be harmful to forests or soil resources (s.5(e)). The starting of fire in any wildland without a permit is prohibited (s.7(e)). Varying degrees of penalties are provided in the Bill for fire offences.

The Palau Wildland Fire and Forest Management Bill also broadly incorporates forest management elements such as:

making recommendations and conducting projects for the protection and management of forest land, including the mangrove area (s.5(g)),

although the general focus of the Bill is on the suppression and prevention of wildland fires.

7.5 Forest Categories and Land Ownership

The various classes of land ownership are central to the effective management of forests, as different regulations, procedures and authorities are involved in forestry administration and operation. One such area identified is under the Public Lands legislation (PNC Title 35).

Under section 215 of PNC Title 35:

the government of any State in the Republic is...empowered to create its own legal entity to receive from the (Public Lands) Authority such public lands within its geographical boundaries, either in whole or in part or by particular parcels, as it deems is in the best interests of the people of that State....

The State Public Lands Authority, consisting of both traditional chiefs and appointed officials of government, has control over forest areas in public lands vested under its control. Traditional, state and national government rights, duties and obligations co-exist with regard to forestry resources and therefore do require some form of legislative expression as ultimately the use, conservation and protection of forestry resources are dependent on the specific exercise of powers by the various authorities. The draft Palau Forest Practices Bill provides for a "supremacy" section in that inconsistent state laws are void to the extent of the conflict. It is envisaged that the national government should have a framework Act giving states the right to draw up forestry regulations consistent with the national Act.

7.6 Land Use and Forest Management

The only other law considered in this chapter is the Land Planning legislation (PNC Title 31). Under this legislation, a Master Plan, among other things, should include "planning for conservation, development, utilization and protection of natural resources, including forests..." (s.132(c)). Forestry legislation would also need to take into account those laws dealing with wildlife protection (PNC Title 24) and the laws creating reserves and preserves such as the Natural Heritage Reserves Systems Act 1991 and the legislation creating Recreation Parks (PNC Title 34) as all these laws bear some relationship to forest management.

7.7 Conclusion and Recommendations

In a framework Forestry Act, it is important to shift the emphasis and make planning the central function of forest management rather than to describe forest management in terms of acts prohibited on forest land. As forest planning is broad in scope, targets for production, use and conservation, particularly in critical watershed areas and on steep slopes, are essential to preserve a meaningful forest estate which would in turn conserve soil and water resources. Landowner participation will play a key role in forest management, particularly in watershed areas and in other management categories. Emphasis should also be given to tree-planting activities and community education programs.

It is important to define national and state interests in forestry management and determine the areas where national interest would complement or override state interests. As states have constitutional authority to regulate activities under their jurisdiction, it is important to assess how often conflicts over forest management would indeed occur and whether this would constitute a serious problem. In practice, it may be that the level and degree of co-operation between states and the national government would provide the avenue for the long-term protection and management of forest land.

A comprehensive set of regulatory measures incorporating the various components of forest planning, management, uses, conservation, penalties and other forms of control over hazards such as fire should, in the long term, be consolidated in a single framework Act with regulation-making powers for details of management and other aspects to be prescribed by the Minister responsible for forests. As piecemeal regulations are familiar in many jurisdictions, it is worth emphasizing that framework comprehensive legislation has much in its favor for ease of implementation and reducing overlapping responsibilities. It is also important to cite in the framework Act the Minister and Ministry responsible for its implementation.

It is therefore recommended that:

1. A comprehensive framework Forestry Act be developed and introduced;
2. The framework Act should include the various classifications of forests and their management requirements;
3. Provision be made for environmental impact assessments where required;
4. That the draft Palau Forest Practices Bill and the Palau Wildland Fire and Forest Management Bill be amalgamated and broadened to form the basis of a framework Act;
5. That forest planning be made a central function of forest management; and
6. Consideration be given to the development of a Code of Logging Practices.

8 Fisheries

8.1 Relevant Legislation

Constitution of Palau

Foreign Fishing (PNC Title 27)

Domestic Fishing (PNC Title 27)

Environmental Quality Protection Act (PNC Title 24)

An Act to repeal Section 1243 of PNC Title 24 RPPL No.3-6 (1989)

An Act to declare a moratorium upon harvesting *Trochus* in Palau except Tobi State

Act RPPL No.3-61 (1991). This Act is to prohibit the commercial exportation of lobsters, mangrove crabs, to prohibit commercial exportation of reef fish, except cultured species, during the months of March through July of each year and for other purposes.

A Bill for an Act to repeal RPPL No.3-61, and to repeal PNC Section 1211, and for other purposes. [This Bill is to regulate the taking of certain species of marine and terrestrial organisms, to prohibit or limit certain fishing methods, to protect coral reefs]. (Pending in Congress during the time of this Review.)

8.2 Introduction

8.2.1 Traditional Aspects of Palauan Fishing Rights

The Constitution of Palau, in Article I, states that Palau has jurisdiction and sovereignty over its territory which includes all of the islands of the Palauan archipelago, the internal waters and the territorial waters extending to 200 nautical miles from a straight archipelagic baseline. Palau's jurisdiction over its territory also extends to the seabirds, subsoil, water column, insular shelves, and airspace over land and water unless it is limited by international treaty obligations assumed by Palau (s.1). Each of the 16 States in Palau shall have exclusive ownership of all living and non-living resources, except highly migratory fish, from the land to 12 nautical miles seaward from the traditional baselines; provided, however, that traditional fishing rights and practices are not impaired.

The management of fishery resources is regulated by a mix of traditional conservation practices, statutes and treaties. Although marine spaces are defined by statutes, traditional clear areas are demarcated by close proximity as fishing grounds adjacent to villages are said to belong to them, except in Ngaraard where individual villages have control of adjacent fishing grounds. Traditional fishing rights are controlled by chiefs for the benefit of villages. Permission to fish in neighboring fishing grounds is usually granted only for domestic use (Johannes 1988). Article V of the Constitution of Palau prevents government from taking any action to prohibit or revoke the role or function of a traditional leader as recognized by custom and tradition unless it is inconsistent with the Constitution.

Traditionally recognized fishing rights in submerged reef areas wherever located within the fishery zone are also to be preserved and respected in accordance with the regulations established by the Palau Maritime Authority (PNC Title 27, Div.I, s.146).

There is, however, some concern expressed by the Division of Marine Resources on the erosion of traditional conservation measures, particularly in areas close to commercial centers and the possible overfishing on near-shore reefs and waters as a result of increased opportunities for fishermen having direct access to power boats. In 1993, a total of 777 fishermen landed a total of 769 tons of fish and invertebrates at three major fish markets with a dockside value of over \$2.1 million. This figure does not include aquarium fish, cultured giant clam and trochus (Idechong 1994).

8.3 Administrative Structure

The Division of Marine Resources is responsible to the Bureau of Natural Resources and Development, under the Ministry of Resources and Development.

8.3.1 Functions of Division of Marine Resources

Executive Order No.9 sets out the functions for the Division of Marine Resources and establishes the three following main work programs: marine and aquaculture research, fishery resources management and fishery resources development. The Division's 1992 annual report summarizes the functions of the Fishery Resources Management section in the following way:

- (a) to assess the commercial potential of reef, pelagic and deepwater fisheries, baitfish, molluscs, turtles and crustaceans from catch records, census and field measurements;
- (b) to develop and recommend regulations for scientific management of these resources on a sustained yield basis;
- (c) to recommend establishment by regulation of size limits, fishing seasons and sanctuary areas where appropriate; and
- (d) to inform the public on marine conservation matters (Republic of Palau 1992).

The Fishery Resources Development Program promotes the development of the commercial fishery and provides technical assistance to local fishing cooperatives and the Board of Directors and management of the Palau Federation of Fishing Associations as well as giving assistance to state governments. The Marine and Aquaculture Research Program operates and maintains the Belau Mariculture Demonstration Center for research and educational purposes. The Center conducts hatchery rearings and the mass production of commercially important marine species for example clams and trochus, for the dual purpose of conservation and economic development.

8.3.2 Draft Marine Resources Economic Development Plan

The Division of Marine Resources has developed a draft Marine Resources Economic Development Plan for 1994 outlining policies and strategies to be implemented which include policies for the conservation of fisheries resources (Idechong 1994). The policies include the establishment of long-term programs to monitor the health of the marine environment and resources; support programs that protect reefs and other marine habitat; encourage non-exploitative use of marine resources which maximizes local benefits and minimizes impacts on resources and the environment; and establish national marine reserves and facilitate marine zoning at key locations to ensure species recovery and long-term sustainability of important resources. The importance of community participation in fisheries management is recognized in the Plan and one of the policies of the Division as set out in the Plan is to encourage and facilitate resource owner participation in management decisions and activities.

8.4 Palau Maritime Authority

The membership of the Palau Maritime Authority (PMA) (created under PNC Title 27) consists of members appointed by the President; five appointed by the President of the Senate and Speaker of the House of Delegates, and one member appointed jointly by the President and the President of the Senate and the Speaker. One member is appointed as Chairperson. The members serve at the pleasure of the person by whom they are appointed. The Authority is responsible to the Ministry of State.

8.4.1 Functions of the Authority

The functions of the Authority are:

- (a) To adopt regulations for the conservation, management, and exploitation of all living resources in the extended and exclusive fisheries zones of the Republic pursuant to sections 125 and 144 of this Title;
- (b) to participate in the delimitation of the extended fishery zone in accordance with section 147 of this Title;
- (c) to negotiate and conclude foreign fishing agreements; and
- (d) to issue foreign fishing permits.

The functions of the PMA not only involve the negotiation and issuing of foreign fishing licenses, it is also responsible for the development, conservation and management of migratory species of fish within the 200-mile Fishery Zone.

8.4.2 Fishery Zone

The Palau Fishery Zone is estimated to cover 600,900 sq km of ocean (figure supplied by Forum Fisheries Agency). The Fishery Zones and Regulations of Foreign Fishing legislation establishes a territorial sea of three miles extending from the baseline of islands outwards (s.141): "The outer boundary of the line, every point of which is three nautical miles seawards of the nearest point from the baseline" (s.142(a)). The Exclusive Fishery

Zone is the zone contiguous to the territorial sea and extends 12 nautical miles seawards from the baseline as defined in section 141. The national government may exercise the same sovereign rights to living resources in the Exclusive Fishery Zone as it does in the territorial sea.

The Extended Fishery Zone established under section 144 lies contiguous to the Exclusive Fishery Zone. The inner boundary of the extended fishery zone of each island or atoll is the seaward boundary of the exclusive fishery zone, and the outer boundary is a line, every point of which is 200 nautical miles seaward. Where the fishery zones overlap with those of another nation, the governments are required to cooperate in the delimitation of the zones (s.147).

8.4.3 Restrictions on Foreign Fishing

Foreign fishing may only be permitted in Palau's Fishery Zone by way of a permit system. Under section 167, a foreign party is entitled to a fishing permit in accordance with the Foreign Fishing Agreement applying to both countries. Permits may also be issued for non-commercial purposes, for example fishery research. A Bait Fish Permit for highly migratory species, containing terms and conditions, may also be issued to foreign fishing vessels at the discretion of the Authority.

8.4.4 Penalties

In addition to civil and criminal penalties that may be imposed for breaches of the provisions of this law by a foreign fishing vessel, the Authority has the power to:

- revoke or suspend fishing permits; or
- impose additional conditions and restrictions on approved applications (s.170).

There are also heavy penalties imposed by section 182 for violations of the provisions of this section of the law or any permit issued or where there is refusal by the authorities of the foreign fishing vessel to permit an authorized officer to conduct inspection and search. Resistance to lawful arrest, or selling or exporting any fish taken in violation of the Agreement, permit conditions, or the law also carries heavy penalties (s.181).

8.5 Domestic Fishing

PNC Title 27 (Div.2) provides for domestic fishing. Chapter 10 establishes district entities for the development of marine resources.

Each district is authorized to establish an entity, to make regulations concerning the exploitation of living marine resources and to provide guidance in establishing a marine resources development policy.

The Palau Fishing Authority Act 1980 establishes the Palau Fishing Authority with the following powers and duties:

- to provide guidance to the national government in establishing marine resources development policy in any internal waters;
- to adopt regulations with respect to living marine resources in any internal waters; and
- to establish and operate facilities required for commercial fisheries development, cooperative associations and locally owned private fishing enterprises.

8.6 *Fish and Game Commission*

This Commission was created under the Environmental Quality Protection Act (PNC Title 24) to conserve and develop the marine and terrestrial resources of the Republic for the nutritional, economical, and environmental benefit of the people of Palau.

The Commission consists of seven members which includes the fisheries management biologist, the staff entomologist and five members appointed by the President with the advice and consent of the Olbiil Era Kelulau.

8.7 *Administrative Structure – Summary*

From the legislation reviewed it appears that fisheries resources are regulated by the:

- (1) Ministry of Resources and Development through the Division of Marine Resources;
- (2) Ministry of State through the Palau Maritime Authority which is concerned with regulating foreign fishing;
- (3) Palau Fishing Authority established under the Palau Fishing Authority Act of 1980 which is mainly concerned with domestic fishing; and
- (4) the Fish and Game Commission created under the Environmental Quality Protection Act (PNC Title 24).

8.8 *Marine Resource Management*

Although the last two decades have produced an industrial culture to utilize fishery resources, the various pieces of legislation reviewed incorporate provisions for fishery conservation and management. Given the fact that the fishery is vulnerable to the encroachments of industrial societies, the laws provide a permitting system to control the overexploitation of fisheries. Palau's sovereignty over the 200 nautical mile Extended Fishery Zone brings under its control a vast area of ocean, giving it the right to prevent overfishing and other activities which could cause both economic and environmental damage. Fisheries are also managed through international agreements as permitted through section 166 of PNC Title 27 (Division 1). One such Agreement is the Treaty on Fisheries between the Governments of Certain Pacific Island States and the Government of the United States of America [Multilateral Fisheries Treaty], signed in Port Moresby on 2 April 1987.

8.8.1 *Multilateral Fisheries Treaty with the USA*

The above Treaty, to which Palau is a Party, acknowledges the sovereign right of States to exploring and exploiting, conserving and managing fisheries resources in their own EEZ or fishery zones. Article 2 of the Treaty emphasizes the cooperative nature of the relationship by providing that the United States will cooperate with specific Island Parties through the provision of technical and economic support to assist them to achieve the objective of maximizing benefits from the development of fisheries resources, in addition to payments based on the number of vessels licensed to fish.

Parties to the Treaty have agreed to license US fishing vessels to fish for tuna, other than southern bluefin tuna (Annex I, Part 3, cl.5), in certain parts of the sea under their jurisdiction. As far as Palau is concerned, this excludes the "closed areas" of its territorial sea (i.e. within 12 nautical miles of all island baselines in the Palau islands; within a 50 nautical mile arc measured from the entrance to Malakal Harbor and extending from where the arc intersects the territorial sea limit to the north-east of Babeldaob to the 134° East meridian, south-west of Angaur, then due North along the 134° East meridian to the intersection with the territorial sea limit).

Licenses can be refused for a number of reasons (Annex II). These include a prior serious violation of the Treaty, or previous multiple violations which constitute a serious disregard of the Treaty, as well as certain situations where the vessel does not have good standing on the Regional Register of Foreign Fishing Vessels, maintained by the Forum Fisheries Agency, because there is evidence giving reasonable cause to believe that the operator has committed a serious fisheries offence and has not been brought to trial.

Annex I, Part 3, Clause 6, states that only purse-seine fishing is permitted. Advance notice of an intention to enter Palauan waters must be given and information relating to the position of the vessel and the catch must be supplied regularly. Part 6 provides for observers who are given full powers of inspection, and full access to and the use of facilities. Access must also be provided to the bridge, holds, fish-storing facilities and logs.

Enforcement provisions under the Treaty are set out in Part 5 of Annex I.

8.9 *Protection of Specific Marine Species*

The Act to prohibit the commercial exportation of lobsters, mangroves, crabs and reef fish, except for cultured species, during the months of March to July each year (RPPL No.3-61), was first introduced into the House in 1989 and became law without the President's signature on October 3, 1991. Anyone breaching its provisions is liable to a fine and/or imprisonment (s.2).

An Act (RPPL No.3-6) "to declare a moratorium on the harvesting of trochus throughout Palau, except Tobi State; to repeal section 1243 of PNC Title 24, to empower the national government to declare open seasons for trochus harvesting, to restrict the storage of harvested trochus" was enacted on August 2, 1989.

This Act provides for closed and open seasons for the harvesting of trochus and state governments are empowered to designate certain reefs or sections of reefs within their borders closed to trochus harvesting. During the open season, any citizen of Palau may harvest trochus in those areas where customary rights can be claimed.

A Bill to regulate the taking of certain species of marine and terrestrial organisms, to protect coral reefs and prohibit or limit certain fishing methods, has also been drafted. The draft Bill has been designed to repeal RPPL No.3-61 and section 1211 of PNC Title 24 (which deals with the control of sponge harvesting). This draft Bill is to be known as the Marine Resources Protection Act of 1994.

Section 3 of the draft Bill sets out a list of prohibitions and makes it unlawful for persons to sell or buy for commercial purposes named species of grouper from April 1 to July 31; rabbitfish from March 1 to May 31; and species of rock lobsters of certain sizes. The exporting of any non-cultured humphead parrotfish, coconut and mangrove crabs and clams is also prohibited.

PNC Title 24, Ch.12 provides for protected sea life. This matter is dealt with in Chapter 13 of this Review.

8.10 Prohibited Fishing Methods

The draft Marine Resources Protection Bill 1994 prohibits the use of gill nets having a mesh size of less than 3 inches; and 'kesoke' nets with no bag portion or with a bag portion having a mesh size of less than 3 inches.

PNC Title 24 (Ch.13, Sub.Ch.1) prohibits the catching of marine life with chemical or plant poisons, or explosives (ss.1301-1305). The President may issue a permit for the use of poisons or explosives only for the purpose of scientific research, exploration, construction or other uses (s.1323).

The use of prohibited methods carries a penalty of a fine and/or imprisonment and the seizure of fishing gear (s.1326).

8.11 Marine Reserves

The Ngerukewid Islands Wildlife Preserve is dealt with in Chapter 14 of this Review. The Ngerumekaol Spawning Area established under PNC Title 24, Ch.31 is for the purpose of conserving grouper during the spawning season. No-one is permitted to kill, capture or transport any fish from the Ngerumekaol Spawning Area between April 1 and July 31 of each year. Idechong (1994) states that potential marine reserves have been documented but they need to be formally established and management plans prepared for them. He asserts that the Ngerukewid Islands Wildlife Preserve requires more frequent surveillance.

8.12 Conclusion and Recommendations

There is a range of legislation providing for, protecting and conserving the fisheries resources of Palau. Although the legislation contains environmental content of a sufficiently broad and satisfactory standard, it is, however, affected by other issues such as the need for sufficient resources and staff to implement the provisions and training. Enforcement of the law is also crucial to the protection of fisheries resources.

As there is a draft Marine Resources Protection Bill 1994, it is suggested that consideration be given for all legislation relating to fisheries resources to be consolidated into one framework Act, such as the Marine Resources Protection Act. If the word "Protection" were not included in the title and the Act simply cited as the Marine Resources Act, it would enable those parts of the law dealing with foreign fishing, for example, to be included in the framework legislation.

It is therefore recommended that:

1. The various pieces of legislation providing for the various aspects of fisheries such as domestic fishing, foreign fishing, the conservation and protection of species be consolidated into one piece of framework legislation.

9 Water Supply and Water Quality

9.1 Relevant Legislation

Marine and Fresh Water Quality Standards Regulations
Water Supply Systems Regulations

9.2 Introduction

Water use and consumption increase with any rise in population and tourism development. The stress on water supplies and resources becomes critical in times of drought, particularly in an atoll community where readily available water sources are scarce. As a general statement, water is not regarded by the general public as a scarce resource and waste is commonplace. There is a need to balance water conservation values against basic water needs.

The Environmental Quality Protection Board (EQPB) considers the provision of safe drinking water to be of the highest priority. There are currently 19 public water supply systems regulated by EQPB. Although most of the systems have ample water supply, "many of the systems experience periodic or frequent problems with producing safe potable water" (Republic of Palau 1994). The Koror/Airai water system is the only one regularly chlorinated. The majority of the population use rainwater from individual catchment systems. Currently, groundwater is not an important source of public water supply except on Angaur and Peleliu, although there are several wells available for supplementary use in Koror. The EQPB laboratory implements a comprehensive monitoring program and tests water quality for bacteria, turbidity, chlorine residue and other contaminants. EQPB has a number of ongoing initiatives to ensure water quality, such as the refinement of the groundwater management strategy, chemical testing, maintaining laboratory certification for coliform and fecal coliform analysis and to perform baseline studies and water quality monitoring in rural public water systems (Republic of Palau 1994).

EQPB is not only responsible for maintaining the quality of the drinking water of Palau, it is also responsible for preserving and protecting the quality and uses of water in the marine environment. The program priorities as set out by EQPB for 1994 are to complete a water quality classification map for significant waters of Palau; continue to implement and expand the marine water quality program; develop and adopt regulations for a National Pollutant Discharge Elimination System (NPDES); adopt regulations for ocean dumping and waste water disposal; and increase monitoring and surveillance of and enforcement of penalties against activities which result in discharges causing deleterious impacts on the waterways (Republic of Palau 1994).

9.3 Statutory Background

The Marine and Fresh Water Quality Standards Regulations (PNC Title 24) are implemented by EQPB. These regulations, based on United States landmark legislation, the Clean Water Act, apply to all marine and freshwater bodies in Palau; and currently it is

the only significant program that protects the ecological integrity of Palau's waters. The goals of the regulations are not only to maintain water quality for health and welfare reasons; their mandate also extends to controlling the pollutants that are discharged into the nation's waters (s.1.2).

9.3.1 Policy

A set of policy goals set out in section 1.3, designed to meet the objectives of the regulations, includes:

- the propagation of aquatic life;
- the propagation of fish, shellfish and wildlife;
- ensuring that the degeneration of water quality does not interfere or become injurious to existing users;
- that any new point source of pollution must not be discharged into near-shore or fresh surface waters and there is to be no discharge of sewage or other wastes into any planned ground or surface sources of drinking water; and
- protecting outstanding national water resources in a pristine state.

9.3.2 Classification of Water

The regulations classify water in accordance with their various uses. The three broad classifications are for coastal waters, fresh waters and groundwaters and the regulations further classify these waters depending on their use value.

(i) Fresh Water Uses

Fresh water in the Class I category is to be protected for drinking water supply, food processing, and for the support and propagation of aquatic life and for uses compatible with recreation. The objective of this Class is to maintain water as near as possible to its natural state with an absolute minimum of pollution permitted from any source. Class II waters are those waters designated for swimming and bathing; for the support and propagation of aquatic life; and for uses that are compatible with recreation and agriculture. The objective of this Class is to encourage the propagation of fish and aquatic life and assign waters for agricultural and industrial uses. Waters with this designation must be kept clean and free from trash, solid waste and oil and must not act as receiving waters for effluent.

(ii) Groundwater Uses

Groundwater is classified into three classes. Class I waters are special groundwaters that could be used as an alternative source of drinking water supply. This water is irreplaceable if polluted, and it is also considered to be ecologically vital to the support of unique habitats. Class II waters are potential sources of drinking water but Class III waters have limited beneficial use due to their high salinity. Groundwater areas are also classified (s.2.4). Part III of the Regulations establishes water quality standards for all classes of water.

(iii) Coastal Waters

Coastal waters are also classified into those that are protected for recreational purposes, aesthetic enjoyment and for the propagation of aquatic life (Class A). Waters classified in the B category are located around harbors which have boat docking facilities for industrial and commercial purposes.

9.4 National Pollutant Discharge Elimination System

Under section 402 of the US Clean Water Act, which applies to Palau, the National Pollutant Discharge Elimination System (NPDES) was established to control and prohibit any point source discharges to surface waters without a NPDES permit. The definition section of the Marine and Fresh Water Quality Standards Regulations (s.1.4) indicates that the program in Palau is not only similar to the US program, but that it must be in uniformity with it.

All point source discharge operators must apply for an NPDES permit from EQPB before commencing any operation. The application enables EQPB to inspect the applicant's operations, establish a monitoring system and generally enforce the provisions of the regulations.

All new point source discharges are subject to the NPDES permit system and an EQPB Discharge Permit. The permits are required even if it can be demonstrated that the discharges will meet the water quality standards at the point of discharge. An application for a permit must include the location and description of the waste to be discharged and the flow rate.

9.5 Water Supply Systems Regulations

The Water Supply Systems Regulations have been promulgated by EQPB pursuant to RPPL 1-58 for the purpose of ensuring that the public water supply systems are protected against contamination. "Public water supply" is defined in the regulations to mean a system which provides piped water to the public for human consumption, if it serves 25 individuals daily at least 60 days out of the year, and there are at least 15 service connections.

The regulations set the Drinking Water Quality Standards, the Microbiological Quality Monitoring System and establish the standards for water supply during emergencies.

9.6 Conclusion

The protection and maintenance of water quality by setting standards specifically or in general is an important part of the system, but the protection of the environment is also achieved by many other techniques such as the attachment of conditions as included in those statutes already examined. One of the purposes of an NPDES permit system is to prevent pollution at source, which involves the identification and elimination of pollution before it

happens, particularly for new point source discharges. Pollution occurring during the currency of a permitted activity could result in the variation, amendment, or revocation of a permit.

The Marine and Fresh Water Quality Standards Regulations and the Water Supply Systems Regulations both set high standards for water quality, to not only protect one of the most important national resources, but also to ensure the health, safety and welfare of the population. The high standards set are justified on the grounds that higher and more stringent standards to prevent pollution and maintain water quality are preferable to less effective and weaker legislation.

Although the nature of the provisions in the legislation reviewed in this chapter determines the scope of environmental concern, the standards in these laws mirror those in the United States legislation. There is no doubt that a sound national management system of water quality is not only desirable, but essential. However, it is up to countries to clearly define its capabilities, resources and strategies to fully implement the objectives of the various water laws.

10 Mining and Minerals

10.1 Relevant Legislation

Draft Mines and Minerals Bill 1987

Draft Petroleum (Marine Area Exploration and Production) Bill 1987

Draft Petroleum (Marine Area Exploration and Production) Regulations 1987

Draft Model Concession Agreement for Petroleum Exploration, Development and Production in the Republic of Palau

Earthmoving Regulations (PNC Title 24)

10.2 Introduction

The laws relating to mining and the extraction and exploration of minerals are usually considered in a review of environmental law because of the surface and subsurface damage brought about by such activities and the storage of wastes, tailings and effluent discharges that result. There is currently no mining operation carried out in the Republic of Palau, although in the past both phosphate and bauxite were mined; it is understood that these mines are no longer operational. This chapter is not confined to the mining of minerals and petroleum but also to sand and foreshore mining and quarrying. The Review will be confined only to the environmental content of the law in this area.

The responsibility for mineral resources falls within the jurisdiction of the Chief of Agriculture and Mineral Resources who is responsible through the Director of the Bureau of Natural Resources and Development to the Minister of Resources and Development.

10.3 Statutory Background

There is currently no law enacted to regulate the mining of minerals and petroleum in the Republic of Palau, but draft legislation exists, as set out above in section 10.1. There is some merit in reviewing the draft Bills and the Model Concession Agreement for their environmental content for future purposes.

In the draft Mines and Minerals Bill 1987, "mineral" is defined to mean "any substance found naturally in or on the earth formed by or subject to a (natural) geological process, but does not include petroleum as defined in section 2 of the Petroleum (Marine Area Exploitation and Production) Act, 1987" (s.3).

10.3.1 Reserved and Protected Areas

The Minister responsible for implementing this Act may designate from time to time areas to be "reserved areas" where reconnaissance, prospecting and mining are prohibited. The draft Bill sets out a number of these areas which include:

- any village, place of burial or other site of traditional significance or within 30 meters of a dwelling house or building;
- any land used for crops or considered fit for planting;
- any designated town land; and
- any land used in connection with water supply or public purposes (s.4).

For any mining within these areas, consent is necessary from owners or occupiers of land or from authorized public officers for land surrounding water supply sources or public lands.

Areas that are not covered above are those areas declared to be reserve forests, as such areas could possibly be affected by mining activities in the future. The inclusion of reserve forests within the categories of land outlined above would need to have complementary provisions in any forestry legislation.

10.3.2 Licenses

The Mining laws permit three kinds of license:

(a) Reconnaissance License

The word "reconnaissance" is defined in section 3 of the draft Bill to mean the intentional search for any mineral by geophysical, geochemical, photogeological surveys or other remote sensing technique but does not, unless provided for in the reconnaissance license, include drilling, trenching, pitting or other excavation or subsurface techniques other than hand-operated augering. A reconnaissance license may be issued by the Minister for the purposes of searching for minerals, but such licenses are not issued in areas that are subject to an existing prospecting or mining license (s.10(b)). A reconnaissance license initially issued for a year with a right of renewal for another year (s.10(d)) contains a number of obligations with which the holder is expected to comply, such as the submission of reports, tests, charts and geological interpretations of the mineral prospects in the area covered by the license. Minerals may be removed for the purposes of analysis (s.13(b) (c)).

There are no provisions in the draft Bill for the holder of a reconnaissance license regarding fencing and securing areas that have been sunk for tests and filling any holes made, to prevent persons and livestock from falling in and for soil conservation purposes. It is therefore suggested that such provisions be included in the draft Bill.

(b) Prospecting License

The holder of a prospecting license has the exclusive right to prospect in designated areas, the extent of which is set out in section 19 of the draft Bill. The holder has the right to drill and excavate as necessary, build roads, airstrips, helicopter pads, erect camps and put in temporary buildings and machinery. In respect of marine areas the license holder may erect installations and place vessels in the area (s.20). On expiry of a prospecting license, the license holder is required under the draft Bill to:

backfill or otherwise make safe any drillhole or excavation made during the course of his prospecting operations, to the satisfaction of the Chief Geologist; and

...remove, within ninety days of the expiry of the Prospecting License, any camp, buildings or machinery erected or installed by him, and repair or otherwise make good any damage to the surface of the ground occasioned by the removal, to the satisfaction of the Chief Geologist (s.21(6)(7)).

The Minister may also require the holder of the prospecting license to rehabilitate roads, stream-beds or banks, or land damaged as a result of prospecting (s.21(d)).

(c) Mining License

A holder of a prospecting license who has made a commercial discovery has the right to apply for a mining license. A mining license may be issued for a period of twenty-five years, subject to renewal for a maximum ten-year period (s.27).

An applicant for a mining license must include in the application the details of the mineral deposits, grade and quantity, and anticipated mining conditions with comments on possible ore reserves. A proposed mining plan must include an environmental impact statement, and a detailed program for:

- (a) tailings and waste disposal;
- (b) the progressive reclamation and rehabilitation of lands disturbed by mining; and
- (c) the monitoring and minimization of the effects of such mining on air, land and water areas (s.23(c) (7)(vi)).

Although an environmental impact statement is required for mining, there are no complementary provisions in the reconnaissance and prospecting areas and it is suggested that a similar requirement be made obligatory before the commencement of reconnaissance and prospecting for minerals.

10.4 Building Materials License

The draft Mines and Minerals Bill includes provisions for the mining of building materials. "Building materials" are defined in the draft Bill to mean "clay, gravel, sand and stone used for buildings, roads or other construction purposes". The holder of the building materials license must comply with "good mining industry practice" (s.40(b)) and on the termination of the license, clear the area and make it safe to the satisfaction of the Chief Geologist (s.40(e)). Every excavation of this description has just as much negative impact on the environment as mining and earthmoving. The draft Bill makes no specific requirement for an Environmental Impact Assessment to be conducted before a license is issued, but it is possible that the Earthmoving Regulations implemented by EQPB would be applicable.

It is suggested that the Earthmoving Regulations and the section on Building Materials License in the draft Mines and Minerals Bill 1987 be reviewed together as it appears that these two pieces of legislation could cover the same subject matter.

10.5 Petroleum

Under the draft Petroleum (Marine Area Exploration and Production) Bill 1987, petroleum is defined to mean:

all natural organic substances composed of carbon and hydrogen; and includes crude oil and natural gas and all other material substances, products, by-products and derivatives that are found in conjunction with petroleum (s.2).

The national government reserves the right to carry out petroleum operations either on its own or by means of contracts with qualified persons. No petroleum operations can be conducted in the Republic unless the national government initiates the operations or issues a contract to persons to conduct the operations (s.8).

10.5.1 Exploration, Discovery, Production

A contractor shall be entitled for the duration of the contract to the exclusive right to carry out petroleum operations in a contract area and to freely lift, dispose of and export the petroleum (s.15). Under section 18 of the draft Bill, the term of a contract is divided into an exploration period, a development period, and a production period. The exploration period extends to a maximum of 10 years but under exceptional circumstances this period may be extended further. Where no commercial discovery of petroleum is made during the exploration period the contract is terminated. Where a commercial discovery is made, the development and production period may be extended to 25 years (s.18). Section 24 permits the contractor to carry out such activities and to execute works and erect structures within the contract area or place such vessels as may be necessary for the purposes of carrying out the operations (s.24).

10.5.2 Conservation and Work Practices

A contractor is expected to carry out petroleum operations in accordance with generally accepted practices in the international petroleum industry which shall include:

- steps to obtain maximum efficient levels of production compatible with the nature and extent of the petroleum reservoirs discovered;
- controlling the flow and preventing waste or the escape of petroleum, water, drilling fluids or any mixture into the surrounding area; and
- adopting the necessary measures for the protection of fauna, flora and other natural resources.

Pollution or contamination of water, atmosphere or land must be avoided and necessary steps must be taken to secure the safety, health and welfare of the persons engaged in the operations. At the termination of the contract, the contractor is required to carry out all clean-up operations and render the contract area safe. At any time during the operation, the Minister may request the complete removal of any structure or facility which has ceased to be used (s.23).

10.5.3 Draft Petroleum Regulations

Under the draft Petroleum (Marine Area Exploration and Production) Regulations 1987 (made pursuant to the Act (currently draft Bill), the Minister may ask the contractor to show cause if it is considered that the contractor is not acting in accordance with the conservation and work practices as set out in section 23 of the Act. The Regulations make further provisions for drilling and abandonment and provide that:

before abandoning a production well, the statutory notice is required setting out the intention to abandon the well and the notice must be accompanied by a satisfactory program for the abandonment and plugging of the well (r.14(10)).

The abandonment operation requires the contractor to:

- securely plug the well to prevent pollution and damage to the deposit;
- remove all equipment but cemented strings and casings shall not be withdrawn without the written approval of the Minister.

The draft regulations authorize a representative of the Government to observe the abandonment operations (r.14(11)).

10.5.4 Pipelines and Related Facilities

A contractor may apply to the Minister for authorization to construct, alter or operate a pipeline, pumping station, storage or other related facilities for the conveyance or storage of petroleum (r.15). Although the regulations make adequate provisions for technical matters, they are silent on the aspects of environmental degradation that can be caused by pipeline and storage facility construction. It is therefore suggested that it should be made mandatory in the regulations that before granting pipeline and storage facility construction, the Minister take into account the public interest and that the pipeline construction in particular is not likely to contravene any town planning regulations or have an adverse impact on scenic attractions, fauna and flora or improved or best agricultural land.

10.6 Restrictions

The restrictions in the draft Petroleum (Marine Area Exploration and Production) Bill and Regulations should mirror those in the draft Mines and Minerals Bill. The right to conduct petroleum operations, which includes the construction of pipeline operations, should not include the right to use land in any village, burial site or land close to the source of drinking water supplies. It is therefore suggested that this portion of the draft Bill be reviewed for environmental conditions.

10.7 Environmental Impact Assessments

Both the draft Mines and Minerals Bill 1987 and the draft Petroleum (Marine Area Exploration and Production) Bill 1987 and related regulations make no provisions for environmental impact assessments (EIAs) to be conducted before approvals are given for

the conduct of mining operations. As EQPB implements the Environmental Impact Statement Regulations as well as the Marine and Freshwater Quality Standard Regulations, it is expected that any mining operations would have to comply with those regulations. It is suggested, however, that specific reference be made in the two draft Bills for the inclusion of EIA provisions.

10.8 Draft Model Concession Agreement for Petroleum Exploration, Development and Production in the Republic of Palau

This draft model concession agreement for petroleum exploration, development and production in the Republic of Palau reviewed for environmental content sets out in Article III that the contractor is required at the end of the exploration period, if no commercial discovery is made, to complete the drilling, testing, appraisal or plugging of any well (3.2). Where an operation has been relinquished, the contractor is required to perform all necessary clean-up activities in accordance with the generally accepted standards of the petroleum industry to prevent hazards to human life and third party property (Art.IV (4.8)).

10.9 Earthmoving Regulations

The Earthmoving Regulations implemented by EQPB require all earthmoving activities within Palau to be conducted in accordance with these regulations to prevent accelerated erosion and sedimentation. The control measures must be set forth in a plan and available at all times on the site of the project. Sedimentation and control plan is set out in regulation 2.2. In the terrestrial environment this could include diversion terraces, while in the marine environment, sea walls and breakwaters to prevent accelerated sedimentation are necessary.

10.10 Conclusion and Recommendations

Environmental content in the draft Mines and Minerals Bill is found to be satisfactory, but the draft Petroleum (Marine Area Exploration and Production) Bill and Regulations need to be reviewed for environmental content. The following further suggestions are made:

1. That the Petroleum (Marine Area Exploration and Production) Bill be specifically reviewed for environmental content;
2. That the Earthmoving Regulations and the Building Materials License provisions in the draft Mines and Minerals Bill be reviewed together to reduce overlapping responsibilities;
3. As earthmoving activities such as quarrying are clearly within the responsibilities of the Division of Agriculture and Mineral Resources, under the draft Mines and Minerals Bill, it would appear that this could overlap with the Earthmoving Regulations implemented by EQPB; some consideration may be given at some stage in the future, if considered desirable, to placing the responsibilities for implementing the Earthmoving Regulations under the Division of Agriculture and Mineral Resources;

4. That specific provisions be made for EIAs to be conducted before approval is given for mining operations in the draft Bills and Regulations;
5. Although an environmental impact statement is required for the mining phase of minerals, it is further suggested that complementary provisions be required during the reconnaissance and prospecting phases;
6. The draft Mines and Minerals Bill and the draft Petroleum (Marine Area Exploration and Production) Bill make no reference to the question of ownership, particularly of findings in the seabed and the subsoil. It is suggested that to avoid conflicting provisions, the legislation regulating Public Lands (see PNC Title 35), which places the ownership of land below the high water mark in the national government, be considered.

11 Waste Management and Pollution

11.1 Relevant Legislation

Solid Waste Regulations (authorized by RPPL No.1-58)
Public Health, Safety and Welfare (PNC Title 34)
Trust Territory Air Pollution Control Standards and Regulations
Trust Territory Pesticides Regulations
Land Planning Act (PNC Title 31)

11.2 Introduction

Waste production is a natural consequence of life in any society and increases in volume with population rise and a developing economy. Discarded plastic packaging, aluminum cans, newspapers, agricultural wastes, sewage sludge, medical wastes, wastes from quarries, unused motor cars, old machinery and chemical wastes are often seen in small island states as well as in industrialized societies. The small village rubbish dumps, at least in the growing centers of population such as towns, will eventually become a thing of the past. The disposal of waste is now becoming a more significant issue as disposal sites approach full capacity. The public solid waste disposal site in Koror highlights the difficulties faced by administrators in managing the large and growing variety of wastes produced in any one year.

11.3 Statutory Background

The management of waste is shared between the Palau Environmental Quality Protection Board (EQPB) and the Ministry of Health. EQPB is responsible for administering the Solid Waste Regulations, the Pesticides Regulations, the Air, Land and Water Pollution Regulations and the Air Pollution Control Standards and Regulations. EQPB has drafted the Toilet Facilities and Waste Water Disposal System Regulations and amendments are being made to the Pesticides Regulations.

11.3.1 Solid Waste

There are two separate pieces of legislation which regulate and control the disposal of solid wastes: the Solid Waste Regulations implemented by EQPB, and the laws relating to sanitation found in the Public Health, Safety and Welfare legislation under PNC Title 34.

The Solid Waste Regulations regulate the standards for the design, installation, operation and maintenance of solid waste storage facilities and the collection and disposal systems. The standards are designed to prevent pollution of waters, land and air, prevent the spread of disease, protect public safety and health, conserve natural resources and preserve and enhance the beauty and quality of the environment (r.1.2).

The regulations set the standards for solid waste disposal facilities; reclamation facilities; incineration; transfer stations; hazardous waste disposal; and private waste disposal

systems. The types of waste covered by the regulations include domestic, commercial, infectious (covering medical waste), hazardous, agricultural, and institutional wastes, and littering in public.

(a) Permit System

An application for a permit to dispose of waste under these regulations must be completed on forms provided by EQPB and must include the detailed plan for the disposal facility, an environmental impact assessment of the proposed site, details of the operation and maintenance procedures and a certificate indicating compliance with land use and zoning requirements (r.6.2.(a)). The Chairman of EQPB, on being satisfied that all the requirements of the regulations have been met, will issue a permit, not to exceed a period of 5 years (r.6.(3)). The Chairman has the power to include special conditions in the permit to ensure the protection of health and the environment (r.6(5)). A performance bond is paid to guarantee proper operation and the closure of the solid waste facility is likely to result in cases of breach of the regulations. The bond may be forfeited for non-compliance (r.6(6)).

(b) Recycling of Waste

The recycling of waste is mentioned in the regulations only in terms of reusable waste containers (Part 2.(d)). Recycling of waste, one of the techniques to reduce waste, if given further statutory expression would be consistent with other measures designed to reduce it. The notion of recycling essentially encourages householders, business and industry to sort waste at source for disposal, recycling and composting.

11.3.2 Waste disposal under Public Health, Safety and Welfare Legislation

Under section 102 of PNC Title 34, the Director of Health Services has the power, subject to the approval of the President, to make regulations considered necessary for public health and safety with respect to privy vaults, cesspools and other means of human excreta disposal.

The Individual Sewage Disposal Act promulgated under PNC Title 34 defines and regulates individual sewage disposal systems, sets the standards for design and construction, and installation of septic tank-soil absorption systems, privies and chemical types of toilets. "Individual sewage disposal system" is defined in the Act to mean a disposal system, which is not a public or community system, which receives human excreta and liquid waste from individual premises. The Act further empowers the Director to enact regulations to establish standards to ensure that waste discharges to the individual disposal systems do not:

- contaminate any drinking water;
- pollute waters used for bathing and shellfish breeding grounds;
- give rise to nuisance due to odor or unsightly appearance;
- become accessible to insects, rodents and other carriers of disease; and
- violate other laws or regulations governing water pollution or sewage disposal.

A permit from the Director of Health Services is required for the construction or extension of the individual sewerage system. The application for a permit sets out a number of requirements, including a complete plan of the disposal facilities to be constructed or extended, and the location of water supplies, piping, existing disposal systems, buildings, dwellings and adjacent lot lines to be identified (s.1105).

Under the Sewer Use Act 1984 promulgated under PNC Title 34 no person, other than the Director of Public Works, is permitted to uncover or make connections to a public sewer without a permit from the Palau EQPB. Before making a decision on the permit, EQPB requires, amongst other things, data on soil formation and groundwater levels and a description of the complete installation of the toilet and sewage disposal system (s.1203). The Act incorporates the Septic Tank and Leaching Field Standards which must conform to the recommendations set forth in the US Public Health Service's *Manual of Septic Tank Practice* (s.1206). Materials for constructing the sewer and the excavation methods used must conform to the requirements of EQPB and any building and plumbing codes in force. The Act prohibits the discharge of certain categories of wastes and water, such as gasoline or toxic or poisonous solids which constitute a hazard to humans and animals, into a public sewer (s.1217). Penalties are set out in the Act for breaches of the provisions (s.1229).

Section 1002 (Division 2 of PNC Title 34), dealing with sanitation, prohibits the accumulation of rubbish, garbage, coconut shells and other refuse. Anyone who permits or maintains such accumulation on land owned or occupied by him/her is required to remove the waste if required by a representative of the Bureau of Health Services.

The Environmental Health and Sanitation Division of the Bureau of Health Services has issued regulations called the Special Sanitation Requirements for Food Service Establishments. Section IV of the regulations, which deals with sanitary facilities and controls, provides that all sewage be disposed of in a public or individual sewerage system in a manner approved by the Director of Health Services. Food wastes and garbage disposals must be properly sealed and disposed of at sufficient frequency and in such a manner as to prevent a nuisance.

11.4 Relationship between Waste Disposal and Planning Law

The disposal of waste on land sites has significant implications for laws relating to land use and planning controls.

The provision of an adequate waste disposal system is dependent upon the zoning provisions provided under the Land Planning legislation. Specific provisions need to be made in waste disposal planning at the national and local levels for land to be set aside for waste disposal, taking into account the volume of waste produced and the number of sites available now and in the future. Under the Land Planning legislation, conditions can be imposed for regulating the development and use of land. This power overlaps with the permits issued for waste disposal under the Solid Waste Disposal Regulations.

11.5 Waste Water Disposal System

There are draft Toilet Facilities and Waste Water Disposal System Regulations promulgated by EQPB pursuant to the authority vested in the Board under Section 5 of RPPL 1-58 (PNC 24 s.121 et. seq.); the Palau Environmental Quality Protection Act; section 5 of RPPL No. 1-73 (PNC Title 34 s.1205); and the Sewer Use Act 1984.

The draft regulations establish standards and regulate toilet and waste water disposal systems and further set the minimum standards for the design and operation of such systems in order to minimize environmental pollution, health hazards and public nuisance.

11.6 Water Pollution

The EQPB Report 1993 sets out a list of goals to be achieved in 1994 for maintaining water quality through the prevention of waters from all sources being used for waste disposal (Republic of Palau 1994). The standards set for water quality and the incorporation of effluent control devices into the Palau legislation is based on United States legislation. EQPB sets itself the task of developing regulations for ocean dumping and waste water disposal; and expansion on the s.401 certification program for a permitting system to be developed for all activities (e.g. shipping, water sports etc.) which may impact on water quality. The development of regulations for a National Pollutant Discharge Elimination System (NPDES)-type permitting program for all discharges of contaminants into water bodies from point sources is a means of achieving effluent limitations. There are other controls over water pollution under section 404 of the US Clean Water Act (see Chapter 9 of this Review) which give the US Army Corp of Engineers and EQPB expanded permit powers over dredge and fill activities on waters and adjacent wetlands.

In reviewing this sector of the legislation for environmental content, it needs to be borne in mind that not all water users prefer or need clean water, as, for example, farmers irrigating land for root crops could prefer unpurified water for its nutrient value and soil-sealing capacities. Although water quality is an inevitable development, numerous laws on water quality standards would need to be balanced with the needs of those who prefer to use water of a lesser quality because of the particular use value.

11.7 Pesticides

EQPB administers the Pesticides Regulations. The Trust Territory Pesticides Regulations are currently being updated; for the purposes of this Review it is useful to comment on some aspects of the current regulations.

It is unknown how much pesticide is imported into Palau. Although the Pesticides Regulations contain stringent requirements, in practice, pesticides can be imported without strictly adhering to the regulatory measures.

Under the regulations, anyone wishing to import pesticides must file a notice of intent. Upon the arrival of the shipment of pesticide, it is subject to inspection by EQPB before being released. Shipments arriving without notice are detained and all expenses occurring

from the detainment will be levied against the importer. Where delivery of a pesticide shipment is denied, the pesticide will be disposed of in accordance with the regulations (r.7).

11.7.1 Restriction and Banning of Pesticides

If a pesticide is found to produce substantial adverse effects on human health and the environment, the pesticide will be seized. Equally, pesticides on the restricted list will be seized if found in the possession of unauthorized persons; or if found to be contaminated or misbranded. A "stop sale" order may also be used if a pesticide does not meet the standards set out in the regulations (r.10.3). Part 13 of the Regulations sets out the Pesticide Use Classification. As the regulations are currently being updated, it is possible that some of the provisions described above could become obsolete.

11.8 Air Pollution

The Trust Territory Air Pollution Control Standards and Regulations currently apply to Palau. The Regulations set out Clean Air Quality Standards which are expected to control pollution that would be hazardous to health, cause injury to agricultural crops and livestock, or have a deteriorating effect on property.

The regulations outline in Part 10 the control of emission from a range of sources, such as the processing industry, incinerations; Part 12 of the regulations establishes controls for odors, sulphur dioxide, motor vehicle pollution; Part 16 sets the National Emission Standards for Hazardous Air Pollutants.

The Regulations provide a scheme to prohibit, limit and control air pollution from regular and new sources. New sources of air pollution are scrutinized through a permitting system and those who contravene the strictures in the regulations may be forced to take abatement measures.

11.9 Conclusion

The range of legislation reviewed provides a sound environmental regime for waste management, encompassing not only pollution control and solid waste management but also pollution in the atmosphere from a range of sources such as motor vehicles, quarrying and incineration. The only matter not covered in this Review is regulations to control "undue" noise. It is possible that noise abatement and control regulations exist, though high volume noises may be controlled through the laws of public nuisance. Zoning laws under the Land Planning Act provide a further basis to control noises through the separation of industrial zones from residential areas.

12 Biodiversity Conservation

12.1 Relevant Legislation

National

Environmental Protection (PNC Title 24)
Ngerukewid Islands Wildlife Preserve (PNC Title 24, Ch.30)
Land Planning Act (PNC Title 31)
Natural Heritage Reserves System Act 1991
Endangered Species Act 1975

International

Convention on Biological Diversity 1992
Convention for the Protection of the Natural Resources and Environment of the South Pacific Region and Related Protocols 1986 (SPREP Convention)
Convention for the Conservation of Nature in the South Pacific 1976 (Apia Convention)

12.2 Introduction

Biodiversity conservation is a comprehensive term encompassing the entire variety of nature - all species of plants, animals and micro-organisms as well as the ecosystems of which they are a part (Birnie & Boyle 1992). The global Convention on Biological Diversity, adopted on 22 May 1992 after four years of deliberations by an Intergovernmental Negotiating Committee under the sponsorship of the United Nations Environment Programme (UNEP), defines biodiversity conservation to mean the variability among living organisms from all sources; terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems (IUCN 1993).

The need to preserve genetic resources is emphasized in the *World Conservation Strategy* (IUCN et al. 1980), which points out that:

we are morally obliged to our descendants and other creatures to act prudently. Since our capacity to alter the course of evolution does not make us any the less subject to it, wisdom also dictates that we be prudent. We cannot predict what species may become useful to us or are vital parts of the life support system on which we depend. For reasons of ethics and self-interest, therefore we should not knowingly cause the extinction of a species.

The Comprehensive Conservation Strategy for the Republic of Palau states that Palau supports a high diversity of both terrestrial and marine resources. Palau's proximity to Asia has allowed for the spread of a proportionally higher number of terrestrial species to Palau than is found in many of the South Pacific nations. Palau's overall isolation and its volcanic and limestone geological formation which sustains different terrestrial habitats play a strong role in creating diversity of terrestrial resources (Cassell et al. 1992).

The Comprehensive Conservation Strategy points out that there are approximately 1258 taxa (species and varieties) of plants, of which 839 are endemic (native) to Palau. There are some 141 species of birds from 41 families which have been seen in Palau; of the 50 species resident in Palau, 8 are endemic. There are three species of native terrestrial mammals; one species, the Palau fruit bat, is endemic (Cassell et al. 1992). Palau also hosts the richest avifauna of all the Micronesian group of islands and has a high level of diversity and abundance of marine resources. There is an estimate of about 1,357 inshore fisheries species in Palau and the diversity of the marine environment is said to be influenced by the close proximity to the center of marine diversity in the Indo-West Pacific (Cassell et al. 1992).

12.3 Statutory Background

The two main legislative methods of biodiversity conservation and protection in Palau are the protection of endangered or threatened species through the Endangered Species Act 1975, and through the creation of parks, reserves and refuges as provided for in the Natural Heritage Reserves Systems Act 1991.

The legislation establishing the Ngerukewid Islands Wildlife Preserve (established in 1956) (see Ch.13 PNC Title 24) also preserves the genetic diversity of the species found there. "In situ protection of species (protecting them in their natural habitats) offers the best method for preserving genetic diversity" (Salm & Clark 1989). The conservation of biodiversity is promoted through such statutes as:

- (a) the Land Planning Act which establishes conservation zones which preserve and protect land and shoreline areas in their natural state (see Chapter 5 of this Review);
- (b) the Natural Heritage Reserves System Act 1991 which provides for a system of reserves, sanctuaries and refuges to be established in the terrestrial, fresh water and marine environment (see Chapter 14 of this Review); and
- (c) the Endangered Species Act 1975 which promotes the protection of species considered to be threatened or endangered to ensure that species do not become exceedingly rare or disappear altogether (see Chapter 13 of this Review).

12.4 International Conventions

The current and most important convention in this area is the Convention on Biological Diversity. This Convention provides for the first time a comprehensive framework agreement for the conservation of biodiversity and the sustainable use of biological resources. The Convention incorporates those related principles established in the *World Conservation Strategy* (IUCN et al. 1980) and the *Global Biodiversity Strategy* (WRI et al. 1992) and recognizes that both biological resources and biodiversity should be conserved not only for economic benefits but also for human survival. The Convention goes beyond the conservation of biodiversity and includes such issues as access to genetic resources and the use of genetic material.

The Convention sets policies and goals and leaves it very much to individual countries to determine how most of its provisions are to be implemented. This approach differs markedly from those conventions that set precise obligations, as found in the Convention on International Trade in Endangered Species (CITES). For example, Article 8 of the Convention on Biological Diversity sets out the policies for *in situ* conservation of biodiversity, leaving it very much to States to match their own laws and policies.

12.5 Regional Conventions

The SPREP Convention (Art.14) and the Apia Convention provide for the establishment of protected areas such as parks and reserves where activities which are likely to have adverse effect on species, ecosystems or biological processes, are controlled or prohibited (see Chapters 13 and 14 of this Review). The current national laws and draft laws in Palau with regards to reserve systems and the protection of endangered and threatened species are considered adequate to implement the objectives of Article 14 of the SPREP and the Apia Conventions.

12.6 Conclusion and Recommendations

There is a range of existing and proposed legislation that promotes the conservation of biodiversity and protects the biological processes of species. Although some of the main statutes have been identified, other regulations such as those relating to water quality and environmental impact assessments (EIAs) also have direct effects on the conservation of biodiversity. One of the goals of EIAs is to avoid or minimize adverse effects on biological diversity.

At some future date, when the Republic of Palau considers becoming a Party to the international and regional conventions cited above, it would then be necessary for the existing legislation to be again reviewed by the authorities in Palau in the light of all the obligations set out in the conventions.

It is therefore recommended that:

When the Republic of Palau considers it desirable to become a Party to the Convention on Biological Diversity, or to the SPREP or Apia Conventions, a more detailed evaluation than the one given here of the current national laws relating to biological diversity will become necessary.

13 Wildlife Conservation

13.1 Relevant Legislation

National

Wildlife Protection (PNC Title 24)
Ngerukewid Islands Wildlife Preserve (PNC Title 24)
Endangered Species Act 1975 (PNC Title 24)
Draft Palau Endangered Species Bill and Draft Regulations
Draft Wildlife Management Bill
Draft Brown Tree Snake, *Boiga Irregularis* Bill of the Republic of Palau
Draft Fruit Bat Conservation Bill
Draft Palau Forest Practices Bill
Draft Mines and Minerals Bill

International

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

13.2 Introduction

The *Exxon Valdez* oil spill and the Gulf War not only serve as a reminder of the severe harm that can be caused to fish and wildlife, they also serve as a trigger to develop more embracing and restrictive statutes to protect and conserve wildlife. Paragraph 13.1 above, indicating a range of draft legislation, is indicative of this trend. Wildlife protection can be achieved through specific wildlife legislation; through regulated "taking" where the statutes establish both civil and criminal penalties for unauthorized "taking"; and through land use management legislation by setting aside land and water areas under protective classification. Activities in areas which have been set aside or reserved, such as wildlife habitats as units in a forestry reserve or marine sanctuaries, are generally controlled and restricted.

13.3 Statutory Background

PNC Title 24 incorporates the Endangered Species Act 1975 (Ch.10) under the framework legislation of Wildlife Protection (Div.2). The policy statements set out in the Act state that:

the indigenous plants and animals of the Republic are of aesthetic, ecological, historical, recreational, scientific, and economic value. It is the policy of the national government to foster the wellbeing of these plants and animals by whatever means necessary to prevent the extinction of any species or sub-species from our islands or the water surrounding them (s.1003).

"Endangered species" is defined in the Act to mean any species which is in danger of extinction throughout all or a significant portion of its range. "Threatened species" means any species which is likely to become an endangered species within the foreseeable future

throughout all or a significant portion of its range (s.1004(c)(m)). This Act is administered by the Ministry of Resources and Development.

The Minister has power to issue regulations applying to this chapter which includes a listing of the species of endangered and threatened plants and animals. The Act prohibits any person to take, engage in commercial activity with, hold possession of, or export any threatened or endangered species of plant or animal except in accordance with the exceptions listed in section 1008 of this Act.

The range of exceptions permits the taking of species for scientific purposes provided a permit is obtained in advance from the Minister. If a plant or animal becomes a public nuisance or a threat to public safety, remedial action can be taken by the national government in accordance with these regulations. Those species which are taken for scientific purposes and raised successfully in commercial quantities under controlled conditions of aquaculture, mariculture, game farming, agriculture or horticulture, and provided the individuals or quantity lots of these species are identifiable as having been raised under controlled conditions, are also exempt. Where the Minister decides that the taking from certain islands of certain species for subsistence food or for old traditional uses does not further endanger the species involved, an exemption is allowed. This exception only applies to the indigenous inhabitants of the islands. Any person in innocent possession of any endangered or threatened species will not be penalized (s.1008).

13.4 Importation of Endangered Species

The importation into the Republic of any species listed by the Convention on International Trade in Endangered Species of Wild Fauna and Flora is prohibited.

Since exotic plants and animals not already established in the Republic can cause ecological upsets by the introduction of diseases which would endanger indigenous plants and animals, their importation is also restricted. The only exceptions made are those insects and biological control micro-organisms which are imported in accordance with the quarantine laws of the Republic (s.1009/10). Any person violating the provisions of the Act can be fined a maximum of \$10,000 or imprisoned for a maximum period of one year (s.1012).

The move in Palau to ban the importation of certain species of wildlife which pose a threat or a danger to resident species is also seen in the draft Bill to prevent the introduction into the Republic of the brown tree snake, *Boiga irregularis*. The draft Bill establishes departure inspection requirements for vessels and aircraft leaving Guam and destined for Palau. The draft Bill further establishes a pre-departure certificate to be issued by the Port Security Quarantine Official and the Fish and Wildlife Official declaring that the vessels or aircraft are free from the brown tree snake.

The importation into Palau of parrots and other psittacine birds (e.g. parakeets, love birds etc.) are also prohibited (PNC Title 34 s.2341). Birds kept in violation of this particular law may be exported or destroyed. The transportation of monkeys from island to island is also prohibited except under special permit issued only by the Chief Entomologist. Any person found in breach of this provision is liable to a fine and/or imprisonment (s.2311).

The coconut rhinoceros beetle considered as a pest under PNC Title 34 (Ch.23) propagates on host plants such as coconut palms, betel-nut palms and other palms and pandanus. The law forbids the planting of these palms on Malakal. Any palms naturally reseeding or coming into existence will be destroyed at the direction of the President (s.2301).

13.5 Fish and Game Commission

The Fish and Game Commission was established under PNC Title 24 (Ch.11) for the purpose of conserving and developing the marine and terrestrial resources for the nutritional, economical and environmental benefit of the people of Palau (s.1101). It is understood that this Commission is currently not operational but as the law is based on sound environmental principles and has not been repealed, it is of value to include this section in the Review.

The Commission is empowered to:

- study the conservation needs of the Republic;
- study the effectiveness and enforcement of present conservation laws in the Republic;
- issue rules and regulations considered necessary to meet the goals of conservation;
- recommend specific legislation to be enacted by the Olbiil Era Kelulau and the State legislatures for the establishment of minimum sizes or ages of marine life or terrestrial wildlife which may be taken; the establishment of requirements for record keeping by persons engaged in commercial activities which include the taking of marine life or terrestrial wildlife.

The Commission has the power to recommend any other legislation which it deems desirable to meet the conservation needs of the Republic (s.1103).

13.6 Protected Sea Life

PNC Title 24, Chapter 12, provides for the restrictions on the taking of turtles, sponges, mother-of-pearl, dugongs, trochus and clams.

13.6.1 Turtles

No hawksbill turtles or sea turtles shall be taken or intentionally killed while on shore. This prohibition also applies to their eggs. An exception is made however in the legislation for those hawksbill turtles whose shell is at least 27 inches when measured over the top of the carapace shell lengthwise; no green turtle shall be taken or killed except those whose shell is at least 34 inches in length. No sea turtle of any size shall be taken or killed from June 1 to August 31, nor from December 1 to January 31 in any year. Anyone violating these provisions is liable upon conviction to a fine and/or imprisonment (s.1201).

13.6.2 Sponges

No sponges artificially planted or cultivated shall be taken or molested except by permission of the President. Anyone found to breach these provisions shall be liable upon conviction to imprisonment and/or a fine.

13.6.3 Mother-of-pearl

No blacklip mother-of-pearl oyster shell (*Pinctada margaritifera*) shall be taken except those whose shell is at least 4 inches in diameter as measured across the nacre. No pearl oyster shell of any size shall be taken from August 1 to December 31 in any year. The President of the Republic may authorize the taking of the oyster shells of any size for scientific purposes. Any person found to breach these provisions is liable upon conviction to a fine and/or imprisonment (s.1221).

13.6.4 Dugong

The killing, trapping, capturing, wounding, possessing, transporting or restraining of any dugong is prohibited. The President may however, upon cause shown, grant a permit for the capture and transportation of dugongs upon such terms, conditions and restrictions considered appropriate. If any dugong is accidentally caught it must be released immediately if still alive. If it is found dead, the Chief Executive Officer of the State where the dugong is found must be notified. On ascertaining that the dugong was caught accidentally, the Chief Executive Officer must release the dead dugong to the person who found it. Any person found in breach of these conditions can upon conviction be fined and/or imprisoned (s.1231).

13.6.5 Trochus

Trochus is defined in this section of the Act as *Trochus niloticus* (the names *Trochus maximus*, *Tectus niloticus*, and *Tectus maximus* shall be considered names synonymous with *Trochus niloticus*). The harvesting of, or interference with, the growth of trochus in the waters of any state is prohibited. Each state government may however designate and vary from year to year an open season for the harvesting of trochus in its territorial waters and may also designate certain reefs that shall be closed for harvesting notwithstanding the fact that the season is open. The open season may vary in different areas or islands within each state. Public notice is required to be given in each state of the dates designated for the harvesting of trochus and of the reefs that have been declared closed.

During an open season, any citizen of Palau may dive for and harvest trochus in the state to which the season applies, but only within those areas in which he has the right to fish under established local custom, but subject to any regulation governing the taking of trochus. No trochus whose shell is less than 3 inches in diameter at the base shall be taken. Each state government may if it is deemed necessary prohibit the harvesting of trochus during any calendar year or years. Public notice must be given of the prohibition.

If a state government considers that underwater operations which will interfere with an existing trochus bed are in the public interest, a written permit may be issued for the removal and replanting of the bed at the expense of the persons wishing to conduct the underwater operations. State governments may at any time authorize the removal and transportation of trochus for the purposes of introduction to other reefs, islands or atolls.

13.6.6 Clams

PNC Title 24 Sub-section VI prohibits the export of clam meat. Anyone found exporting clam meat can be fined and/or imprisoned (s.1261).

13.7 Conservation of Birds and Mammals

PNC Title 24 provides in Chapter 14 that no birds shall be taken, intentionally killed or harmed, nor their eggs taken. This provision however does not apply to the hunting of *Gallus gallus* (Malkureomel), *Porphyrio porphyrio* (Wek), *Cacatua galerita* (Yakotsiang), and *Halcyon chloris* (Tengadidik). Anyone in breach of this section is liable upon conviction to a fine and/or imprisonment (s.1401).

The draft Fruit Bat Conservation Bill which passed its second reading on April 30, 1991 is designed to conserve the fruit bat population and to control its export to other countries. The Bill prohibits the hunting, catching or taking of fruit bats except during the open season which runs from October to December each year (s.3). During the open hunting season fruit bats may be hunted by the use of one or a combination of the following techniques: traps, use of a blow gun with darts, bow and arrow, airguns, slingshots (s.4).

Fruit bats may be exported during the open hunting season provided a permit is obtained from the receiving country. All exporting agencies or persons must show the fruit bats to and obtain a clearance certificate from the Division of Conservation and Entomology, where an accurate record of all exported fruit bats shall be kept. Fruit bats from other countries cannot be imported or routed through the Republic for consumption or re-exportation outside Palau.

13.8 Bill to Amend the Endangered Species Act

In 1993, proposed amendments were drafted to sections of the Endangered Species Act 1975, and at the time of this Review, had passed the First Reading in the Olbiil Era Kelulau. Under the Bill, the power of the Minister of Resources and Development has been expanded to include the authority to set up conservation programs aimed at conserving endangered and threatened species, including research programs to adequately define which species are in fact endangered or threatened. The Minister is also empowered to acquire land or areas of known aquatic habitat or interest for the conservation of resident endangered or threatened species.

13.9 Threatened and Endangered Species List

Upon the recommendation of the Director of the Bureau of Natural Resources and Development, the Minister may add to or remove species from an established Threatened and Endangered Species List. Section 1007 of the draft Bill sets out the following criteria for determining the inclusion of species on the endangered or threatened list:

- the present or threatened destruction, modification or curtailment of the species habitat or range;
- over-utilization for commercial, recreation, scientific or educational purposes;
- substantial decrease in species population caused by disease or predation;
- the inadequacy of existing regulatory mechanisms to protect the species; and
- other natural or man-made factors affecting the continued existence of the species.

A species may only be removed from the list if there is no longer any danger of extinction and this determination must be based only on biological criteria, using the best available scientific data on the species.

The draft regulations give the following species list:

Mammals

Dugong (*Dugong dugon*)

Blue whale (*Balaenoptera musculus*)

Sperm whale (*Physeter catadon*)

Birds

Palau gray duck (*Anas superciliosa*)

Micronesian megapode (*Megapodius laperouse*)

Palau Nicobar pigeon (*Caleoenas nicobarica*)

Reptiles

Saltwater crocodile (*Crocodylus porosus*)

Leatherback sea turtle (*Demochelys coriacea*)

Hawksbill sea turtle (*Eretmochelys imbricata*)

Green sea turtle (*Chelonia mydas*)

Loggerhead sea turtle (*Caretta caretta*)

Olive Ridley sea turtle (*Lepidochelys olivacea*)

Shellfish

Giant clam (*Tridacna gigas*)

13.9.1 Management Plans

The Minister is required under section 1009 of the draft Bill to develop and implement management plans for the conservation and survival of endangered and threatened species. The primary objective of these plans is to enhance the species' recovery until they are no longer in danger of extinction. Mandatory for inclusion in each plan is a list of plan

objectives including species population enhancement and protection of critical habitats, site-specific management actions and measurable criteria to determine which species should be removed from the protected list. In implementing the management plan, the Minister may procure the services of appropriate government and private agencies and institutions and other qualified personnel. The Minister may enter into agreement with any State for the implementation and administration of management plans.

In terms of enforcement of the provisions included in the draft Bill, the Minister has the primary responsibility for enforcement through conservation enforcement officers in conjunction with personnel from the Bureau of Public Safety and state governments. The Minister is further authorized to enter into agreements with traditional entities to establish a cooperative enforcement system. In the event that traditional entities fail to effectively penalize those breaching the conditions of the law, the Minister may intervene and immediately implement national law (s.1021).

13.10 Draft Wildlife Management Bill

The purpose of the draft Wildlife Management Bill is to ensure the existence of viable and diverse wildlife populations for the use and enjoyment of future residents and visitors, while also allowing for regulated uses. The policy set out in this draft Bill endorses the national government's overall policy to protect and preserve these rare and sensitive species and allow controlled harvest and export so long as such uses will not result in the serious depletion of the exploited populations (s.3).

"Wildlife" is defined under this draft Bill to mean wild birds, amphibians, reptiles and wild mammals not listed under the Endangered Species Act.

The Bureau of Natural Resources and Development through the Division of Conservation and Entomology is charged with the following duties and functions:

- to develop a comprehensive wildlife classification scheme for management purposes;
- to promulgate permanent, seasonal, or emergency regulations controlling the harvest or collection of wildlife species;
- to provide a system of licensing for persons harvesting wildlife species;
- to establish a system of permits for the collection of species for scientific research, traditional use or any other purpose considered necessary;
- to prepare management plans;
- to recommend key portions of the habitat of sensitive or rare wildlife species for inclusion in the Natural Heritage Reserves System;
- to establish a system for monitoring the export of wildlife species;
- to regulate the import of wildlife species.

Section 5 of the draft Bill provides for regulations to be made to control the harvest and collection of wildlife species using the special procedures set forth in the draft Bill.

13.11 Ngerukewid Islands Wildlife Preserve

Legislation protecting the Ngerukewid Islands Wildlife Preserve (PNC Title 24) designed to preserve the environment in its natural state where natural plants and animal life are permitted to develop undisturbed (s.3001) is considered more fully in Chapter 14 of this Review.

13.12 International Conventions

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has been considered in Chapter 3 of this Review.

13.13 Conclusion and Recommendations

The primary issue addressed in the various pieces of draft legislation is the protection and conservation of wildlife through the development of management plans and safeguards imposed through permit systems. The number of pieces of draft legislation available in this area demonstrates the concern felt for more specific legislative controls to protect wildlife. The Endangered Species Act 1975 is clearly deficient in management and mechanism components, such as the listing of species that require absolute or partial protection through seasons. Although the amendments proposed to the Endangered Species Act 1975 are to accommodate better control mechanisms, the provisions in this Act and its amendments would need to be examined in the light of other legislation such as the proposed Palau Forest Practices Bill and the draft Mines and Minerals legislation. The extent of the controls built into the endangered species legislation could result in situations where a variety of legal activities built into other legislation (e.g. forestry and mining) could conflict.

For example, any disturbance to habitats designated as "critical" or the endangering of species on the threatened or endangered list could constrain or prohibit activities permitted under other legislation. It is therefore necessary for the draft forestry and mining legislation and the Endangered Species legislation and its amendments to be examined together so that an efficient consultative process within the regulations may be considered.

It is therefore recommended that:

1. The Endangered Species Act 1975 and proposed amendments and draft regulations, the draft Palau Forest Practices Bill and draft Mines and Minerals legislation be viewed together for the incorporation of an efficient consultative process to resolve problems that could arise where mining or timber harvesting have been permitted under the relevant legislation. These legal activities could be constrained by the Endangered Species legislation, especially in the areas designated as "critical habitat", or areas where threatened and listed endangered species are to be found.
2. The provisions in PNC Title 24 dealing with wildlife and the various pieces of draft legislation on wildlife be incorporated under a single piece of umbrella legislation for ease of implementation.

14 Protection of National Heritage

14.1 Relevant Legislation

National

Historical and Cultural Preservation Act (PNC Title 19)
Environmental Protection (PNC Title 24)
Natural Heritage Reserves Systems Act 1991
Land Planning Act (PNC Title 31)
Land Acquisition (PNC Title 35, Ch.4)
Belau National Museum – Articles of Incorporation

International/Regional

Convention Concerning the Protection of the World Cultural and Natural Heritage 1972
Convention on Conservation of Nature in the South Pacific 1976 (Apia Convention)
Convention for the Protection of the Natural Resources and Environment of the South Pacific Region and Related Protocols 1986 (SPREP Convention)

14.2 Introduction

There is sometimes a dilemma when nations are faced with the need to consider the preservation of historical and cultural properties and sites of outstanding beauty and significance, and the pressures of economic development, as the goals may sometimes appear to be incompatible. Specific laws designed to protect the nation's heritage point to the fact that a nation's economic development program is not carried out at the expense of the deep and rich culture and heritage of a nation as the two goals *can* be compatible.

The phrase “natural and cultural heritage”, often used in both speech and legislation, means different things to different people. The legal definition of the term is not identical in all jurisdictions in the Pacific as it is dependent upon what aspect of heritage is allotted by a nation for legislative protection. What is important, however, is the range and the significance of natural and cultural heritage that a nation considers should be protected by legislation. A significant feature of some legislation is that heritage is divided into movables (e.g. relics, traditional carvings, artwork, artistic properties etc.) and immovables or fixed natural heritage such as monuments, historic and archeological sites, historic buildings and natural features of outstanding beauty and significance. The distinction, when made this way, necessitates that different protective measures are accorded by legislation.

The word “heritage” describes the mix of culture, traditions and assets passed from generation to generation. One of the basic goals of heritage legislation is to provide a measure of consistency in the assessment and protection of heritage properties and to provide assistance to property owners and States to maintain registered heritage properties.

The measures included in such legislation are not only for maintenance purposes but also to enhance and improve such properties. The *Comprehensive Conservation Strategy* comments on cultural resources in more detail (Cassell et al. 1992).

14.3 Statutory Background

The Historical and Cultural Preservation Act protects both movable and immovable heritage properties. This Act establishes the Palau Historical and Cultural Advisory Board consisting of 16 members appointed by the President, having one member representing each State. The members are appointed for a term of three years.

14.3.1 Functions of the Palau Historical and Cultural Advisory Board

The duties and functions of the Board are outlined in the Act and they include the establishment of policies and criteria for the registration of historic sites, tangible and intangible properties, and living national treasures. "Intangible cultural property" is defined by the Act to mean aspects and manifestations of traditional Palauan culture, including music, dances, art, skills employed in applied arts, story-telling and similar activities. "Tangible cultural property" includes those objects living or non-living which are part of traditional Palauan culture, and includes buildings, objects of fine and applied art, archeological specimens and specific animals or plants. "Historical site" means any location, site, structure, building or landmark, located in the Republic, which is of outstanding prehistoric, archeological or cultural significance.

14.3.2 Division of Cultural Affairs

The Act creates a Division of Cultural Affairs which is charged with the responsibility of establishing a comprehensive historical and cultural preservation program, and maintaining a register of historical sites and tangible cultural properties and a register of living national treasures. The Division is empowered to conduct nationwide surveys to review and prepare a national historical and cultural preservation plan and to provide technical and financial assistance to state governments and agencies involved in historical preservation activities and to stimulate public interest in cultural matters. The Division is required to assist each state in establishing a state Board for historical and cultural preservation. The governing body of any state may also establish a historical and cultural preservation Commission to undertake the promotion, development and preservation of cultural resources.

14.3.3 Registration of Heritage Properties

As the Palau Historical and Cultural Advisory Board is responsible for implementing the heritage protection program, it is empowered under the Act to solicit nominations from government officials, agencies and private citizens for the registration of cultural properties. Registration is not regarded by those who implement this program as simply a recording of heritage properties, as it enables more positive protective measures to be taken, as consultation and approval are necessary when activities under other categories of legislation such as land planning, mining or earthmoving directly or indirectly affect registered properties.

There are about 1,000 sites identified for registration, but as at February 1994, only 41 sites have been registered including the Japanese Shinto Shrine in Koror State, the Ngermelei Monolith, Mother and Child in Koror State, the Yap Stone Money in Airai State and the Ngermelech Gods in Melekeok State (V. Kanai, pers. comm., February 1994).

14.4 Nature of Heritage Properties

For ease of discussion, heritage properties are divided into immovable and movable properties as both these aspects are covered by legislation.

14.4.1 Immovable Properties

(a) Palau Lagoon Monument (PNC Title 19, Ch.3)

It is a policy of the Republic to preserve forever historic landmarks, structures, and other sites and objects of significance (s.301). All ships and aircraft which formally belonged to, or were part of, the armed forces or commercial fleet of Spain, Germany, Japan, the United States or any other nation, which were sunk or deposited on the bottom of the Palau lagoon and its territorial waters are set apart as monuments which are collectively called the Palau Lagoon Monument. Except for applicable salvage laws, all persons who dive to examine and gather objects from the lagoon must first obtain a permit from the President or his representative. Any person who, without permission, removes, damages or destroys the lagoon monuments is liable upon conviction to a maximum fine of \$1,000 and/or imprisonment for a maximum of 6 months.

(b) Preserves and Protected Areas

The Environmental Quality Protection Act (PNC Title 24, Div.3, Ch.30) provides for preserves and protected areas. Chapter 30 of Title 24 establishes the Ngerukewid Islands Wildlife Preserve which covers all land, water, reef and underwater areas of the islands known as Ngerukewid (Orukuisu) Islands for the purpose of preserving these wilderness conditions where natural plants and animal life are permitted to exist and develop without being disturbed. The legislation lists the actions that are prohibited in the Preserve, and these include the lighting or use of fires, the cutting of any plant, the taking into the Preserve of any domesticated bird or animal, the killing or restraining of any animal, plant or marine life and the introduction of firearms, weapons, nets, traps or other materials capable of killing wildlife. Penalties for violation of the provisions of the law are set out in section 3003.

(c) Natural Heritage Reserves

The Natural Heritage Reserves System Act 1991 (RPPL No.3-51) is designed to protect the unique natural resources of Palau, such as geological features and distinctive freshwater, marine and terrestrial plants and animals (s.2(a)). The Act enables a system of reserves, sanctuaries and refuges to be developed and specific land and water areas which support unique communities of natural flora and fauna to be preserved in perpetuity (s.2(c)).

The responsibility for nominating and designating areas into the reserve system lies with the Bureau of Natural Resources and Development. The Governor of each state through the state legislature and chiefs may designate areas in the state mutually agreed upon with the Bureau of Natural Resources and Development (s.4). The national government (through the Bureau of Natural Resources and Development) is also empowered under the Act to designate Republic-owned land or other areas set aside by Executive Order; state-owned land which may be conveyed to the Republic; private land given as a gift to the Republic, and any other area purchased or acquired under the Land Acquisition legislation (PNC Title 35, Ch.4) by the Republic into the Natural Heritage Reserves System (s.5). There are heavy penalties for violation of any laws and regulations under this Act (s.7).

The Land Planning Act provides for the protection of heritage properties through the mechanism of zoning. Under the Act, conservation zones (CD) and historic preservation zones (HP) may be established. Although the legislation only refers to Koror State, the principles of this legislation would be applicable nationally.

Conservation zones are established for the purpose of preserving and protecting land and shoreline areas in their natural state to conserve their scenic and recreational qualities (s.3175); the historic preservation zone designation is intended to protect sites and structures of outstanding historic, archeological, scientific or biological interest from mutilation or encroachment by undesirable land uses. The HP zone designation allows these areas considered irreplaceable and expressions of Palau's history to be preserved for future generations. This section is also dealt with in Chapter 5 of this Review.

14.4.2 Movable Properties

Movable heritage properties, as stated earlier in this chapter, includes relics, artistic and traditional handicrafts, artifacts, fauna and flora, ancient documents and ethnological materials. Relics provide the living evidence of the surviving traces of the historical past of the nation and could cover historical and paleontological material, antiquities, burial remains and artifacts as well as animal and plant specimens.

14.5 Belau National Museum

The Articles of Incorporation establishing the Museum set out in Article 3 the following purpose:

to preserve, protect and perpetuate artifacts, publications, flora and fauna, and other items which reflect the natural history of Palau, or the past or present culture of the Palauan people, or other cultures indigenous to Micronesia; to edify and instruct the people of Palau and visitors...regarding the cultures that have contributed and continue to contribute to the Palauan and other Micronesian cultures; and to act as a center for cultural understanding.

14.6 International and Regional Conventions

It was not possible during the course of the Review to ascertain which international treaties extended to Palau by virtue of ratification by the United States. There are however a number of international treaties which are relevant to heritage protection and are identified in paragraph 14.1 above. Some of these treaties are dealt with in Chapter 3 of this Review.

14.6.1 Regional Conventions

Palau is a signatory to the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (SPREP Convention) and related Protocols. This Convention requires ratification before it comes into force in Palau.

The SPREP Convention requires that the Parties establish protected areas such as parks and reserves and prohibit or regulate activities that are likely to have adverse effects on the species, ecosystems or biological processes that such areas are designed to protect (Art.14).

Under the Convention on Conservation of Nature in the South Pacific (Apia Convention), the Contracting Parties are required to encourage the creation of protected areas to safeguard representative samples of the natural ecosystems occurring within, as well as superlative scenery, striking geological formations, and regions and objects of aesthetic interest or historic, cultural or scientific value (Art.11(1)). The Convention further requires that the boundaries of national parks not be altered or reserves alienated, nor the national parks subjected to exploitation for commercial profit except after the fullest examination. The hunting, killing, capture or collection of specimens of the fauna and the destruction of the flora in national parks is prohibited except when authorized. The Apia Convention also requires the establishment of national reserves which "shall be maintained inviolate as far as practicable" (Art.IV). Palau is not a Party to the Apia Convention.

The Convention Concerning the Protection of the World Cultural and Natural Heritage is cited in Chapter 3 of this Review.

14.7 Conclusion and Recommendations

The various pieces of legislation protecting heritage properties in Palau are considered to be satisfactory, although it was not possible during the course of the Review to explore the practical application of the various pieces of legislation. The programs for the protection of heritage properties and the programs for the conservation of living and non-living resources are implemented by the Ministry of Community and Cultural Affairs and the Ministry of Resources and Development respectively. Although it was not clearly evident during this Review, it is possible that there may be areas of overlapping responsibilities between Divisions which may necessitate coordination.

One of the constraints faced by most island States in the Pacific in the establishment of systems of reserves and protected areas is the land tenure system, for example the competing demands for land use, where land is in short supply, to meet the demands of a growing population. One device that could be incorporated into heritage legislation, in

order to overcome such constraints, is the concept of Heritage Agreements which are essentially agreements between landowners of a registered site or place and the Heritage authorities. Heritage Agreements should incorporate a range of assistance and incentives for owners of property in return for an undertaking by landowners to maintain and protect listed Heritage properties.

It is therefore recommended that:

1. The use of Heritage Agreements as a device for landowner cooperation to protect heritage properties, if considered desirable, should be given legislative support.

15 Tourism

15.1 Relevant Legislation

Tourism Reorganization Act 1982 (PNC Title 28, Ch.5)
Foreign Investors Business Permit Act (PNC Title 28, Ch.1)
Regulation of Tour Operators (PNC Title 11, Ch.9)
Water Safety Act (PNC Title 34, Ch.52)
Historical and Cultural Preservation Act (PNC Title 19)
Natural Heritage Reserves System Act 1991 (RPPL No.3-51)
Environmental Quality Protection Act (PNC Title 24)
Land Planning Act (PNC Title 31)
Public Health, Safety and Welfare (PNC Title 34)
Restaurant and Food Selling Places (s.61 of Trust Territory Code)
Special Sanitation Requirements for Food Service Establishments
(promulgated by the Ministry of Health)

15.2 Introduction

With over 28,000 tourist arrivals (1992) and with 22 establishments offering 553 rooms, tourism is about to become the biggest industry in Palau. Presently estimated to be worth US\$6,000,000 per annum, the tourist industry's importance in the country's economy will continue to grow as it provides employment opportunities for a sector of the population. Palau is currently not a member of the Tourism Council of the South Pacific (TCSP), a regional body assisted by the European Development Fund of the European Community. TCSP (1990) sets out guidelines for environmental legislation, protection of the natural environment, environmental impact assessment, waste disposal and environmental guidelines for tourism operations, and for tourist behavior management. Environmental legislation in the guidelines covers four main areas: pollution, environmental impact assessment, protected areas (national parks, national reserves, historic sites etc.) and protected species.

It is with these matters...that tourism's environmental concerns are most involved. Such concerns arise both through the impact that tourists/tourism developments may themselves have on the natural environment and the enjoyment/benefit that tourists derive from the natural surroundings (TCSP 1990).

15.3 Palau Tourism Master Plan

The preparation of a Tourism Master Plan was authorized and funded by the former legislature of the Palau District of the Trust Territory of the Pacific Islands in 1980. The Master Plan was produced for the then Palau Tourism Commission by the Sipapu Institute to provide Palau with a course of action for developing tourism as one of its principal economic resources. The failure to allocate sufficient resources towards implementation resulted in few of the Master Plan recommendations coming into effect (McVey 1994).

15.4 First National Development Plan 1987–1991

The First National Development Plan 1987–1991 states that the Federal Government should adopt the following objectives for tourism during the Plan period:

- to expand the tourism sector through increasing tourism arrivals, with expansion in a gradual and controlled manner so that no serious socio-cultural or environmental problems arise;
- to develop tourism according to a coherent policy with a carefully planned and comprehensive marketing program;
- to improve and expand the internal and external routes of access to attractions, tourist facilities and services, monitor environmental quality, improve public education and employee training in order to provide a strong foundation for the expansion of tourism (McVey 1994).

The national tourism organization for Palau is the Palau Visitors Authority which superseded the Palau Tourist Commission in 1982.

According to McVey (1994), “there has been no shortage of review and analysis of Palau's tourism sector...(nor has there) been a lack of recommendations on how to address the issues arising from the uncontrolled ad hoc expansion of the country's tourism sector. What has been lacking is the collective will and the commitment of the necessary resources to effectively resolve these issues”. A strong and effective legislative guideline is also necessary to control tourism's impact on the natural resources and protect them for the enjoyment of future generations. Currently, a Tourism Sector Development Plan is being drawn up by SAGRIC International Pty Ltd who have been contracted to establish the National Master Plan for Palau.

15.5 Statutory Background

15.5.1 Tourism Policy and Palau Visitors Authority

Legislation relating to tourism is found in PNC Title 28, cited as the Tourism Reorganization Act of 1982.

The policy of the Government of Palau as set out in this Act is to promote and encourage the development of a visitor industry and to make it a responsibility of all visitor-oriented government and quasi-government agencies to assist and participate in this policy (s.502).

Section 503 establishes the Palau Visitors Authority as a public corporation which has the following powers and duties:

- (a) implement the declared tourism policy;
- (b) implement the Tourism Master Plan after its adoption;
- (c) attract visitors to Palau;

- (d) conduct programs of advertising, publicity and promotion, to familiarize the traveling public with Palau;
- (e) recommend public policies and programs to the President in order to increase and improve the number of tourist facilities, including the construction of additional hotel rooms, airport and affiliated facilities and attractions which would facilitate the entry of visitors to Palau;
- (f) encourage the participation of foreign and local private capital in the development of tourism; and
- (g) promote the manufacture of local handicrafts and artifacts and promulgate regulations to carry out the provisions set out in the Act.

The Board of Directors of the Palau Visitors Authority consists of 7 members appointed by the President on the advice and consent of the Senate, provided that 3 of the members are licensed tour operators in the Republic. A Managing Director who is not a Board Member is required to report to the Chairman of the Board. The Managing Director is responsible for the daily operations and affairs of the Authority.

15.5.2 Licensing of Tourist Establishments

There are currently no specific laws to license tourist establishments. A business license may be obtained from the Foreign Investment Board under the Foreign Investors Business Act. Under section 141 of the Act, no non-citizen is permitted to do business in the Republic without first obtaining a business permit, nor are they permitted to acquire an interest in any business previously owned entirely by citizens of the Republic until the latter business obtains a business permit. An application for a business permit, amongst other things, such as showing a detailed investment analysis, must include specific economic and social programs the applicant intends to implement for the Republic to:

- (a) develop and conserve the land and marine resources; and
- (b) provide community-related social services such as beautification programs;

and any additional information which the Minister of National Resources (now Resources and Development) or the Foreign Investment Board requires (s.142).

The application for a business permit is evaluated by the Minister for Resources and Development, and the Foreign Investment Board, and the criteria for determining the application as set out in s.143(c)(3) of the Act include:

the extent to which such an operation will deplete a non-renewable natural resource, or will disturb the environmental balance required for conservation of renewable natural resources, or will pollute the atmosphere or water.

15.6 Regulations promulgated by the Ministry of Health

Under Title 34 which deals with public health, safety and welfare, the Director of Health Services is required to make regulations, subject to the approval of the President, for

hotels, rooming houses, lodging houses, laundries for hotels, rooming and boarding houses and any restaurant where food is prepared and sold for human consumption and use (s.102). The Director of Health Services may issue certificates, permits or licenses deemed necessary to adequately regulate the conditions of such businesses (s.103).

There are two regulations implemented by the Ministry of Health relative to the tourist industry:

- (a) the Restaurant and Food Selling Places Regulations (promulgated under section 612 of the Trust Territory Code) provide for inspections of every restaurant (including those located in hotels) and food selling places to be carried out at least once a month by authorized officers. A copy of the inspection report is filed with the Division of Environmental Health and a copy given to the person operating the food establishment (r.24.1). Power is given under the regulations for contaminated foods and drinks to be destroyed and food establishments may be closed for reasons of unhealthy practices or disease. The regulations in Part 25 set out the standards to be met by those operating restaurants and food establishments. There are currently 28 restaurants in Palau; and
- (b) the Special Sanitation Requirements for Food Service Establishments regulations set out a list of requirements for food equipment and utensils, water supply, sewage disposal, garbage and rubbish disposal and measures to be adopted for insect and rodent control.

15.7 Protected Areas

Protected areas such as nature reserves, historic sites, wildlife reserves and areas of special beauty, for example the Rock Islands, make substantial contributions to the development of tourism, as such areas are major attractions to tourists. Opportunities for local employment (e.g. as tour operators and guides), the local handicraft industry, transportation and food industry also benefit from a growth in the tourist industry. Although the prime purpose of nature reserves and wildlife sanctuaries is for the protection of plant and animal species, heavy tourist traffic could cause stress on species and result in their deterioration. The development of tourist facilities calls for close coordination between those who manage conservation and protected areas and those engaged in the development of tourism to control any adverse impacts on protected areas.

A term often used in the development of tourism facilities is eco-tourism, a concept developed to keep visitor disturbance on the natural environment to a minimum while encouraging them to enjoy the natural and historic features of the areas. Section 15.1 above identifies the relevant protective legislation that needs to be taken into account, such as the Historical and Cultural Preservation Act; the Natural Heritage Reserves Systems Act, and the various wildlife legislation referred to in Chapters 12 and 13 of this Review.

15.8 Other Relevant Legislation

15.8.1 Tour Operators

PNC Title 11 Chapter 9 regulates the activities of tour operators. A Tour Operator's License issued by the President is required by those who wish to engage in tour services. In considering the application for a license, the President in consultation with the Palau Tourist Commission (now Palau Visitors Authority) shall examine the information filed and may either grant or deny the application (s.904). There are currently 23 tour operators in Palau.

15.8.2 Resort Center Zones

The Land Planning Act (which regulates land uses and zoning) provides for a Resort Center Zone (RV) through the zoning regulations. The RV zone is intended to provide areas for integrated resort development that would include a variety of visitor orientation uses and encourage economic development by protecting areas particularly suited to resort use from encroachment by other uses (s.3161).

The principal uses permitted in the RV zone include:

- hotels;
- restaurants, nightclubs, bars and other similar uses;
- accessory buildings and uses customarily incidental to the above uses.

The conditional uses include retail businesses, recreation facilities, boarding or rooming houses, clubs and halls to serve the needs of the resort center (s.3162/3).

There are relevant laws under Public Health, Safety and Welfare (PNC Title 34) which relate to sanitation and the Environmental Quality Protection Act (PNC Title 24) which are relevant to tourism establishments.

15.9 Conclusion

In terms of tourism-related legislation, there is currently a range of laws considered relevant to the industry. It is also understood that a tourism information service is being developed which could have some influence in developing an appreciation among those who visit Palau's unique environment and natural resources. If local communities do indeed benefit from tourism development, their support is essential to the management of parks, nature reserves and wildlife sanctuaries; local communities could be in the forefront in promoting eco-tourism in Palau.

16 General Conclusions

The domestic legislative response to environmental problems in Palau is reflected in the wide range of existing and proposed legislation. Examining the content of the legislation identified in this Review, it is clear that, from a legal perspective, the characteristics of United States practice of environmental management are incorporated in the laws of Palau. Thus, standards of water quality based on the United States Clean Water Act and standards for emissions into the atmosphere based on the United States Clean Air Act are weighted towards US environmental quality standards and objectives. The special Trusteeship arrangement underlies the development of some strong and specific environmental laws in Palau.

Some pieces of legislation of environmental significance are incorporated in public health regulations, such as those laws that control sanitation, sewerage and public nuisance, while other aspects controlling pollution and waste discharges into water are regulated by a specialist body, the Palau Environmental Quality Protection Board. Development of environmental laws through public health laws was and still is the norm as historically laws to protect the environment first developed through the public health arena. It is therefore inevitable that some overlapping of jurisdiction has been found in the implementation of certain pieces of legislation. This highlights the need to specifically define areas of responsibility and mechanisms established for coordination.

Other domestic legislation, such as that protecting threatened and endangered species, mirrors United States law and is enough to implement the international CITES Convention. Similarly, legislation regulating parks, reserves, fragile ecosystems, threatened and endangered species and sites of special significance is sufficient to implement the obligations in the appropriate provisions of the SPREP and Apia Conventions.

Draft laws in the various sectors have been reviewed for environmental content. In this regard, draft legislation in the conservation and marine resources sectors, the draft Palau Forest Practices Bill and all the current draft legislation relating to mineral mining and petroleum have received comment and recommendations proposed for consideration.

In general, there is a broad range of strong environmental provisions, in areas such as water and air quality control, in the laws of Palau that is not found in equivalent South Pacific jurisdictions. The laws of Palau provide more specific language for statutory policy goals, as seen in section 1.3 of the Marine and Fresh Water Quality Standards Regulations, and precise standards when they relate to matters such as the quality of water or the content of emissions or the control of wastes and pollution.

The legal provisions and principles concerning enforcement of the laws, although similar in all Pacific jurisdictions through the use of, for example, criminal sanctions and the revocation of licenses, vary in application. Where environmental provisions in laws are considered to be comprehensive, enforcement has been found, in some cases, to lag.

Where strong environmental law already exists but some areas have been found to be in need of legislative support, it is sometimes useful to look first to existing laws to see if they

can be utilized to bring about the same results. For example, although the Land Planning Act is designed for land use planning, the Act also covers the protection of species of plants and animals and the protection of historic and heritage sites through the zoning provisions. Such use of existing legislation can reduce the possibility of over-regulation and overlapping laws and jurisdictions. A body specifically established for law development and law reform could provide specific guidance.

Certain chapters of this Review contain recommendations for consideration. Where draft legislation is proposed by the various Divisions, the suggestion has been for assessment to be made of other legislation to reduce potential conflict. Where there have been several pieces of legislation regulating particular aspects of the environment, it has been suggested that some consideration be given to consolidating those laws within a single framework. For example, a Marine Resources Act (without the word "Protection" included in the title as this could limit the possibility of grouping certain areas into a single framework Act) could consolidate the laws relating to foreign fishing, domestic fishing and the conservation and protection of marine resources through open and closed seasons, prohibiting certain fishing practices and other related matters. There are other matters in the management of national fisheries that could be covered by a single piece of comprehensive legislation. The detailed provisions could be incorporated by way of regulations.

Some laws such as those adopted from the Trust Territory Codes and United States laws would need consideration in order to reflect more appropriately the current administrative and environmental practices and standards of Palau. Some laws, such as the Pesticides Regulations, are currently being re-drafted.

In conclusion, the usefulness of strong environmental laws without effective enforcement mechanisms remains limited. It is suggested that enforcement guidelines, to include environmental education and strategies for community involvement, could significantly contribute to protecting the environment of Palau.

Legal Instruments, Agreements, Legislation and International Conventions dealt with in the Review

Constitution of the Republic of Palau

Compact of Free Association

Trusteeship Agreement

Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America

Palau National Code

- Title 1 General Provisions
- Title 2 The Executive
- Title 3 The Olbiil Era Kelulau
- Title 4 The Judiciary
- Title 6 Administrative Law
- Title 7 Admiralty and Maritime
- Title 9 Agriculture
- Title 11 Business and Business Regulations
- Title 19 Cultural Resources
- Title 24 Environmental Protection
- Title 28 Foreign Relations and Trade
- Title 31 Land Planning
- Title 34 Public Health, Safety and Welfare
- Title 35 Public Lands

Regulations Implemented by the Environmental Quality Protection Board

- Title 24 Earthmoving Regulations
- Title 24 Marine and Fresh Water Quality Standard Regulations
- Environmental Impact Statement Regulations
- Solid Waste Provisions
- Title 63 Trust Territory Pesticides Regulations
- Title 63 Trust Territory Air Pollution Control Standards and Regulations
- Proposed Toilet Facilities and Waste Water Disposal System Regulations
- Water Supply Systems Regulations

Draft Legislation

Draft Palau Forest Practices Bill

Draft Animal and Plant Quarantine Bill

Palau Wildland Fire and Forest Management Bill

A Bill for an Act to Repeal RPPL No.3-61 and to Repeal PNC Section 1211 and for other Purposes. [This Bill is to regulate certain species of marine and terrestrial organisms, to prohibit or limit certain fishing methods, to protect coral reefs.]

Draft Mines and Minerals Bill 1987

Draft Petroleum (Marine Area Exploration and Production) Bill 1987

Draft Petroleum (Marine Area Exploration and Production) Regulations 1987

Draft Model Concession Agreement for Petroleum Exploration, Development and Production in the Republic of Palau

Draft Palau Endangered Species Bill and Draft Regulations

Draft Wildlife Management Bill

Draft Brown Tree Snake, *Boiga Irregularis* Bill

Draft Fruit Bat Conservation Bill

Environmental Conventions and Treaties

Atmosphere

- Convention for the Protection of Ozone Layer (Vienna, 22 March 1985)
- Convention on Climate Change (Rio de Janeiro, 9 March 1992)

Marine Environment

- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention, 1972)
- Convention on the Prohibition of Fishing with Long Driftnets in the South Pacific (Wellington 23 November 1989)
- South Pacific Forum Fisheries Agency Convention 1979
- International Convention for the Prevention of Pollution from Ships, London, 1973 and as Modified by the Protocol of 1978
- United Nations Convention on the Law of the Sea (Montego Bay, 1982)

Nuclear

- South Pacific Nuclear Free Zone Treaty (Rarotonga, 1985)

Biological Diversity

- Convention on Biological Diversity (Rio de Janeiro, 1992)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington, 3 March 1973)

Protection of Natural Resources and Environment

- Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (Noumea, 1986) (SPREP Convention) and Related Protocols, namely:
 - (i) Protocol for the Prevention of Pollution of the South Pacific Region by Dumping; and
 - (ii) Protocol Concerning Co-operation in Combating Pollution Emergencies in the South Pacific Region
- Convention on Conservation of Nature in the South Pacific 1976 (Apia Convention)
- Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 23 November 1972)

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