Facility for Economic and Infrastructure Management Project

ENVIRONMENTAL AND NATURAL RESOURCES DEVELOPMENT ACTION PLAN

Final



Prepared for:
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Prepared by:

Facility for Economic and Infrastructure Management,

PINZ



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ABBREVIATIONS

ADB – Asian Development Bank

BOA – Bureau of Agriculture

BMR – Bureau of Marine Resources

BPW – Bureau of Public Works

BWA – Babeldaob Watershed Alliance

CCF – Climate Change Fund

CIP – Capital Improvement Project

COC – Chamber of Commerce

COFA – Compact of Free Association

CRMA – Climate risk management and adaptation

EA – Environmental Assessment

EIS – Environmental Impact Statement

EQPA – Environmental Quality Protection Act

EQPB - Environmental Quality Protection Board

FAO – Food and Agriculture Organization

FEIM – Facility for Economic and Infrastructure Management

FONSI – Findings of No Significant Impact (part of EA review process under

EQPA)

GDP – gross domestic product
GIS – Global Information System

IMF – International Monetary Fund

JICA – Japan International Cooperation Agency

MCCA - Ministry of Cultural and Community Affairs

MCSF – Micronesian Centre for A Sustainable Future

MCT – Ministry of Commerce and Trade

MNRET – Ministry of Natural Resources, Environment and Tourism

MPA – marine protected area

MPS – Micronesian Presidents' Summit

MRD – Ministry of Resources and Development

MPIIC – Ministry of Public Infrastructure, Industry and Commerce

MTDS – Medium-Term Development Strategy

NBSAP – National Biodiversity Strategy and Action Plan

NEPC – National Environmental Protection Council

NGO – Non-government organization

NMDP – National Master Development Plan

NRCS – Natural Resources Conservation Service

OEK – Olbill Era Kelulau

OERC – Office of Environmental Response and Coordination

PAN – Protected Areas Network



PCAA – Palau Community Action Agency

PCS – Palau Conservation Society

PICRC – Palau International Coral Reef Centre

PNRC – Palau Natural Resources Council

PPLA – Palau Public Lands Authority

PSC – Project Steering Committee

SID – Support Impact Doable

SPLA – State Public Lands Authority

SLMP – Sustainable Land Use Management Project

TAPC – Tourism Action Plan Committee

TNC – The Nature Conservancy
TTA – Trust Territory Authority

UNCBD – United Nations Convention on Biological Diversity
 UNCCD – United Nations Convention to Combat Desertification

UNFCCC – United Nations Framework Convention on Climate Change

US – United States of America

USDA – United States Department of Agriculture

WB – World Bank

WMCES - Western Micronesia Chief Executives' Summit

WEIGHTS AND MEASURES

ha – hectare km – kilometer m – million



I. EXECUTIVE SUMMARY

- 1. A key issue in respect of environmental management is the lack an overarching policy and an appropriately scaled "Palau-specific" regulatory framework to; (i) meet basic resource management needs (i.e. of Palau for Palau); (ii) fulfil obligations under various international agreements (i.e. of Palau for regional and global community); and, (iii) achieve the defined vision and goals as identified in the National Master Development Plan (NMDP) and guide future planning and development activities. Currently Palau is endeavouring to meet its international obligations under various conventions and agreements in the absence of a national environmental policy framework and without the requirements of those agreements being integrated into domestic environmental management policy.
- 2. The NMDP clearly set out a tiered approach to master planning starting with the definition of a national vision and national goals which are to be supported by national strategies, policies, programs and activities. However, these latter mechanisms have been lacking and result in the absence of a cohesive development framework. In order to fill the gaps in the existing framework envisaged in the NMDP, policies in each of the key sectors establishing how different levels of government, including civil society organizations, fit into the framework are required.
- 3. It is also clear that the need to revise, update and improve (streamline) the existing regulatory framework is of a high priority. This will require a major overhaul of the Environmental Quality Protection Act (EQPA) and regulations.
- 4. The Environment and Natural Resources Development Action Plan builds on mechanisms to preserve the key values and address the key constraints within a framework for facilitating a consensus for change. The strategies included in the Action Plan are as follows:
 - Strategy 1 Update and Improve Key Legislation
 - Strategy 2 Strengthen the Environmental Management Policy Framework
 - Strategy 3 Strengthen and Simplify Environmental Management Structure
 - Strategy 4 Fully Support States in Resource Management
 - Strategy 5 Improve Enforcement and Compliance
 - Strategy 6 Improve Infrastructure to Support Environmental Management
 - Strategy 7 Improve the General Capacity for Environmental Management
 - Strategy 8 Ensure Adequate Funding for Environmental Management Activities
 - Strategy 9 Improve Environmental Management Monitoring and Evaluation
 - Strategy 10 Improve Collation and Management of Data
- 5. Each of the strategies includes a number of actions which have been ranked by stakeholders and included as a 'combined priorities' matrix in the Action Plan.
- 6. The overall cost of the Action Plan is \$1.185 million.



II. INTRODUCTION

A. Facility for Economic and Infrastructure Management

- During the 2006 Asian Development Bank (ADB) Country Programming Mission, the Government requested technical assistance (TA) to provide a fast-response facility to assist economic policy formulation, facilitate the budget process, strengthen private sector development, and foster infrastructure management. In response, ADB provided support for such a facility in the 2007 TA pipeline which included the Facility for Economic and Infrastructure Management (FEIM).
- 2. In respect of the environmental management aspects of the TA, following stakeholder consultation and review of various documents and reports, an *Environmental Overview Report* was prepared in December 2007. This was submitted to the Project Steering Committee (PSC) for the FEIM and also circulated to stakeholders.

B. Key Conclusions and Recommendations of Overview Report

- 3. The key conclusions of the Environmental Overview were prioritized, on a preliminary basis, in terms of suggested importance and need for action in respect of developing a medium-term development strategy (MTDS) and five-year plan. It should be noted that some conclusions i.e. the need to complete an environmental management policy framework, have longer-term implications, but in order to prepare and implement a MTDS that responds to the environmental management issues raised in the report, it was noted that a number of the conclusions should be addressed as soon as possible.
- 4. The conclusions in order of suggested priority are as follows:
 - The environmental management policy and regulatory framework is incomplete, policies are still required in key areas such as energy, mining, forestry and watershed management (the climate change adaptation policy put before the House in December 2007 is still pending);
 - ii. In order to meet immediate resource management and environmental protection needs, trying to work around the resistance of states to any initiatives that are seen to be nationally imposed is a priority. States accept the need for a framework of regulation and policy but want the flexibility to achieve the minimum standards set at national level in ways that their suit their own visions and capacity;
 - iii. Within the national policy framework and setting of minimum environmental standards, states should be supported and encouraged to prepare and implement management plans in ways that best fit their context and capacity. States require the assistance of one clearly identified agency within government to access information and technical assistance available through grants (including knowledge about grant availability, proposal writing, project/program implementation and reporting requirements);
 - iv. Within the approved project framework of the United Nations Development Program (UNDP)/Global Environmental Facility (GEF) funded Sustainable Land Management Project (SLMP), the work program and deliverables can be focused to support ongoing initiatives that could achieve some of the anticipated outcomes of the SLMP, for example, the Babeldaob Watershed Alliance (BWA), whilst recognizing the limited institutional and implementation capacity of a small country;
 - v. On the basis of existing and future projected population, state administration staffing and capacity, states may choose which type of resource management planning



document would best suit their needs, some states may opt for a land use plan while other states may opt for a watershed management plan. In addition to any protected areas management plans they may already have or propose, either a watershed management plan or a land use plan, along with zoning regulations and a building code will be sufficient for integrated resource management (i.e. an ecosystem based approach covering management of all resources rather than isolating resources and trying to manage them separately);

- vi. More fully adopting integrated resource management would assist in simplifying the institutional structure and supporting the role of states in resource management;
- vii. In respect of institutional arrangements, realignment of functions and responsibilities at the ministry and bureau level is required to ensure that environmental management is given sufficient attention in national decision making (ministry level) and to reduce over-management of resources and remove over-lapping jurisdictions (bureau level);
- viii. A new bureau with an environmental planning and conservation mandate should be established. The functions of the Office of Environmental Response and Coordination (OERC) need to be institutionalized within the government structure, an appropriate place would be in a new bureau of environmental planning and conservation. This bureau could also include an office or division that provides assistance to states in terms of accessing grants and implementing projects and programs;
- ix. The Environmental Quality Protection Act (EQPA) and various regulations require updating in terms of Palau's current political and environmental management context, and previously unforeseen risks, such as climate change and bio-security, need to be addressed;
- x. Addressing cumulative impacts and synergistic effects across legislation is important, especially in respect of development and intensifying use of watersheds, coastal zone and mangrove areas, and a developing aquaculture sector;
- xi. New regulations are also required, e.g. vegetation clearance, and a range of minimum environmental standards, e.g. forest cover, need to be established;
- xii. Once the policy framework is established, environmental management requirements can be more effectively mainstreamed in master planning documents and development strategies rather than be dealt with in a separate chapter; and
- xiii. Currently the Environmental Quality Protection Board (EQPB) is not collecting all revenues, such as environmental impact fees, to which it is entitled under the EQPA and various regulations. Revenue generated by EQPB from permit applications goes into general National Treasury and is not ear-marked for the activities and operations of EQPB so currently there is no incentive to EQPB to collect all revenue to which it is entitled.
- 5. In respect of conclusions (vii) and (viii) above, a law was passed in May 2008 which divides Ministry of Resources and Development (MRD) into two ministries Ministry of Natural Resources, Environment and Tourism (MNRET) and Ministry of Public Infrastructure, Industries and Commerce (MPIIC) and eliminating the Ministry of Commerce and Trade. The functions of the OERC will be included in MNRET.



III. IDENTIFYING STRATEGIC PRIORITIES

C. Environmental Management Framework Structure

- 6. In summary, the *Environmental Overview Report* concluded that the key issue in respect of environmental management is the lack an overarching policy and an appropriately scaled "Palau-specific" regulatory framework to:
 - Meet basic resource management needs (i.e. of Palau for Palau);
 - Fulfil obligations under various international agreements (i.e. of Palau for regional and global community); and
 - Achieve the defined vision and goals as identified in the National Master Development Plan (NMDP) and guide future planning and development activities.
- 7. The NMDP clearly set out a tiered approach to master planning starting with the definition of a national vision and national goals which are to be supported by national strategies, policies, programs and activities. However, these latter mechanisms have been lacking and result in the absence of a cohesive development framework. In order to fill the gaps in the existing framework envisaged in the NMDP, policies in each of the key sectors establishing how different levels of government, including civil society organizations, fit into the framework are required.

Level **Component of Resource Management Framework** Policies, overall objective statement, guidelines, minimum environmental standards; National National Action Plans establishing requirements for meeting various international commitments Management plans and other resource management tools as required, determined State within context and capacity of states, in accordance with national objectives and minimum environmental standards Environmental management policy within sectoral management plans focusing national Ministry objective statements and guidelines and establishing key objectives, roles, and functions of the sector Strategic action plans establishing key activities and tasks; and Management plans providing the mechanisms for 'operationalization' of action plans -Bureau/Division identifying objectives, management requirements, methods of implementation for specific aspects of each sector – linked with key requirements for environmental management

Table 2.1 - Overview of Framework Structure

- 8. Currently Palau is endeavouring to meet its international obligations under various conventions and agreements in the absence of a national environmental policy framework, e.g. watershed, land-use and forest policies are required for Palau to be able to ensure an integrated and consistent response to these issues and to meet its obligations under the United Nations Convention to Combat Desertification (UNCDD).
- 9. It is also clear, from ongoing consultation, that the need to revise, update and improve (streamline) the existing regulatory framework is of a higher priority than concluded at the end of 2007. This will require a major overhaul of the EQPA and regulations.

D. Strategic Priorities of MTDS

10. The strategic priorities that have been established by the TA for the medium-term development framework include:



- Preserving key values and advantages;
- Achieving consensus for change; and
- Addressing key binding constraints.
- 11. Overall, the MTDS concludes that the key values that are important to preserve are (i) the environment; (ii) cultural values; (iii) political stability; (iv) public security and civil order; and, (v) effective relationships with development partners.
- 12. To ensure the success of the MTDS, it will be necessary to develop and implement an effective communication program to build a consensus for change, of which the MTDS has identified the following key elements:
 - i) The benefits in terms of standards of living, cultural values and the environment if the MTDS can be successfully implemented;
 - ii) The need for changes to be made in attitudes to the role and functions of government and responsibility for the cost of government;
 - iii) The need to improve the performance of government and government entities; and
 - iv) The need to create an environment that is more conducive to private sector development.
- 13. The MTDS presents a detailed section on binding constraints. In summary, the key binding (or fundamental) constraints for sustainable economic development are:
 - The expectation that someone else should pay for a wide array of government services and responsibilities and that government services to firms and individuals will be heavily subsidized and which in turn affects incentives to work and to adopt effective policies; and
 - Conflicts of interest that make it difficult to gain acceptance for and to implement effective governance arrangements and policies for the benefit of the community as a whole.
- 14. In addition to the two key binding constraints identified above there are a number of other weaknesses that also need to be addressed as a matter of priority. These included (i) the regulatory and administrative constraints on foreign investment and foreign labor; (ii) weaknesses in land use planning to ensure that land that is used for economic development purposes is consistent with the goal of sustainable national development and environmental values in the MTDS; and, (iii) inadequate governance, planning, management, regulatory and financing arrangements for infrastructure, public enterprises and public services.
- 15. In terms of the environmental management sector the following key values, leverage points for consensus for change, and key constraints have been identified (Table 2.2).



Table 2.2 – Environment Sector: Values, Consensus for Change, and Key Constraints

Strategic Priority	Issues in Environmental Sector
	A unique environment and natural resource base for tourism and sustainable development;
	 With at least 10,000 species of living organisms including nearly 1,500 species of reef fishes and 700 corals Palau records the highest number of flora and fauna species in Micronesia, and a 25 per cent endemism rate. Some 53 of the species are near threatened, vulnerable, endangered or critically endangered;
	 The coastal zone and reef ecosystems include 1,150 km2 of coral reef, two endemic sea-grass species, 13 of the 14 mangrove species found in Micronesia, and a very high coral diversity;
	Marine environment provides habitat for endangered marine fauna (saltwater crocodile, dugong, and giant clams);
Key values and advantages	 Palau's terrestrial environment includes one of the largest undisturbed tropical rainforests in Micronesia, and the largest number of resident bird species in Micronesia (50 species), of which 43 permanently inhabit Babeldaob. The many streams contain at least 40 species of fish, one native frog, 20 species of lizards, five species of snakes, and saltwater crocodiles. There is a very high number of insects, approximately 5,000 species have been identified;
	 Lake Ngarodok is the largest natural freshwater lake, Ngermeduu Bay is the largest estuary lake in Micronesia, numerous marine lakes that provide habitat for the unique and non-stinging Mastigias and Moon Jellyfish. The high concentration of marine lakes is unique in the world;
	 There are 33 protected areas in Palau (some protected under state legislation others managed as community marine conservation areas) covering an area in the order of 1,315 km2; and
	 Currently five sites (two are being proposed under both cultural and natural categories) proposed for World Heritage Site status, have progressed to the Tentative List for UNESCO consideration.
	 Motivation for resource protection and sustainable development high (membership of NGOs, awareness of issues, community-based marine protected areas);
	 Work around states resistance to nationally imposed initiatives by supporting state-driven resource management actions;
Consensus for change	 Use community-based and integrated resource management approaches to overcome concept of national welfare being secondary to clan and state welfare;
	 State-driven initiatives, supported by NGOs, such as Babeldaob Watershed Alliance (BWA) indicate willingness for trans-boundary resource management co-operation.
	Lack of over-arching policy framework;
	 Outdated regulatory framework within a system of insufficient resources and capacity to fully implement;
	 Over-lapping mandates and functions in resource management roles at national level;
Key constraints	 Insufficient funding from national government leading to difficulties of hiring staff and undertaking evaluation, review, monitoring, compliance, and enforcement activities;
	 Ongoing tensions between state and national government as to land and resource ownership and management;
	 Traditional structure (clan ownership) adds complexities to defining clear title to, and ownership of, land and resources;
	 Foreign assistance has supported elevated consumption levels without improved work practice or productivity.



- 16. The Environment and Natural Resources Development Action Plan (the Action Plan), building on mechanisms to preserve the key values identified above, seeks to address the key constraints within a framework for facilitating a consensus for change.
- 17. An excellent spring-board for continuing to build consensus for change is the UNDP/GEF, and Palau Conservation Society (PCS) funded SLMP, being implemented through Palau Automated Land and Resources Information System (PALARIS) which brokers multiagency and inter-state cooperation for strengthening state and community capacities in land-use planning and management, and developing partnerships with local institutions, community groups and NGOs to implement land degradation prevention measures. The main national objectives of the SLMP being to:
 - Develop sustainable land management plans that equitably engage stakeholders at all levels;¹ and
 - Mainstream sustainable land management principles into development strategies and programs, as well as on the ground interventions.

The basic premise of the plans is that they will uphold the biological productivity of the land, with all its ecological and socio-economic value, for present and future generations.



IV. ENVIRONMENTAL MANAGEMENT STRATEGIES AND ACTIONS

E. Starting Point

- 18. The National Biodiversity Strategy and Action Plan (NBSAP) represented the first document to synthesize environmental impacts and the status of their management since the National Environmental Management Strategy (NEMS) and represented Palau's initial step to meet its obligations under the United Nations Convention on Biological Diversity (UNCBD).
- 19. It was agreed during discussions on the conclusions of the Environmental Overview Report and the remaining tasks that the priorities of the NBSAP will be adopted as the starting point for the environmental management components of the MTDS (five-year plan) to be prepared under the TA. This is an appropriate starting point for setting environmental management priorities for the MTDS as the NBSAP was developed through comprehensive consultation and has wide acceptance within the community and leadership.
- 20. The themes and actions recommended in the NBSAP are guiding principles developed for the successful long-term preservation, conservation, and sustainable utilization and management of Palau's biodiversity along the lines of eight strategic themes which include:
 - Protected/managed areas:
 - Species protection;
 - Bio-security, invasive species and bio-safety;
 - Sharing benefits of genetic resources;
 - Sustainable economic development;
 - Prevention and minimization of waste;
 - Agricultural biodiversity; and
 - Mainstreaming of biodiversity conservation.
- 21. The implementation framework for NBSAP will be developed in cooperation with the 16 State governments, traditional leaders, and other relevant stakeholders. While the NBSAP document has not been endorsed by the OEK, the principles have, and various actions included in the Action Plan support the principles of the NBSAP.

F. Components of the Action Plan

22. Following further consultation with stakeholders, the Action Plan builds on the recommendations and actions identified in the *Environmental Overview Report*.



1. Strategy 1 – Update and Improve Key Legislation

- 23. The EQPA was adopted during Trust Territory times and was largely adapted from the US's National Environmental Protection Act, it needs to be revised to better reflect the Palau political, administrative and socio-economic context and capacity to implement and enforce its various provisions, and be updated to include risks that were not applicable or identified when the EQPA was approved.
- 24. The ways the process can be streamlined need to be reviewed. This includes the assessment of how appropriate a "one-stop-shop" approach for project approval and permit applications could be within the Palau development context, particularly addressing the links that can be made between various state and EQPA requirements.
- 25. An example of how EQPB has been unable to fully implement the EQPA and EIS Regulations is the Palau Vacation Hotel (Malakal, Koror). A summary is given below, the details have been included as Annex 1.
- 26. In September 2007, an application for an earth moving permit was submitted to EQPB for removal of 488m² of an approximately 2,500 m² limestone rock island (Malakal, Koror) associated with the development of a hotel. An EA was submitted which concluded, based on the information and drawings/plans supplied by the applicant, that provided the development was within the footprint of existing buildings, and complied with a number of silt and sedimentation control measures, that the development and removal of the rock would amount to a non-significant impact. The earth permit was subsequently granted by EQPB with a number of conditions pertaining to soil and coastal erosion and sedimentation control.
- 27. During construction, the applicant proceeded to remove rock beyond that allowed in the permit (an additional area of approximately 390 m² was removed). Koror state issued a \$100,000 fine (which was subsequently reduced to \$10,000 for reasons not immediately apparent). EQPB issued a stop work notice (for a period of 10 days), retroactively agreed to the additional rock removal, and is still considering what fine should be imposed. EQPB is further investigating to ensure that the applicant has not encroached even further onto the rock island.
- 28. In discussions between EQPB and Koror State to determine the extent of the problems and how they should be rectified, it became evident that Koror State had waived three provisions of its land use plan set back provisions, density provisions, and car parking requirements in order to permit the development and was not enforcing relevant provisions of the Koror State Public Law covering protection of mangroves or waste disposal. This information, which could have given an insight into the overall scheme being proposed by the applicant, was not provided to EQPB at the time of the earth moving permit application.
- 29. The applicant has since indicated that it proposes to submit a permit application for filling adjacent to the rock island to provide for a walkway around the island and a boat marina on the western side of the rock island. It is clear that the applicant is pursuing a "creeping development", an approach which is inconsistent with the purpose of both the EQPA and EIS Regulations.



- 30. The foregoing example demonstrates the necessity for (i) national regulations covering assessment of the impacts of an entire development rather than assessment of its components (in response to individual permit applications) and providing EQPB and states the discretion to request additional information if there is any doubt as to the intended extent of a proposal; (ii) improved cooperation between states and EQPB in respect of developments during both the permit application stage and construction stage (compliance monitoring and enforcement); (iii) national regulations for vegetation clearance (to provide ability for EQPB to intercede in cases where states are not enforcing their own regulations, if indeed there are state regulations covering such; and, (iv) EQPB to consider permit applications only when all of the information, and relevant state approvals sought have been granted (or otherwise), is made available.
- 31. A number of state governors have been critical of EQPB's implementation of EQPA and provisions there-under, citing the complexities, costs and unreasonableness of the process, and lengthy periods entailed from time of application to time of receipt of approval, for permits. States consider that complying with the EQPA (and regulations), largely the permitting process, is cumbersome and time-consuming, it has been cited as a "barrier to development" by some governors.
- 32. Three examples have been provided by state governors in this regard and are summarised below.

Example 1 – Ngaraard State: Road Improvement Project

- 33. In response to a permit application for a road improvement project to be undertaken by Capital Improvement Program (CIP), the Governor of Ngaraard State was unwilling to sign the permit because the state could be held liable for any violations committed during construction works. The state contended that it had not been privy to the contractor selection process undertaken by CIP nor the permit application made by the contractor, and therefore could not exert any control over the contractor's execution of the project.
- 34. The rationale for refusal to sign the permit was based on the state being previously held liable for contractor violations and being fined \$10,000 as part of remedial measures, in order to ensure work was resumed and the project completed. Further, the state mentioned that in cases where it becomes aware that permit conditions are not being complied with or are being violated, it has no authority to stop the work or to intervene.
- 35. The issues that arise out of this example include (i) why a state is responsible for work undertaken by CIP or a contractor on behalf of CIP; (ii) why a state can not act as a proxy for EQPB in situations where it is aware of permit violations; and, (iii) why a permit is required for the operation of the road.
- 36. It was subsequently explained by EQPB that the operations permit is required in respect of drainage (particularly maintenance and clearing of drains to prevent over-flows and impacts on adjacent properties) and storm-water run-off, treatment and discharge, which is reasonable, but this was not explained in the letter to the State.



Example 2 – Airai State: Ngebudel Subdivision Roads

- 37. An earthmoving permit application for road access associated with a subdivision was made by Airai State on December 6th 2007, on 26th December 2007 the response from EQPB was that further information was required, including (i) road and drainage designs; (ii) an erosion and sedimentation control plan; (iii) disposal area for excess spoil; and, (iv) an EA of sewage generation and disposal impacts of the subdivision.
- 38. A request for proposals to undertake the EA was made by Airai State on January 21st 2008. The EA, prepared by a consultant and submitted to EQPB by Airai State on May 01st 2008, did not address all of the items set out above and was confined to expected impacts of the road (i.e. providing items (i) and (ii) above). The additional information (items (iii) and (iv) above) was again requested by EQPB. The EA has been re-submitted and is currently subject to review by EQPB.
- 39. The state contends that the process is time consuming (taking some six months from the initial earth moving permit application to the submission of the EA) and costly as a consultant must be engaged to undertake the EA.
- 40. In addition to the cost and time-delay concerns raised by Airai State, the issues that arise out of this example include (i) how does the EQPA dovetail with various approvals required under state legislation and regulations; (ii) in respect of (i), why an EA was not required for the original subdivision proposal/plan, or if one was required and subsequently approved by the sate and/or EQPB, why that EA did not address the issue of sewage generation and disposal; (iii) why, if an EA of the original subdivision proposal/plan was required and subsequently approved by either the state and/or EQPB, that EA did not include an environmental management plan covering the various subdivision components including erosion and sedimentation control; and, (iv) why components of an overall project (i.e. the subdivision) require separate permit applications and approval processes.

Example 3 – Ngarchelong State: Oketol Dock Extension

- 41. Ngarchelong State wished to extend the Oketol dock and upgrade associated facilities. The proposal, EA and permit application were submitted on August 13th 2007. After initial review, EQPB did not consider the information supplied was adequate enough to determine the degree of impact and whether an EIS would be required or Findings of No Significant Impact (FONSI) could be issued. A request for further information was received from EQPB on September 10th 2007.
- 42. The Governor and consultant who prepared the EA on behalf of the state, considered the 14 comments and four questions largely irrelevant to the proposal. A major area of contest between the state and EQPB focused on the economic impacts to be derived from the proposal and who the actual beneficiaries were. A revised EA, was submitted on October 04th and approval of the permit (with conditions) was issued on 31st October 2007.
- 43. The FEIM environmental specialist does not consider this a particularly good example of problematic permit applications. The permit was approved in reasonable time and the additional information sought was entirely reasonable within the context of the proposed development.
- 44. The three examples above are indicative of a growing tension between the states and EQPB over the implementation of the EQPA and Regulations, and that there is a strong desire on the part of the states to review the process, focusing on how it may be streamlined or better linked with approvals required under state laws.



Focus of Legislation Review and Update

- 45. Particular aspects that need to be revised in existing legislation or addressed by new regulations include:
 - Revise (update and improve) the EQPA and link with relevant legislation passed in recent years (e.g. PAN Act, Recycling Program Act) and rationalize with pending or proposed legislation (climate change, forest practice, bio-security, energy conservation etc); include climate risk management and adaptation (CRMA) mechanisms; fully address hazardous materials (including permitting);
 - EIS Regulations need to be revised to:
 - address issues of cumulative impacts in terms of several similar developments and the assessment of single but phased developments (i.e. in respect of state regulations covering some aspects of a development and EQPA covering others, it is clear that developments need to be considered in their entirety and not broken into components and assessed separately under different laws and regulations);
 - ii. improve coordination between states and EQPB in respect of developments at both permit application stage and construction stage (compliance and enforcement monitoring);
 - iii. focus on simplifying the permit application process and EA (especially address the issue of accepting EAs from other than consultants), and triggers for EIS. Assess whether dovetailing state and EQPA requirements would be appropriate;
 - iv. provide states and EQPB to have flexibility to require additional information or full information disclosure by applicant if there is any doubt as to the intended extent of a proposal;
 - v. include a schedule of fines, linked with value of development (similar to environmental impact fee) and minimise discretion fo states and EQPB to reduce or waive fines; and
 - vi. address contribution of projects/developments on factors of climate change as well as the possible impact of climate change on the proposed development and attendant mitigations required;
 - Solid Waste Management Regulations linked with initiatives promoted under the Recycling Program Act and supporting the proposed Solid Waste Management Plan (prepared under JICA funding in February 2008);
 - Air Pollution Regulations revised to address the major risks in Palau (i.e. unlikely to need to address coal-fired power plants or large scale industrial factories) and point source and non-point source polluters (including emissions from motor vehicles), and link with proposals in climate change bill in respect of emissions regulations;
 - Fresh and Marine Water Quality Regulations revised to better reflect inter-related nature
 of land use development and impacts on coastal zone/ reef areas in respect of
 sedimentation and turbidity; minimum quality standards need to be based on biological
 as well as chemical parameters; effects of cumulative stressors need to be addressed
 i.e. individual levels for various parameters may be met (on a chemical or biological
 basis) but the combined and cumulative effect may be significantly adverse on water
 quality and/or flora and fauna;
 - New regulations, such as vegetation clearance (including submerged vegetation), to provide ability for EQPB to intercede in cases where states do not enforce their own



- regulations and to cover states that do not have such regulations; and
- Development of zoning regulations (largely driven by states) within, or following the framework established under the SLMP and linking with watershed and forest management plans viz-a-viz development and use of coastal zone, land in watershed areas or drainage basins, and development of the aquaculture sector; building codes linking with CRMA and energy policy in respect of conservation initiatives.
- 46. Addressing cumulative impacts and synergistic effects across legislation is important, especially in respect of development and intensifying use of watersheds, coastal zone and mangrove areas, and a developing aquaculture sector. For example, while conversion of a small area of mangrove for aquaculture or community use might be acceptable, the cumulative effect of conversion of several small areas within one watershed or catchment might be unacceptable.
- 47. This will need to be linked with the preparation of watershed management plans and/or forest and mangrove management plans which define the carrying capacity of each area covered by the plan as well as zoning rules and regulations.
- 48. Minimum environmental standards for forest cover (including mangroves), as well as water quality, are required and along with forest/mangrove management plans would be best addressed through vegetation clearance regulations which are paralleled with the earthmoving regulations and zoning rules/regulations.

- 49. The key actions required for achieving the strategy include:
 - Review, update and strengthen enabling legislation (EQPA and Regulations); address inadequacies and gaps (i.e. agricultural activities not covered by Earthmoving Regulations) include additional regulations (e.g. vegetation clearance);
 - Establish minimum environmental standards for resource other than water; and, address previously unforeseen risks including climate change and biosecurity;
 - iii. Further investigation of permit approvals and EA process; simplify the procedures for permit applications and clearly define the triggers for EA and EIS. This includes a review of the number and type of permits required for different activities and the possibility of streamlining the process;
 - iv. Complete, and/or approve existing drafts of laws e.g. climate change, energy conservation and bio-security:
 - v. Within, or following the framework established under the SLMP, support states to establish zoning rules and regulations, building codes (with priority given to where intensive development is likely in the near future;
 - vi. Address element of SLMP (zoning regulations, rules and building codes) omitted from current project through engagement of planner to assist states;²

The inclusion of a planner with land-use or environmental planning experience in the small island state context to assist



and

vii. Revise and expand Endangered Species Act to cover additional species.³

2. Strategy 2 - Strengthen the Environmental Management Policy Framework

- 50. The key issue in respect of environmental management is the lack of any overarching policy framework to meet the basic resource management needs and achieve the defined vision and goals as identified in the NMDP and guide future planning and development activities.
- 51. The NMDP clearly set out a tiered approach to master planning starting with the definition of a national vision and national goals which are to be supported by national strategies, policies, programs and activities. However, these latter mechanisms have been lacking and result in the absence of a cohesive development framework.
- 52. In order to fill the gaps in the existing framework envisaged in the NMDP, policies in each of the key sectors establishing how different levels of government, including civil society organizations, fit into the framework are required. National policies will provide the objective statement, guidelines and minimum standards in terms of resource protection and resource management; sectoral environmental management policies at ministry level will focus the national objective statements and guidelines; strategic action plans will set out the key activities and tasks of each sector and management plans will provide the mechanisms for 'operationalization' of the strategic action plans.
- 53. Such an over-arching policy framework will provide a mechanism for integrated resource management, for e.g. watershed planning linked with land-use practices and forestry management while also recognizing the complexities of managing the coastal zone, and energy planning linked with CRMA, land-use, and building codes.
- 54. Future master development plans as well as sector strategic action plans need to mainstream environmental management aspects in line with national policy.
- 55. Once the national policy framework is clearly established, environmental management requirements viz-a-viz key policy areas can be addressed in an integrated/mainstreamed way in each of the sector plans, rather than be dealt with in a separate chapter in each of the sector plans.
- 56. This will ensure integration of environmental management across sectors. To achieve this, policies are required in a number of key areas;
 - Forest, including mangrove, and coastal zone policy linking with watershed management and sustainable land management;
 - Energy, including renewable energy. As a priority an energy policy is required that will

states develop zoning regulations was originally included in the SLM proposal and was to be funded through a grant from the US. Subsequently, the US advised there was insufficient budget to cover this and an important component of the overall SLMP, as originally envisaged, has been excluded from the current project.

Palau has not actually become a signatory to CITES. How non-Palauan endangered species are handled needs to be addressed to ensure that Palau does not become a safe haven for people trading in endangered species from other countries.



link with proposed climate change policy and proposed Palau Energy Conservation Strategy (PECS). Coordination is required between Energy Office and PPUC initiatives, and energy conservation (including metering of government facilities and buildings, and expansion of energy audits);

- Minerals policy covering surface and seabed/ocean minerals (including oil and gas) to resolve issues related to ownership, use rights and royalties. While minerals fell under the purview of MRD there is no division or office within the structure tasked with facilitating mineral exploration and/or development. Some aspects fall to EQPB (environmental considerations for sand mining, rock quarrying, sand and coral dredging activities). Surveying and exploration work in terms of extent of mineral deposits and commercial viability of the same are required; and
- Linked with above is the need to prepare aggregate extraction guidelines addressing sources for construction materials, and sustainable extraction and location of quarry sites etc (i.e. not adjacent to coast).

Key Actions

- 57. The key actions required for achieving the strategy include:
 - i. Complete the national (over-arching) policy and regulatory framework; prepare and/or complete AND implement management policies for key sectors such as forestry (including mangroves), minerals, water, watershed management, and, energy; incorporate CRMA into existing policies; and, ensure policies and plans comply, or link, with key national action plans prepared to meet requirements of international conventions;
 - ii. Address land use issues (i.e. few functioning land use plans) based on integrated management approach (recognising links between land and water management, community participation in sustainable land management, and recognising importance of CRMA);
 - iii. Mainstream environmental considerations (as per national framework) in planning process; incorporate environmental management including CRMA requirements and targets in state plans, sector plans (agriculture, tourism, infrastructure, energy etc) and development strategies; and
 - iv. Establish a national strategic plan for environmental response linked with updated Disaster Management Plan (identifying CRMA mechanisms).

3. Strategy 3 – Strengthen and Simplify Environmental Management Structure

- 58. In respect of the environmental management structure, the key areas that need to be addressed include:
 - Lack of singular institutional arrangements at bureau and division level for environmental protection and resource management because of over-lapping mandates and jurisdictions of many government agencies and advisory councils (for e.g. some resources have as many as seven government agencies with mandates for some aspect of their management and this does not include advisory agencies such as NEPC, PNRC or NGOs who are also involved);
 - Conflicting and confused mandates in terms of resource management; and
 - Lack of capacity (staff, skills, and resources).
- 59. Assuming the mandate of MNRET is similar to that of MRD in respect of resource management, its responsibilities could potentially include the promotion, exploitation,



development and conservation of natural resources of Palau including agriculture, forestry, marine resources and fisheries, mineral and other land-based and ocean resources. The jurisdiction of MNRET will overlap with each of Palau's 16 state governments for all resources that are located within 12 nautical miles of the high-tide watermark.

- 60. There are two issues related to such a mandate in respect of resource management (i) it is confused and conflicting which results in a mismatch between the drive (and therefore activities) to exploit and develop on the one hand and to conserve on the other, and (ii) there is a disconnect between the service delivery requirements of the agriculture, forestry, and fishery sectors and over-arching environmental management needs such as forest policy and management, watershed management, sustainable land use development, and degraded land rehabilitation. The Agriculture and Aquaculture and Fisheries Stock-take and Overview reports prepared for FEIM conclude there is a need to separate the conservation functions of BOA and BMR from their development and management functions, and this conclusion is fully supported by this Action Plan.
- 61. It is clear that rationalizing the functions of bureaus and divisions is necessary in order to avoid shifting existing inefficiencies and mis-matches in functions to a new ministry, as this would conflict with one of the objectives of the NMDP to streamline internal administration, eliminating duplication wherever possible. As the new ministry is to take effect from January 2009, addressing these issues is of some immediacy.
- 62. The lack of an overall policy framework is a stumbling block for the different agencies and stakeholders that can make contributions to resource and environmental management. Once the key policy areas are addressed, as per Strategy 2, the national policy framework will facilitate much simplified institutional arrangements. The activities of bureaus and states can then be focused to key activities, such as management plans, that will comply with minimum environmental standards.
- 63. Given that climate change adaptation is a stated priority within the national agenda it is considered that including the Energy Office within the MNRET rather than MPIIC is appropriate as there are numerous links between energy policy and CRMA, and links between energy planning and minerals development in respect of the petroleum sector.
- 64. The lack of policy in the energy and minerals sectors is a key area addressed by the Action Plan

Key Actions

- 65. The key actions required to achieve this strategy include:
 - Clearly define bureau and division roles and responsibilities within MNRET to ensure that jurisdictions do not overlap and duplication ("over-management" of resources) is removed; clarify and formalise the functions of OERC within MNRET; Energy Office to be included in MNRET (recognising conservation and climate change aspects of management);
 - ii. Review and revise the roles, objectives, functions, governance arrangements, and specific regulatory requirements and procedures of the EQPB to simplify and streamline requirements;
 - iii. Ensure appropriate staffing for bureaus, divisions, Energy Office, and EQPB; support additional staff recruitment for EQPB Office as identified in NMDP if still required under streamlined structure; and
 - iv. Ensure mineral resources are addressed and covered in new structure



(MNRET);

- v. An office or division of MNRET with similar functions to OERC, which would have the mandate to ensure that provisions of international agreements are complied with at sector level and requirements are mainstreamed into sector strategies and plans; and
- vi. Request TA to review organisation structure, roles and responsibilities of Executive Order originally establishing MRD to address above issues (Action Plan items 3.1 3.5 and 10.4) for MNRET and to enable Action Plan item 2.1; make recommendations as appropriate pursuant to new organisation; address staffing requirements of MNRET and EQPB. As the new ministry will take effect in January 2009, this action has urgent priority to ensure that existing problems are not carried over into MNRET (an outline Terms of Reference has been prepared and is included as Annex 2).

4. Strategy 4 – Fully Support States in Resource Management

- 66. States have a crucial role in effective resource management. States have established, and manage, protected areas, and have established State Public Land Authorities (SPLA), although the SPLA is not functioning adequately in all states.
- 67. Recognizing that the existing tensions between national and state governments in respect of resource ownership and management can be detrimental to effective environmental management, supporting any initiative that is driven by the states themselves is much more likely to meet with success than nationally imposed initiatives, irrespective of how sensible or necessary the national initiatives might be.
- 68. An example is the Mangrove Management Plan, which was considered to be a comprehensive and important plan, but has met with resistance from the states in terms of its implementation as it has also been viewed as an attempt by national government to control the way states manage their resources.
- 69. In order to meet immediate resource management and environmental protection needs, trying to work around the resistance of states to any initiatives that are seen to be nationally imposed is a priority. States accept the need for a framework of regulation and policy but want the flexibility to achieve the minimum standards set at national level in ways that their suit their own visions, contexts and capacities.
- As long as management of state resources complies with national policy and law, a state is able to promulgate more stringent or additional measures if it chooses, as Koror has done. This would mean that minimum environmental standards are set by national government by way of regulations and/or policy, and states (with support from bureau and division level) prepare and implement key resource management plans such as watershed management plans, protected area management plans and sustainable land use plans.
- 71. An excellent example of supporting states in marine resource management is the program being undertaken by the Palau International Coral Reef Centre (PICRC) with funding

⁴ As noted in the Section 3.2.1, this does not always mean that the more stringent laws and regulations are enforced.



through National Fish & Wildlife Foundation.⁵ PICRC is working with four states in the area of capacity building for community based monitoring, to better enable states and communities to manage marine resources associated with reefs, and monitor and evaluate activities.

Key Actions

- 72. The key actions for achieving this strategy include:
 - Clearly define the role of, and support states in, environmental management; states have flexibility to comply with national framework in a manner inkeeping with their own context and capacity;
 - ii. Improve state capacity for environmental management through government funded expertise (environmental, engineering, surveying) - as a shared resource - to assist states in complying with national environmental management framework;
 - iii. Encourage states to work together in respect of trans-boundary resources and issues (such as BWA model);
 - iv. Bureau and division level agencies of MNRET to support and assist states in preparing and implementing key resource management tools such as watershed plans, protected area management plans and land-use plans; and
 - v. Facilitate better communication between national and state levels through regular formal forum to discuss resource management issues and CRMA.

5. Strategy 5 - Improve Enforcement and Compliance

- 73. Monitoring and enforcement, at both national and state level, is patchy. This is associated with (i) a general lack of capacity (staff and financial resources) and, (ii) over-lapping mandates and jurisdictions. For example, in terms of marine resources (inside the reef and foreign fishing) protection and compliance are the responsibility of Ministry of Justice Bureau of Public Safety through Division of Fish and Wildlife Protection and the Division of Marine Law Enforcement, BMR's Marine Protected Areas Program and Endangered Species Program, EQPB, State Departments of Conservation and Law Enforcement, and State Rangers, in some cases there are also community/clan based enforcement processes.
- 74. Some states perform well, such as Koror State which has established Koror State Rangers and a State Department of Conservation and Law Enforcement, while other states do not even have a conservation officer.
- 75. In 2007 EQPB issued 50 violation notices and 5 desist orders. The EQPB states that there are many instances where violation notices are not being served or followed up as a result of lack of capacity and resources, and that EQPB is probably only performing about half of its required mandate. While improved compliance monitoring would strengthen enforcement capabilities, there is a need to improve inspection-related performance, including adequate follow-up and final inspections. EQPB notes that currently follow-up inspections are usually

⁵ The program is for three years and has been provided a grant of US\$41,000.



only undertaken in response to a complaint or problem.

Key Actions

- 76. The key actions required for achieving this strategy include:
 - i. Retaining an independent process and agency with mandate for monitoring, compliance and enforcement of "umbrella" legislation;
 - ii. Strengthen enforcement capabilities and improve compliance monitoring; improve performance in respect of inspections; improve cooperation between agencies and State Rangers; and
 - iii. Support Endangered Species Program in new bureau of MNRET (will allow for resource sharing) to enforce existing and new regulations.

6. Strategy 6 – Improve Infrastructure to Support Environmental Management

- 77. Key infrastructure that is supportive of sound resource management includes energy development including conservation and opportunities for renewable energy, appropriate water and sanitation services, and sound waste management (including minimisation and recycling).
- 78. This strategy recognises the important links between infrastructure provision and the management of environmental impacts, and is based on the premise that improving infrastructure (particularly maintenance) is supportive of sustainable development and environmental management.
- 79. To this end, mainstreaming of nationally set environmental management policies into the plans and development strategies of the infrastructure sector is critical. Infrastructure is the sector that has been most lacking in terms of integration of environmental management and CRMA mechanisms.⁶ This has been addressed in the preparation of the MTDS through coordination and cooperation between the relevant specialists and integration and mainstreaming of relevant environmental management requirements in the infrastructure action plan as well as endorsement of actions pertaining to conservation strategies and policy development in the infrastructure sector by this Action Plan.

Key Actions

- 80. Key Actions required for achieving this strategy include:
 - Complete and implement energy (including renewable sources and conservation) policy linked with CRMA; develop and implement a comprehensive energy conservation program for all government facilities and ability to impose sanctions for non-compliance;
 - ii. Implement solid waste management strategy; management plans to identify

It should be noted that other key sectors such as agriculture, tourism, and fisheries are already based on sound environmental management principles and these will be supported and strengthened through various recommendations of the MTDS and formulation of relevant strategies and actions in the action plan prepared for each sector.



- coastal zones and other sensitive environments as "no go" areas for landfill sites;
- iii. Work with Tourism Action Plan Committee to promote waste control and minimization and recycling within tourism sector;
- iv. Establish a comprehensive and effective water conservation strategy and program; ensure water management and conservation included as part of mandate of MPIIC; work with OERC and EQPB on water quality and drought mitigation issues.

7. Strategy 7 – Improve the General Capacity for Environmental Management

- 81. Strategy 7 recognises the need to support across-the-board resource management initiatives (from national through to community levels) and actions and increase awareness.
- 82. The strategy supports environmental education and awareness programs including promotion of:
 - How environmentally sound development can assist people in meeting their needs (above and beyond compliance);
 - Main purpose of environmental law and regulations, reasons for enforcement, and application of enforcement in a consistent and transparent manner;
 - Why some activities are prohibited and others are undesirable from an environmental management perspective, and promotion of alternatives; and
 - Importance of compliance, and that violations are generally very costly (i) diversion of government resources; (ii) costs to the violator (time, money and loss of reputation); and, (iii) environmental impacts that must be mitigated. Encouragement of voluntary compliance.
- 83. Strengthening is required of not only government agencies but NGOs and civil society organisations, in order to increase community understanding of the goals of sound resource management, acceptance of programs based on sound environmental management practices, and consequently to attain improved compliance with environmental laws and regulations. This includes capacity building (training), skills transfer, monitoring, evaluating the effectiveness of environmental management programs and measures at the community, state, national, and regional level.
- 84. An important component of this overall strategy is supporting the initiative to establish a Micronesian Centre for A Sustainable Future (MCSF). The proposed functions of the MCSF include (i) provision of research and knowledge management, development and administration; (ii) a strategic "think tank" for sustainable development for the Western Micronesia Chief Executives' Summit (WMCES), Micronesian Presidents' Summit (MPS), and the Micronesia Challenge; and, (iii) office of Research and Development of the University of Guam.

The member States include Republic of Palau, the Commonwealth of the Northern Mariana Islands, the Territory of Guam, the Republic of Marshall Islands, the Federated States of Micronesia; Yap, Chuuk, Pohnpei and Kosrae.



- 85. In response to common challenges unique to small island developing states, given the opportunities within the north Pacific region to integrate natural and human resource systems and to establish processes of collaborative governance, the member States have established two sub-regional summits WMCES and the MPS.
- 86. The 9th WMCES (April 2008) resulted in the adoption of regional programs of action in the areas of solid waste management, conservation through the Micronesia Challenge and related environmental programs, energy, invasive species, health, transportation, workforce investment, tourism zoning, and communications. To facilitate these activities and include additional environmental issues of regional concern, through the WMCES the concept of the MCSF has been developed.
- 87. An initial evaluation of potential locations for the MCSF has been undertaken, taking into account such factors as accessibility to air travel, communications infrastructure, availability of in-kind support, access to funding sources (private, international, donor), and political linkages. This evaluation led to the recommendation that Palau is the preferred location for the MCSF and Palau was appointed as the Interim Secretariat to establish the MCSF.⁸
- 88. The areas of research and programs of action of the MCSF will include education for sustainable development, environment and sustainability; sustainable development governance, and science policy for sustainable development, bio-diplomacy; ecosystems and people. The primary objectives of the MSCF are set out in Table 3.1.

Table 3.1 - Objectives of Regional Centre for North Pacific

Area	Objectives
	Identify and address gaps in data and the characterization of information related to economic, social, environmental, and cultural activities;
Research and	Develop databases, vulnerability indexes, cost indexes, geographical information systems, econometric modelling and other information systems necessary to ensure a sustainable future of the region, including the development of clearing house mechanisms for the region;
Knowledge Management	• Establish a relevant research and executive education degree program at the University of Guam to be aligned with all the existing institutions of higher education within the region;
	Collect, integrate and synchronize emerging research, information and opportunities that have the potential to stimulate sustainable development
	Serve as a strategic think tank for the sub-regional Council of Micronesian Chief Executives.
Development	 Identify and expand indigenous and exogenous systems in order to advance methodologies for economic and ecological sustainability;
	 Integrate, leverage and synchronize opportunities for private and public sector partnerships within the sub regional, regional, national and international community
	Serve as a point of contact and facilitation for member governments;
Administration	Serve as a resource for program development and project management;
	Provide a nexus for information technology, strategic communications and public relations;

Guam Legislature through introduction of Resolution No. 140 (LS) by Senator Judy Gutherz, this piece of legislation provides the basis for the MCSF to perform a number of functions. At the 9th WMCES it was agreed to endorse the policies and proposals embedded in the Resolution (No. 140).



- Assist member governments in developing, organizing and planning for bi-annual summits in order to ensure institutional continuity; and
 - Develop, implement and manage a budget in order to carry out the Centre's primary objectives; and
 - Provide administrative capacity for sub-regional programs and activities.

- 89. The key actions required to achieve this strategy include:
 - Establish a regular forum for national-state cooperation on resource management, zoning, land use planning and other policies affecting the use of land:
 - ii. Support establishment of a regional centre for sustainable development (MCSF) to improve regional coordination of development strategies and programs;
 - iii. Support a community awareness function so that the community can (i) understand the need for resource management, compliance and monitoring;
 (ii) risks such as climate change (iii) potential value of land and how to realize that land for their benefit; and (iv) understand and address any adverse impact on the environment from economic development and economic uses of land;
 - Support NEPC and PNRC to reconvene and hold regular meetings;
 - v. Improve coordination, raise awareness and improve community education; increase knowledge and integrate with custom, strengthen community based organisations (such as BWA) & NGOs; and
 - vi. Develop and implement an environmental training program highlighting crosscutting issues; organisation (e.g. PCC, PICRC or NGO) to develop in cooperation with government agencies curricula for government agencies/staff, and deliver program; in-house staff with skills to deliver monthly training sessions.

8. Strategy 8 – Ensure Adequate Funding for Environmental Management Activities

- 90. EQPB only receives about two-thirds of its required operating budget on an annual basis. Currently the EQPB does not collect all revenues to which it is entitled under the EQPA and various regulations (i.e. charges for water quality testing and reimbursement for expenses associated with inspections and EIS review), and the revenue generated by EQPB from permit applications goes into general National Treasury funds rather than into a separate account or fund that can be used for EQPB's activities. Thus there is no incentive for EPQB to collect all revenue to which it is entitled under the EQPA and regulations because it is not ear-marked for use by EQPB.
- 91. The costs of development projects, with the exception of infrastructure and services that are public works, that will accrue individual or specific-group benefits, are expected to be borne by the project proponent. This should include the costs of application (including EIS)

Public works, such as large infrastructure projects, are still required to comply with the basic rules of EQPA, EIS Regulations, and apply for relevant permits. These costs will be met by the government agency proposing the work.



- preparation and filing), all permit applications, construction bond, mitigation of impacts and full compliance with conditions of approval, and monitoring.
- 92. A Mitigation Trust Fund is established and is funded by fines imposed by EQPB, these funds are used for addressing environmental risks (such as weed or invasive eradication) or situations requiring an emergency response. There are restrictions imposed upon the use of the Fund, it may not be used for salaries or daily operating expenses.
- 93. The NMDP did not support the imposition of an environmental tax of two per cent of total cost for projects above \$0.5 million, and an environmental impact fee which can be imposed by EQPB requires passing of a statute before such fees can be collected. An alternative is to include a provision for environmental impact and mitigation in the performance bond suggested in the FEIM Economic Policies and Institutions for Sustainable National Development report (June, 2008).

- 94. The key actions required to achieve this strategy include:
 - i. Promulgate statute that permits EQPB to charge for water quality testing and monitoring and charge an environmental impact fee (could be linked with performance bond recommended in Economics working paper);
 - EQPB supported to exercise duties under EQPA and EIS Regulations to seek reimbursement for inspections and miscellaneous expenses related to permit applications and EIS review;
 - iii. Permit fees and reimbursement of expenses to be separated from National Treasury and used solely for activities and operations of EQPB i.e. allow permit application charges to be used for inspections and monitoring; and
 - iv. Ensure baseline operational needs of resource management agencies are met; improve existing monitoring capabilities by addressing lack of equipment, appropriately trained personnel, and operational budgets.

9. Strategy 9 – Improve Environmental Management Monitoring and Evaluation

- 95. Similar to capacity weakness in respect of enforcement of existing regulations, monitoring and evaluation capabilities are also constrained. The most serious deficiency is the lack of systematic baseline data collection with which to determine the current state of environment and with which to monitor and evaluate the effectiveness, or otherwise, of policies, programs and interventions.
- 96. The lack of resources including equipment, appropriately trained personnel and budgets is a significant barrier to effective environmental management and planning for sustainable development. The Pacific Island Economic Review (PIER) report for Palau notes that without the capacity and capability to monitor performance using prescribed indicators and targets, the entire planning process is fundamentally flawed.¹⁰

¹⁰ ADB; Palau: Achieving Sustainable Development (Draft), October 2007



- Improve evaluation, prioritisation and monitoring techniques through establishment of policies and plans formulated with a framework for evaluation of investments that takes into consideration environmental impacts;
- Establish and/or update flora and fauna baselines and databases through systematic survey (by which to improve planning and monitor effectiveness of management plans);
- iii. Sector plans should include environmental targets;
- iv. EQPB to develop and implement procedures that include other appropriate government agencies in the EA/EIS review process; identify bureau, office or division within MNRET to be tasked with role of coordinating responses on EIS and permit applications from government agencies;
- v. Ensure EQPB has resources to undertake follow up and final inspections for permit applications;
- vi. Energy Office to prepare compliance reports and set realistic targets for conservation for each sector; and
- vii. Energy Office to prepare annual reports; energy conservation issues to be addressed in annual performance reviews.

10. Strategy 10 - Improve Collation and Management of Data

- 97. The effectiveness of data collection for monitoring and evaluation is integrally linked with a satisfactory data storage and management system.
- 98. Currently there is a lot of environmental information collected in Palau, but this is housed in various locations with different types of access arrangements. While it is not necessary for, or even recommended that, all information be stored in one place there should be a consolidated information base of what information is available and where it may be accessed. This would also avoid a lot of duplication of effort.

Key Actions

- 99. The key actions for this strategy include:
 - Coordinate data made available from initiatives and programs; share task between EQPB and PALARIS;
 - ii. Assist EQPB to establish new database for monitoring and compliance audits; expand environmental statistics base in line with SPREP requirements; and
 - iii. Publicise availability of EQPB data as resource for information provision and planning.

G. Criteria for Setting Sector Priorities

100. The MTDS notes that an important aspect that needs consideration relates to the setting of priorities for policies, strategies and activities both within sectors and across sectors and major policy areas. This is because an effective medium-term strategy must recognize the economic, social, political and practical constraints that exist in making progress with an economic development plan. In formulating the MTDS to date the following criteria have been used to help set priorities for the MTDS:



- **Support (S)**: the proposed policies, strategies and actions must have or be likely to have the support of the community and elected officials. It may be the case that many proposals do not have immediate support but they are so important for economic development that there should be a committed effort to explain the benefits of proposals and ensure support for them. The support criterion refers to the extent that support could be expected assuming a reasonably effective communications effort.
- Impact (I): the proposed policies, strategies and actions must have or be likely to have a substantial impact in terms of sustainable economic development of the specific objective under consideration. This criterion is self explanatory and will rely on the various sectoral and policy papers prepared by FEIM for the MTDS. However, it needs to be recognized that impact must also take account of implementation capacity which is to a large extent covered in the third criterion below.
- **Doable (D):** the proposed policies, strategies and actions must be practicable and implementable having regard to the time and resource constraints that exist.
- 101. Table 3.2 shows the priorities established for each of the specific actions of the Action Plan using the SID Criteria obtained through consultation with stakeholders. The 'impact' criterion is given a weight of 50% and the 'support' and doable' criteria are each given weights of 25%. Each action is given a ranking out of 10, with 10 being the highest score.
- 102. Some comments on the rankings are also provided in Annex 3 to aid in understanding. An overall score for each action was then obtained as a weighted average of the individual SID criteria using the weights just described. The actions were then ranked in accordance with the overall score and are shown in the action plans in each of the specific sectors in this paper. A ranking of 1 is the highest ranking.
- 103. As noted in the MTDS, the rankings can be changed if circumstances, assessments and priorities change or new actions are recommended as the MTDS is being implemented.
- 104. In respect of the actions and tasks set out in the Action Plan, the following factors directed the scoring:
 - i. Uncertainty of the support of the new administration for environmental management actions affected both "support" and "doability" categories;
 - ii. Actions ranked highly for the "impact" category where they are seen as essential for improving the existing environmental management system and contributing to a coordinated effort between government and state agencies, between government agencies, and between government and state agencies and NGOs; and
 - iii. Actions scored highly for "doability" where they would seek to complete, complement or advance existing initiatives.
- 105. Based on the priorities from the SID scores provided by stakeholders, in order to establish the timing, i.e. when actions should be implemented within the MTDS 5-year timeframe, the following general periods have been allocated to the ranked priorities:
 - Ranked priorities 1 4 recommended for implementation in Year 1;
 - Ranked priorities 5 8 recommended for implementation in Year 2;
 - Ranked priorities 9 11 recommended for implementation in Year 3;
 - Ranked priorities 12 14 recommended for implementation in Year 4; and
 - Ranked priorities 15 18 recommended for implementation in Year 5.



106. It should be noted that the SID matrix prepared as part of the technical assessment prepared by the FEIM environmental specialist and author of the Action Plan arrived at different scores and rankings for some actions. Table 3.2 contains notes addressing where the ranked priorities obtained through consultation differ from those obtained in the technical assessment, and where the technical assessment considers the priority, and therefore timing of implementation, should be revised (as indicated in the highlighted cells).



Table 3.2 - Environmental Management Action Plan

Goal: To protect, conserve, and manage the environment and natural resources of Palau for present and future generations of Palauans while providing for sustainable social, cultural, and economic development.

Strategy	Action No.	Action	Overall Priority (Rank)	Responsibility	Cost	Timing
Update and improve legislation	1.1	Moving Regulations) include additional regulations (e.g.	8.4 (7)	MOJ; EQPB; MNRET + Consultant	250,000	Year 2
		vegetation clearance); establish minimum environmental standards for resources other than water; and, address previously unforeseen risks including climate change and bio-security	9.5 (1)	In order to facilitate various actions in strategies 2 a this action is considered very high priority in the technical assessment and is recommended for implementation in Year 1		
	1.2	Simplify procedures for permit applications and clearly define triggers for EA and EIS	8.4 (7)	MOJ; EQPB; MNRET + Consultant	Incl. in 1.1	Year 2
	1.3	Complete and approve existing drafts of laws e.g. climate change, energy conservation, and bio-security	7.7 (12)	MOJ; EQPB; MNRET	Incl. in 1.1	Year 3
	1.4	Within, or following, framework established under the SLMP, support states to establish zoning rules and regulations (recognising need for CRMA mechanisms), and building codes (with priority given to states where intensive development is likely in the near future)	9.5 (1)	States; MNRET + Consultant	Incl. in 1.5	Year 1
	1.5	Address element of SLMP (zoning regulations, rules and building codes) omitted from current project through engagement of planner to assist states	9.5 (10)	States; MNRET + Consultant	350,000	Year 1
	1.6	Revise and expand Endangered Species Act to cover additional species (CITES issues)	6.3 (16)	MOJ; MNRET + Consultant	Incl. in 1.1	Year 5
2. Strengthen environmental management framework	2.1	Complete national policy and regulatory framework; prepare and/or complete management policies for key sectors such as forestry (incl. mangroves), minerals, water, watershed management, energy; incorporate CRMA into existing policies; and, ensure policies and plans comply or link with key action plans prepared to meet requirements of international conventions	8.6 (4)	MNRET;	Incl. in functions of MNRET	Year 1
	2.2	Address land use issues (i.e. few developed or functioning land use plans) based on integrated management approach (recognising links between land and water management, community participation in sustainable land management); recognise importance of CRMA in integrated land use management plans	8.3 (7)	States; MNRET	Incl. in 1.1 and 1.5	Year 2



Strategy	Action No.	Action	Overall Priority (Rank)	Responsibility	Cost	Timing
2. Cont Strengthen environmental		Mainstream environmental considerations and CRMA (as per national framework) in planning process; incorporate environmental management requirements	8.0 (10)	MNRET; TAP Committee; Energy Office	Incl. in functions of MNRET	Year 3
management framework	2.3	and targets in state plans, sector plans (agriculture, tourism, infrastructure, energy etc) and development strategies	9.0 (2)	In order to facilitate various actions in strategy 3, this action is considered very high priority in the technical assessment and is recommended for implementation in Year 1		
	2.4	Establish a national strategic plan for environmental response linked with updated Disaster Management Plan (identifying CRMA mechanisms)	8.0 (10)	MNRET; NEMO	Incl. in functions of MNRET + NEMO	Year 3
3. Strengthen and simplify national environmental management structure	3.1	Clearly define bureau and division roles and responsibilities within MNRET to ensure jurisdictions do not overlap and duplication ("over-management" of resources) is removed; clarify and formalise functions of OERC within MNRET; Energy Office to be included in MNRET (recognising conservation and climate change aspects of management)	9.0 (2)	MNRET + Consultant	Incl. in 3.6	Year 1 (ref. 3.6)
	3.2	Review and revise the role objectives, functions, governance arrangements, and specific regulatory requirements and procedures of the EQPB to simplify and streamline requirements	8.0 (10)	EQPB + Consultant	Incl. in 3.6	Year 3
			9.0 (2)	This action is considered high priority in the technical assessment and ideally would be undertaken as part of action 3.6, and therefore is recommended for implementation in Year 1		
	recruitment for EQPB Office as identified in NMDP if still required under simplified or streamlined (as above)	Energy Office, EQPB; support additional staff	8.2 (8)	MNRET + Consultant	Incl. in 3.6	Year 2
		9.0 (2)	This action is considered high priority in the technical assessment and ideally would be undertaken as partaction 3.6, and therefore is recommended for implementation in Year 1		lertaken as part of	
		Ensure mineral resources are addressed and covered in new structure (MNRET) 4	5.6 (17)	MNRET + Consultant	Incl. in 3.6	Year 5
	3.4		8.2 (8)	Ideally this action would be undertaken as part of a 3.6, and therefore is recommended for implementation Year 1		
		Office or division of MNRET with similar functions to OERC has mandate to ensure that provisions of international agreements are complied with at sector level and requirements mainstreamed into sector plans	9.5 (1)	MNRET + Consultant	Incl. in 3.6	Year 1



Strategy	Action No.	Action	Overall Priority (Rank)	Responsibility	Cost	Timing	
	3.6	Request TA to review organisation structure, roles and responsibilities of Executive Order originally establishing MRD to address above issues (3.1 – 3.5 and 10.4) for MNRET and to enable 2.1; make recommendations as appropriate pursuant to new organisation; address staffing requirements of MNRET and EQPB.	9.5 (1)	Consultant	\$25,000	Immediately N.B. NEEDS PRIORITY ATTENTION AS MNRET EFFECTIVE FROM JAN 09	
	4.1	Clearly define role of, and support states in, environmental management; states have flexibility to comply with national framework in manner in-keeping within their own context and capacity	8.2 (8)	States; MNRET	No cost	Year 3	
	4.2	Improve state capacity for environmental management - government to fund an environmental specialist and adequate engineering and land survey expertise – as a shared resource - to assist the states in complying with national environmental management framework	8.3 (7)	States; MNRET	Incl. in Economic Action Plan	Year 2	
Fully support state level resource	4.3	Encourage states to work together in respect of trans- boundary resources (such as BWA model)	8.1 (9)	States; community based organisations; NGOs	No cost	Year 3	
management			8.8 (3)	This action is considered high priority in the technical assessment and can be relatively easily facilitated through the SLMP and therefore is recommended for implementation in Year 1			
	assist states to prepare and implement key resource			8.0 (10)	States; MNRET	No cost	Year 5
		8.8 (3)	This action is considered high priority in the technical assessment, it supports a number of outputs from SLI and is recommended for implementation in Year 1				
	4.5	Facilitate better communication between national and state levels through regular formal forum to discuss resource management issues and CRMA	5.3 (18)	States; MNRET; MPIIC	No cost	Year 5	
5. Improve enforcement and	5.1	Retain independent process and agency (EQPB) with mandate for monitoring, compliance and enforcement	8.1 (9)	EQPB	No cost	Retains status quo	
compliance in respect of environmental protection and	5.2	Strengthen enforcement capabilities, improve compliance monitoring and inspection performance; cooperation with State Rangers	7.3 (15)	EQPB; States		Year 5	
resource management	5.3	Support Endangered Species Program in new bureau of MNRET (will allow for resource sharing) to enforce existing and new regulations	7.3 (15)	MNRET	No cost	Year 5	



Strategy	Action No.	Action	Overall Priority (Rank)	Responsibility	Cost	Timing
6. Improve infrastructure and implement maintenance plans to support sound	6.1	Complete and implement energy (incl. indigenous and renewable sources) policy linked with climate change policy; develop and implement a comprehensive energy conservation program for all government facilities and ability to impose sanctions for non-compliance	8.5 (5)	MNRET – Energy Office	No cost	Year 2
environmental management; energy conservation, safe and secure water	6.2	Implement solid waste management strategy; management plans to identify areas at risk from climate change, coastal zones and other sensitive areas as "no go" areas for landfill sites;	8.3 (7)	MPIIC	No cost	Year 2
supplies, adequate sanitation, and	6.3	Work with TAPC to promote waste control and minimization in tourism sector	8.2 (8)	MPIIC; TAP Committee	No cost	Year 2
waste management	6.4	Establish a comprehensive and effective water conservation program; ensure water conservation included as part of mandate of new MPIIC; work with OERC and EQPB on water quality and drought mitigation issues	7.7 (12)	MPIIC; MNRET; EQPB	No cost	Year 4
	7.1	Establish a regular forum for national-state cooperation on resource management, zoning, land use planning and other policies affecting the use of land	5. (18)	States; MNRET; MPIIC	No cost	Year 5
	7.2	Support establishment of Regional Sustainable Development Centre (improve coordination of development strategies and programs)	8.6 (4)	MNRET; WMCES; MPS + donors	\$500,000	Year 1
7. Improve general capacity for environmental management at all levels	7.3	Support a community awareness function so that the community can (i) understand need for resource management, compliance and monitoring; (ii) risks such as climate change (iii) potential value of land and how to realize that land for their benefit; and (iv) understand and address any adverse impact on the environment from economic development and economic uses of land	7.7 (12)	States; NGOs; civil society organisations; MNRET; PICRC; PCC	Costed in Economics Action Plan	Year 4
		Support NEPC and PNRC to reconvene and hold	7.3 (15)	NEPC; PNRC	No cost	Year 5
	7.4	regular meetings	8.0 (10)	This is considered restructures are alread		plement as the
	7.5	Improve coordination, raise awareness and improve community education; increase knowledge and integrate with custom, strengthen community based organisations (such as BWA) & NGOs	8.0 (10)	States; NGOs; civil society organisations; MNRET; PICRC; PCC	Nominal above existing costs	Year 3



Strategy	Action No.	Action	Overall Priority (Rank)	Responsibility	Cost	Timing
	7.6	Develop and implement an environmental training program highlighting cross-cutting issues; organisation (e.g. PCC, PICRC or NGO) to develop in cooperation with gov. agencies curricula for government agencies/staff, and deliver program; in-house staff with skills to deliver monthly training sessions	7.6 (13)	States; NGOs; civil society organisations; MNRET; PICRC; PCC	\$75,000	Year 5
8. Ensure adequate funds are allocated for		Promulgate statute that permits EQPB to charge for	7.3 (15)	MOJ; EQPB; MNRET + Consultant	Incl. in 1.1	Year 1-2
environmental management, compliance and enforcement	water quality testing and monitoring are environmental impact fee (could be lin	water quality testing and monitoring and charge an environmental impact fee (could be linked with performance bond recommended in Economics working paper)	8.8 (3)	This action is consid assessment, it addredirectly impact on the ability to filly implement can be included in an implementation in Ye	esses funding sho e effectiveness of ent mandate unde ction 1.1 it is reco	rtfalls which EQPB and its er EQPA. As this
	EIC D	EIS Regulations to seek reimbursement for inspections	7.8 (11)	MOJ; EQPB	No cost	Year 3
	8.2		8.8 (3)	As per comment for 8.1		
	8.3	Permit fees and reimbursement of expenses to be separated from National Treasury and used solely for activities and operations of EQPB i.e. allow permit application charges to be used for inspections and monitoring	7.5 (14)	MOJ; EQPB; MNRET + Consultant	Incl. in 1.1	Year 4
	8.4	Ensure baseline operational needs of resource management agencies are met; improve existing monitoring capabilities by addressing lack of equipment, appropriately trained personnel, and operational budgets	8.2 (8)	OEK	No cost (budget)	Year 2
9. Improve environmental management monitoring and evaluation	9.1	Improve evaluation, prioritisation and monitoring techniques through establishment of policies and plans formulated with a framework for evaluation of investments that takes into consideration environmental impacts	8.5 (5)	MNRET; EQPB; PICRC; MPIIC	No cost	Year 2
	9.2 Establishment and/or updating of flora and fauna baselines and databases through systematic survey (by which to improve planning and monitor effectiveness of management plans)	8.4 (6)	MNRET; EQPB; PICRC; States	Should be incl. in operating budgets of MNRET; PICRC etc	Year 2	
	9.3	Sector plans to include environmental targets	8.5 (5)	MNRET; EQPB; MPIIC	No cost	Year 2



Strategy	Action No.	Action	Overall Priority (Rank)	Responsibility	Cost	Timing
	9.4	EQPB to develop and implement procedures that include other appropriate government agencies in the EA/EIS review process; identify bureau, office or division within MNRET to be tasked with role of coordinating responses on EIS and permit applications from government agencies	8.4 (6)	EQPB; MNRET	No cost	Year 2
	9.5	Ensure EQPB has resources to undertake follow up and final inspections for permit applications;	8.2 (8)	EQPB; OEK	No cost (budget)	Year 2
	9.6	Energy Office to prepare compliance reports and set realistic targets for conservation for each sector; Energy Office to prepare annual reports; energy conservation issues addressed in annual reviews	7.8 (11)	Energy Office - MNRET	No cost	Year 3
10. Improve collation and	10.1	Coordinate data made available from initiatives and programs; share task between EQPB and PALARIS	8.2 (8)	EQPB; PALARIS	Incl. in SLMP	Year 2
management of environmental data	10.2	Assist EQPB to establish new database for monitoring and compliance audits; expand environmental statistics base in line with SPREP requirements	8.2 (8)	EQPB	\$10,000	Year 2
	10.3	Publicise availability of EQPB data as resource for information provision and planning	7.6 (13)	EQPB	No cost	Year 4

Summary total cost: \$1.185 million



H. Funding

- 107. As shown in Table 3.2, the total cost of the Action Plan, in addition to existing spending, is \$1.185 million.
- 108. The MCSF will cost in the order of \$1.5 2 million, with an estimated operation cost of \$600,000 per year. Funding will likely be sourced through a number of different avenues, including donor grants or loans (ADB, World Bank, GEF, European Union under existing or additional programs). The Action Plan includes a contribution to the establishment of the MCSF of \$500,000.

1. Opportunity for Linkages with CRMA Road Map

- 109. The Government is unlikely to borrow money for sectors or activities that are not revenue generating. Therefore it is important to identify potential funding agencies from which grants could be sought for the higher priority elements of the Action Plan.
- 110. Under the Climate Change Fund (CCF) resources can be accessed as part of a new ADB project, or as an addition to an ongoing project. A number of the activities which could qualify for CCF support include:
 - i. Climate-proofing vulnerable investments (e.g. energy, transport, industry, urban and rural development);
 - ii. Enhancing the climate resilience of key sectors (e.g. agriculture, natural resource management, water resource management), economic development planning, and/or disaster preparedness and response;
 - iii. Responding to special threats facing the Asia and Pacific region especially those in (i) arid, rain-fed agricultural areas; (ii) densely populated coast lowlands and deltas; and, (iii) low-lying islands;
 - iv. Providing opportunity for leveraging and upscaling; and
 - v. Reducing emissions from deforestation and degradation (REDD), and land use changes.
- 111. ADB has prepared a draft Climate Risk Management and Adaptation (CRMA) Road Map for Palau (June 2008) which notes that to achieve the cross-sectoral outcomes of risk reduction and climate resilience, CRMA needs to be mainstreamed into the priority sectors of; (i) integrated water supply; (ii) forestry; (iii) agriculture; (iv) infrastructure (coastal development and tourism); (v) coral reefs, fishery and tourism. The Road Map also notes that disaster risk management priorities are to be blended with climate risk management approaches to maximise resource and agency synergies and avoid unnecessary duplication of risk management activities and investment.
- 112. The CRMA Road Map therefore proposes (i) targeted grant-supported adaptation pilots that build resilience into the water management sector;¹¹ and (ii) concentrating on the

Linked with ADB's Preparing the Babeldaob Water Supply Project (PAL-40122-01)



- priority environmental management and development areas of tourism dependent marine resources conservation, watersheds, tourism infrastructure at risk, and food security (agriculture and fisheries).
- 113. In this respect, the CRMA Road Map recommends that \$1.1 million be sourced from the CCF.
- 114. Table 3.3 identifies the CRMA Road Map's proposed adaptive measures and linkages with the strategies and actions included in the Action Plan, it is possible that some of the activities included in the Action Plan could be funded through implementation of the Road Map.

Table 3.3 - Integration of Action Plan with Proposed CRMA Road Map Adaptation Measures

Road Map Proposed	Road Map		Proposed MTDS Action Plan
Adaptive Measure	Proposed Implementing Agency	Action No.	Action
Risk & vulnerability screening and risk atlas (ecosystem dependent tourism and vulnerable water supply)	MNRET; PVA; BTA; PCOC; BWA; NEMO/FEMA (N.B. need to	1.4	Within, or following, framework established under the SLMP, support states to establish zoning rules and regulations (recognising need for CRMA mechanisms), and building codes (with priority given to states where intensive development is likely in the near future)
	include states)	1.5	Address element of SLMP (zoning regulations, rules and building codes) omitted from current project
		2.2	Address land use issues based on integrated management approach (recognising links between land and water management, community participation in sustainable land management); recognise importance of CRMA in integrated land use management plans
		6.4	Establish a comprehensive and effective water conservation program; ensure water conservation included as part of mandate of new MPIIC; work with OERC and EQPB on water quality and drought mitigation issues
3. Climate-oriented EA/EIS; environment project/environment impact corollary	MNRET; OERC, EQPB; MPIIC; PPLA	1.1	Review, update and strengthen enabling legislation (EQPA and Regulations); address inadequacies and gaps (e.g. agricultural activities not covered by Earth Moving Regulations) include additional regulations (e.g. vegetation clearance); establish minimum environmental standards for resources other than water; and, address previously unforeseen risks including climate change and bio-security
		1.2	Simplify procedures for permit applications and clearly define triggers for EA and EIS
		1.3	Complete and approve existing drafts of laws e.g. climate change, energy conservation, and bio-security
		2.1	Complete national (over-arching) policy and regulatory framework; prepare and/or complete management policies for key sectors such as forestry (incl. mangroves), minerals, water, watershed management, energy; incorporate CRMA into existing policies; and, ensure policies and plans comply or link with key action plans prepared to meet requirements of international conventions
		2.3	Mainstream environmental considerations and CRMA (as per national framework) in planning process; incorporate environmental management requirements and targets in



Road Map Proposed	Road Map		Proposed MTDS Action Plan
Adaptive Measure	Proposed Implementing Agency	Action No.	Action
			state plans, sector plans (agriculture, tourism, infrastructure, energy etc) and development strategies
		2.4	Establish a national strategic plan for environmental response linked with updated Disaster Management Plan (identifying CRMA mechanisms)
5. Cost-benefit analysis of business as usual versus adaptive measures in high risk sectors (cross-cutting CRMA mainstreaming and public education and outreach	sus PAN; MNRET high ting		Support a community awareness function so that the community can (i) understand need for resource management, compliance and monitoring; (ii) risks such as climate change (iii) potential value of land and how to realize that land for their benefit; and (iv) understand and address any adverse impact on the environment from economic development and economic uses of land
		7.5	Improve coordination, raise awareness and improve community education; increase knowledge and integrate with custom, strengthen community based organisations (such as BWA) & NGOs
		7.6	Develop and implement an environmental training program highlighting cross-cutting issues; organisation (e.g. PCC, PICRC or NGO) to develop in cooperation with gov. agencies curricula for government agencies/staff, and deliver program; in-house staff with skills to deliver monthly training sessions
6. Blending of traditional and contemporary adaptive knowledge for state and village-led policy formulation and livelihood pilots	OERC; PAN; MNRET; (N.B. need to include states and community based organisations)	7.3, 7.5 & 7.6	As above
7. Infrastructure risk audit and climate impact resiliency	MPIIC (BPW and CIP); OERC; TAP Committee	6.1	Complete and implement energy (incl. indigenous and renewable sources) policy linked with climate change policy; develop and implement a comprehensive energy conservation program for all government facilities and ability to impose sanctions for non-compliance
		6.2	Implement solid waste management strategy; management plans to identify areas at risk from climate change, coastal zones and other sensitive areas as "no go" areas for landfill sites
		6.4	Establish a comprehensive and effective water conservation program; ensure water conservation included as part of mandate of new MPIIC; work with OERC and EQPB on water quality and drought mitigation issues



V. Action Plan Performance Indicators

This section provides a summary of goals and suggested performance indicators for the environmental management sector within the overall MTDS framework. As noted in the MTDS, because there are many factors that can impact on performance it is difficult to specify quantitative performance indicators that are both meaningful and readily available. Quantitative performance indicators will be further developed, wherever possible, by the Co-ordination Committee for the MTDS as actions are agreed to.

Goal. To protect, conserve, and manage the environment and natural resources of Palau for present and future generations of Palauans while providing for sustainable social, cultural, and economic development.

Key Performance Indicators:

- Progress on each of the Actions as specified in the Action Plan Matrix;
- Development of strategies and sectoral plans with natural resources and environmental management policies and requirements (including specification of environmental targets) effectively mainstreamed;
- Development strategies and sectoral plans with CRMA mainstreamed;
- Establishment of minimum environmental standards and meeting of key targets set;
- Establishment and/or updating of flora and fauna baselines and databases through systematic survey (by which to improve planning and monitor effectiveness of management plans);
- Achievement of PAN and Micronesian Challenge targets;
- Increase in budget allocations to, and/or operating expenses for, EQPB;
- Increase in staff with relevant and required expertise and adequate provisioning of equipment in EQPB;
- Documentable increase in EQPB successfully receiving reimbursement for operations including permit application inspections, compliance, monitoring and enforcement;
- Increase in provision of technical expertise and support from bureau/division level to states in environmental management, engineering, and survey;
- Effectiveness of shared expertise and human resources (environmental, engineering and survey) utilised by states;
- Increase in successful application of enforcement procedures (violations, fines, corrective actions);
- Number of coordination meetings held between national and state level agencies in respect of environmental management and land-use planning;
- Number of meetings and collaborative actions between states with trans-boundary natural resources with actionable (and therefore monitorable) items;
- Number of meetings of NEPC and PNRC with actionable (and therefore monitorable) items;
- Number of meetings with regional partners with actionable (and therefore monitorable) items;
- Progress made on establishment of the MCSF.



ANNEX 1 – DISCUSSION OF PALAU VACATION HOTEL APPLICATION & DEVELOPMENT, MALAKAL, KOROR

- 1. An application for an earth moving permit was submitted to EQPB for removal of 488m² of an approximately 2,500 m² limestone rock island (Malakal, Koror) associated with the development of a hotel. The development would include demolition of a number of buildings already on the site. An EA was submitted with the application which provided a more than adequate assessment of impacts and included a number of drawings showing the rock to be removed as a small area adjacent to the south-eastern (landward) area of the existing commercial plot.
- 2. The EA concluded, based on the information supplied by the applicant, that provided the development was within the footprint of the existing buildings, and complied with a number of silt and sedimentation control measures, that the development and removal of the rock would amount to a non-significant impact. The earth permit was subsequently granted by EQPB with a number of conditions.
- 3. A final wastewater treatment plan is yet to be submitted to EQPB for review and approval. Wastewater treatment is currently being considered by Bureau of Public Works in association with the applicant as it will require an additional pump station.
- 4. During construction, the applicant proceeded to remove rock beyond that allowed in the permit (an additional area of approximately 390 m² was removed). Koror state issued a \$100,000 fine (which was subsequently reduced to \$10,000) and stopped work during the time required to amend the lease to cover the additional land, and EQPB issued a stop work notice (10 days), retroactively agreed to the additional rock removal, and is still considering what fine should be imposed. EQPB is further investigating to ensure that the applicant has not encroached even further onto the rock island.
- 5. It has also become clear that an agreement between Koror State, EQPB and the applicant to remove and dump spoil at the landfill is being ignored, and spoil is being dumped, in excess of the volume allowed under the permit, across the road. This is likely to result in a further notice of violation.
- 6. In discussions between EQPB and Koror State to determine the extent of the problems and how they should be rectified, it became evident that Koror State had waived three provisions of its land use plan set back provisions, density provisions, and car parking requirements in order to permit the development and was not enforcing relevant provisions of the Koror State Public Law covering protection of mangroves (and other submerged vegetation) (K6-110-00) or waste disposal (K2-34-89). This information, which could have given an insight into the overall scheme being proposed by the applicant, was not provided to EQPB at the time of the earth moving permit application.
- 7. The EQPB is not permitted to enforce state laws, and only can include a condition to a permit requiring compliance with relevant state laws.
- 8. The applicant has since indicated that it proposes to submit a permit application for filling adjacent to the rock island to provide for a walkway around the island and a boat marina on the western side of the rock island. It is clear that the applicant is pursuing a "creeping development", an approach which is inconsistent with the purpose of both the EQPA and EIS Regulations.
- 9. The foregoing example demonstrates the necessity for (i) national regulations covering assessment of the impacts of an <u>entire development</u> rather than assessment of its components (assessed in response to individual permit applications) and providing EQPB and states the discretion to request additional information if there is any doubt as to the intended extent of a



proposal; (ii) improved cooperation between states and EQPB in respect of developments during both the permit application stage and construction stage (compliance monitoring and enforcement); (iii) national regulations for vegetation clearance (to provide ability for EQPB to intercede in cases where states are not enforcing their own regulations (if indeed there are state regulations covering such); and, (iv) EQPB to consider permit applications <u>only when</u> all of the information, and relevant state approvals sought have been granted (or otherwise), is made available.



ANNEX 2 – OUTLINE TERMS OF REFERENCE FOR TECHNICAL ASSISTANCE FOR REVIEW AND ASSESSMENT OF ROLES, FUNCTIONS AND STAFFING OF MNRET AND EQPB

A. Purpose of Technical Assistance

Subsequent to a law passed in May 2008, the Ministry of Resources and Development (MRD) will be split into Ministry of Natural Resources, Environment and Tourism (MNRET) and Ministry of Public Infrastructure, Investment and Commerce (MPIIC) effective from January 2009. A number of reports completed in recent years have pointed to problems in respect of national and state level environmental management, with the key areas that need to be addressed being identified as:

- Lack of singular institutional arrangements at bureau and division level for environmental protection and resource management because of over-lapping mandates and jurisdictions;
- Conflicting and confused mandates in terms of resource management; and
- Lack of capacity (staff, skills, and resources).

The technical assistance (TA) will; (i) review organisation structure, roles and responsibilities of Executive Order originally establishing MRD as well as the existing staff and resource requirements of Environmental Quality Protection Board (EQPB); (ii) make recommendations as appropriate pursuant to the new organisation; and, (iii) address staffing requirements of MNRET and EQPB.

B. Terms of Reference

- Review recent reports and obtain an understanding of the existing problems in respect of the resource management and environmental protection roles of national government;
- Undertake consultation with bureaus and divisions within MNRET, Office of Environmental Response and Coordination (OERC), and officers of EQPB;
- Review the Executive Order establishing MRD;
- Following from the above, undertake a needs assessment of staff requirements of MNRET and EQPB (number, skills, etc);
- Clearly define bureau and division roles and responsibilities within MNRET to ensure that jurisdictions do not overlap and duplication ("over-management" of resources) is removed; clarify and formalise the functions of OERC within MNRET; Energy Office to be included in MNRET (recognising conservation and climate change aspects of management);
- Comment on the roles, objectives, functions, governance arrangements, and specific regulatory requirements and procedures of the EQPB to simplify and streamline requirements (to assist in preparation of TOR for the environmental legislation and regulatory framework review);
- Identify appropriate staffing for MNRET (including Energy Office), and EQPB;
- Ensure mineral resources are addressed and covered in new structure (MNRET);
 and
- Address the need for an office or division of MNRET with similar functions to OERC, which would have the mandate to ensure that provisions of international agreements are complied with at sector level and requirements are mainstreamed into sector strategies and plans.



ANNEX 3 – ENVIRONMENTAL MANAGEMENT STRATEGIES, ACTIONS AND PRIORITIES ESTABLIHSED BY STAKEHOLDERS

Goal: To protect, conserve, and manage the environment and natural resources of Palau for present and future generations of Palauans while providing for sustainable social, cultural, and economic development.

Strategy	Action No.	Action	S (25%)	I (50%)	D (25%)	Overall Priority (Rank)	Comment
Update and improve legislation	1.1	Review, update and strengthen enabling legislation (EQPA and Regulations); address inadequacies and gaps (e.g. agricultural activities not covered by Earth Moving Regulations) include additional regulations (e.g. vegetation clearance); establish minimum environmental standards for resources other than water; and, address previously unforeseen risks including climate change and bio-security	8.3	8.8	7.7	8.4 (7)	Supports Themes 1, 2, 3, 5, 6, 7 & 8 of NBSAP; Would most likely require grant or donor funding; Unsure of support under new administration
	1.2	Simplify procedures for permit applications and clearly define triggers for EA and EIS	8.3	8.8	7.7	8.4 (7)	Can be addressed as part of 1.1
	1.3	Complete and approve existing drafts of laws e.g. climate change, energy conservation, and bio-security	7.2	8.5	6.5	7.7 (12)	Supports Themes 1, 2, 3, 5, 6, 7 & 8 of NBSAP
	1.4	Within, or following, framework established under the SLMP, support states to establish zoning rules and regulations (recognising need for CRMA mechanisms), and building codes (with priority given to states where intensive development is likely in the near future)	9.0	10.0	9.0	9.5 (1)	Also incl. in Economic Policy & Institutions Action Plan; Partially being covered under SLMP
	1.5	Address element of SLMP (zoning regulations, rules and building codes) omitted from current project through engagement of planner to assist states	9.0	10.0	9.0	9.5 (1)	Requires support through TA for land use/environmental planner
	1.6	Revise and expand Endangered Species Act to cover additional species (CITES issues)	6.7	6.0	6.3	6.3 (16)	Supports Themes 1 & 2 of NBSAP
2. Strengthen environmental management framework	2.1	Complete national (over-arching) policy and regulatory framework; prepare and/or complete management policies for key sectors such as forestry (incl. mangroves), minerals, water, watershed management, energy; incorporate CRMA into existing policies; and, ensure policies and plans comply or link with key action plans prepared to meet requirements of international conventions	8.3	9.0	8.0	8.6 (4)	Supports Themes 1, 2, 3, 5, 6, 7 & 8 of NBSAP; Unsure of support under new administration; Support & doability dependent on commitment of staff to process and funding



Strategy	Action No.	Action	S (25%)	I (50%)	D (25%)	Overall Priority (Rank)	Comment
	2.2	Address land use issues (i.e. few developed or functioning land use plans) based on integrated management approach (recognising links between land and water management, community participation in sustainable land management); recognise importance of CRMA in integrated land use management plans	7.8	8.7	8.2	8.3 (7)	Supports Theme 1 of NBSAP; Link with UN/GEF SLMP and National Action Plan to Combat Desertification and Land Degradation; Partially being covered under SLMP
	2.3	Mainstream environmental considerations and CRMA (as per national framework) in planning process; incorporate environmental management requirements and targets in state plans, sector plans (agriculture, tourism, infrastructure, energy etc) and development strategies	8.0	8.3	7.5	8.0 (10)	Supports Theme 8 of NBSAP; Support & doability dependent on commitment of staff to process and funding
	2.4	Establish a national strategic plan for environmental response linked with updated Disaster Management Plan (identifying CRMA mechanisms)	7.7	7.8	8.5	8.0 (10)	Supports Theme 3 of NBSAP; Doable as can be supported by ADB regional climate change initiatives
3. Strengthen and simplify national environmental management structure	3.1	Clearly define bureau and division roles and responsibilities within MNRET to ensure jurisdictions do not overlap and duplication ("over-management" of resources) is removed; clarify and formalise functions of OERC within MNRET; Energy Office to be included in MNRET (recognising conservation and climate change aspects of management)	8.8	9.3	8.7	9.0 (2)	Should be adequately covered in detailed description of roles, functions and responsibilities of MNRET; Unsure of support under new administration;
	3.2	Review and revise the role objectives, functions, governance arrangements, and specific regulatory requirements and procedures of the EQPB to simplify and streamline requirements	8.8	9.3	8.7	9.0 (2)	Also incl. in Economic Policy & Institutions Action Plan; EQPB staff recognize existing legislation is very demanding given capacity constraints
	3.3	Ensure appropriate staffing for bureaus, divisions, Energy Office, EQPB; support additional staff recruitment for EQPB Office as identified in NMDP if still required under simplified or streamlined (as above) structure	7.7	8.3	7.2	8.2 (8)	Doability linked with funding for additional staff and resources required
	3.4	Ensure mineral resources are addressed and covered in new structure (MNRET)	5.3	5.7	5.7	5.6 (17)	Should be adequately covered in detailed description of roles, functions and responsibilities of MNRET



Strategy	Action No.	Action	S (25%)	I (50%)	D (25%)	Overall Priority (Rank)	Comment
	3.5	Office or division of MNRET with similar functions to OERC has mandate to ensure that provisions of international agreements are complied with at sector level and requirements are mainstreamed into sector strategies and plans	9.0	10.0	9.0	9.5 (1)	
	3.6	Request TA to review organisation structure, roles and responsibilities of Executive Order originally establishing MRD to address above issues (3.1 – 3.5 and 10.4) for MNRET and to enable 2.1; make recommendations as appropriate pursuant to new organisation; address staffing requirements of MNRET and EQPB	9.0	10.0	9.0	9.5 (1)	Very high priority as new organisation effective from January 2009. Issues need to be resolved; Requires small grant/TA
4. Fully support state level resource management	4.1	Clearly define role of, and support states in, environmental management; states have flexibility to comply with national framework in manner in-keeping within their own context and capacity	7.8	8.5	8.0	8.2 (8)	Doability linked with support available to, and improved capacity of, states
	4.2	Improve state capacity for environmental management - government to fund an environmental specialist and adequate engineering and land survey expertise – as a shared resource - to assist the states in complying with national environmental management framework	8.0	8.5	8.2	8.3 (7)	Also incl. in Economic Policy & Institutions Action Plan; The main issue is funding (have had similar before)
	4.3	Encourage states to work together in respect of trans- boundary resources (such as BWA model)	7.8	8.2	8.3	8.1 (9)	BWA excellent model for showing willingness for cooperation
	4.4	Bureau and division level of MNRET to support and assist states to prepare and implement key resource management plans such as watershed plans, protected area management plans, land use plans	7.3	8.5	7.5	8.0 (10)	Disparate capacity for resource management across states, some would require more assistance than others
	4.5	Facilitate better communication between national and state levels through regular formal forum to discuss resource management issues and CRMA	4.8	5.5	5.5	5.3 (18)	
5. Improve enforcement and	5.1	Retain independent process and agency (EQPB) with mandate for monitoring, compliance and enforcement	7.5	8.3	8.3	8.1 (9)	Maintaining status quo
compliance in respect of environmental protection and	5.2	Strengthen enforcement capabilities and improve compliance monitoring; improve performance in respect of inspections; cooperation with State Rangers	7.2	7.8	6.5	7.3 (15)	Doability linked with funding for additional staff and resources required
resource management	5.3	Support Endangered Species Program in new bureau of MNRET (will allow for resource sharing) to enforce existing and new regulations	7.7	7.0	7.5	7.3 (15)	Supports Theme 2 of NBSAP; Also incl. in Fisheries Action Plan



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6. Improve infrastructure and implement maintenance plans to support sound environmental management; energy	6.1	Complete and implement energy (incl. indigenous and renewable sources) policy linked with climate change policy; develop and implement a comprehensive energy conservation program for all government facilities and ability to impose sanctions for non-compliance	8.0	8.8	8.5	8.5 (5)	Supports Themes 5 & 6 of NBSAP; Energy Office developing strategy (with funding from SOPAC), needs to integrate with sustainable development, disaster management and climate change adaptation initiatives
conservation, safe and secure water supplies, adequate sanitation, and waste	6.2	Implement solid waste management strategy; management plans to identify areas at risk from climate change, coastal zones and other sensitive areas as "no go" areas for landfill sites;	8.0	8.7	8.0	8.3 (7)	Supports Themes 1& 6 of NBSAP; Draft Solid Waste Management Plan already prepared under JICA funding
management	6.3	Work with TAPC to promote waste control and minimization in tourism sector	7.8	8.8	7.2	8.2 (8)	TAPC highly organized and motivated
	6.4	Establish a comprehensive and effective water conservation program; ensure water conservation included as part of mandate of new MPIIC; work with OERC and EQPB on water quality and drought mitigation issues	7.2	8.3	7.0	7.7 (12)	Supports Theme 5 of NBSAP; Doability linked with funding
7. Improve general capacity for environmental management at	7.1	Establish a regular forum for national-state cooperation on resource management, zoning, land use planning and other policies affecting the use of land	4.8	5.5	5.5	5. (18)	As per rankings in Economic Policy & Institutions Action Plan
all levels	7.2	Support establishment of Regional Sustainable Development Centre (improve coordination of development strategies and programs)	7.5	9.0	9.0	8.6 (4)	Will require funding from several sources; Promotes regional cooperation
	7.3	Support a community awareness function so that the community can (i) understand need for resource management, compliance and monitoring; (ii) risks such as climate change (iii) potential value of land and how to realize that land for their benefit; and (iv) understand and address any adverse impact on the environment from economic development and economic uses of land	7.7	7.7	7.7	7.7 (12)	Also incl. in Economic Policy & Institutions Action Plan
	7.4	Support NEPC and PNRC to reconvene and hold regular meetings	7.2	7.3	7.2	7.3 (15)	



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	7.5	Improve coordination, raise awareness and improve community education; increase knowledge and integrate with custom, strengthen community based organisations (such as BWA) & NGOs	7.8	8.2	7.8	8.0 (10)	
	7.6	Develop and implement an environmental training program highlighting cross-cutting issues; organisation (e.g. PCC, PICRC or NGO) to develop in cooperation with gov. agencies curricula for government agencies/staff, and deliver program; in-house staff with skills to deliver monthly training sessions	7.2	7.8	7.5	7.6 (13)	
8. Ensure adequate funds are allocated for environmental management, compliance and enforcement	8.1	Promulgate statute that permits EQPB to charge for water quality testing and monitoring and charge an environmental impact fee (could be linked with performance bond recommended in Economics working paper)	7.0	7.7	6.8	7.3 (15)	Public expenditure on environmental management is heavily dependent on foreign aid; OERC relies entirely on external sources of funding; expenditure (incl. national government contribution) on EQPB budget has declined; sustaining expenditure crucial issue in the event of future reduction in foreign aid
	8.2	EQPB supported to exercise duties under EQPA and EIS Regulations to seek reimbursement for inspections and miscellaneous expenses related to permit applications and EIS review	7.2	8.3	7.2	7.8 (11)	
	8.3	Permit fees and reimbursement of expenses to be separated from National Treasury and used solely for activities and operations of EQPB i.e. allow permit application charges to be used for inspections and monitoring	6.8	8.0	7.2	7.5 (14)	
	8.4	Ensure baseline operational needs of resource management agencies are met; improve existing monitoring capabilities by addressing lack of equipment, appropriately trained personnel, and operational budgets	7.7	8.7	7.7	8.2 (8)	
9. Improve environmental management monitoring and evaluation	9.1	Improve evaluation, prioritisation and monitoring techniques through establishment of policies and plans formulated with a framework for evaluation of investments that takes into consideration environmental impacts	7.8	9.0	8.0	8.5 (5)	
	9.2	Establishment and/or updating of flora and fauna baselines and databases through systematic survey (by which to improve planning and monitor effectiveness of management plans)	7.8	9.0	7.8	8.4 (6)	Doability linked with funding for additional staff and resources required
	9.3	Sector plans include environmental targets	8.2	8.8	8.2	8.5 (5)	



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	9.4	EQPB to develop and implement procedures that include other appropriate government agencies in the EA/EIS review process; identify bureau, office or division within MNRET to be tasked with role of coordinating responses on EIS and permit applications from government agencies	7.7	9.0	8.0	8.4 (6)	
	9.5	Ensure EQPB has resources to undertake follow up and final inspections for permit applications	7.7	8.7	7.7	8.2 (8)	Doability linked with funding
	9.6	Energy Office to prepare compliance reports and set realistic targets for conservation for each sector	7.8	7.8	7.5	7.8 (11)	Doability linked with funding for additional staff and resources required
	9.7	Energy Office to prepare annual reports; energy conservation issues to be addressed in annual performance reviews	5.0	5.3	5.0	5.2 (18)	
10. Improve collation and management of	10.1	Coordinate data made available from initiatives and programs; share task between EQPB and PALARIS	7.5	8.7	8.0	8.2 (8)	PALARIS required to consolidate data into library under SLMP
environmental data	10.2	Assist EQPB to establish new database for monitoring and compliance audits; expand environmental statistics base in line with SPREP requirements	7.8	8.3	8.2	8.2 (8)	Doable with assistance from PALARIS
	10.3	Publicise availability of EQPB data as resource for information provision and planning	7.8	7.3	8.0	7.6 (13)	Could charge for access to, or provision of, information/data as revenue generating activity



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