



**SOPAC**



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***EU Integrated Water Resources Management National Planning Programme***

**Report of the Micronesia Sub-Regional Planning Workshop for  
Implementation of the EU IWRM National Planning Programme**



***Pohnpei Island, Federated States of Micronesia  
8<sup>th</sup> – 12<sup>th</sup> November 2010***



SOPAC



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SOPAC/EU/IWRM

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Cover Photo: Sokehs Rock and Kolonia Harbour, Pohnpei Island, Federated States of Micronesia  
by Mr. Chris Paterson, 2010

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## REPORT OF THE MEETING

### 1. OPENING OF THE MEETING

#### 1.1 Welcome Address on behalf of SOPAC

1.1.1 Mr. Marc Wilson, the Regional Project Manager of the Global Environment Facility (GEF) funded project entitled "*Implementing Sustainable Water Resource and Wastewater Management Project in Pacific Island Countries*" (hereafter referred to as the "*GEF Pacific IWRM Project*") began proceedings at 08.30 on 9<sup>th</sup> November 2010. There followed the presentation of traditional Pohnpeian flower garlands or "*mwaramwars*" to attendees. Mr. Wilson proceeded to invite Mr. Jorelik Tibon, Deputy Chief Secretary of the Government of the Republic of the Marshall Islands to deliver an opening prayer on behalf of participants.

1.1.2 Following conclusion of the prayer delivered by Mr. Jorelik, Mr. Wilson noted that the meeting was a Micronesian sub-regional planning workshop for implementation of the European Union (EU) funded project entitled "*Integrated Water Resources Management National Planning Programme*" (hereafter referred to as the "*EU National IWRM Planning Programme*") being executed by the Pacific Islands Applied Geoscience Commission (SOPAC). He then outlined the purpose and anticipated outputs of the meeting.

1.1.3 Mr. Wilson listed the specific anticipated outputs of the meeting as follows: preliminary national reviews of information on water resources and their management; compilations of national budgets and development policies and plans; draft national inventories of existing policies and laws for water and sanitation; costed work plans for the conduct of National Water Summits on World Water Day 2011, including preparatory and follow-up actions; Terms of Reference and work plans for the recruitment of national water policy officers and other resource persons as required; and identification of specific inputs to, and anticipated outputs from, National Water Summits planned for 22 March 2011.

1.1.4 Mr. Wilson expressed his view that the meeting would be an excellent opportunity for the participating Micronesian countries, namely the Republic of Palau (Palau), the Federated States of Micronesia (FSM), and the Republic of the Marshall Islands (RMI) to significantly advance their efforts to improve governance and regulatory support for water resource and wastewater management in their respective countries. He noted the high level participation of government officials from each country and thanked all participants for their efforts in compiling information and data for consideration during the meeting. He also expressed his thanks to the Integrated Water Resource Management (IWRM) Focal Point for FSM, Mr. Leerenson Airens for taking time from his hectic schedule as Manager of Water Works at the Pohnpei Utilities Corporation (PUC) to make all local arrangements for the meeting.

#### 1.2 Welcome Address by a Traditional Leader from Pohnpei Island

1.2.1 Mr. Wilson invited Mr. Peterico Hairens to address the meeting. Mr. Hairens welcomed participants to Pohnpei Island, FSM and extended a warm Pohnpeian "*Kaselehlie*" to all. Mr. Hairens expressed his sincere appreciation and gratitude to the meeting organisers for providing him with the opportunity to welcome his fellow Micronesians to FSM on behalf of Pohnpei's traditional leaders.

1.2.2 Mr. Hairens highlighted the important roles and duties of Pohnpei's traditional leaders in ensuring secure access to safe drinking water and sanitation in order to sustain their communities as well as the island's unique biodiversity. He explained that whilst traditional leaders co-manage water and sources of water with their respective local, state, and national governments, FSM lacked a comprehensive water policy. He expressed his hope that the meeting would act as an important starting point in putting in place policies and arrangements for management that would assist in improving the quality of life for all Micronesians now and into the future.

1.2.3 Mr. Hairens concluded by wishing the meeting every success and the participants a safe and enjoyable stay on the island. He informed the meeting that a traditional "*sakau*" ceremony had been organised in their honour and would be conducted that evening as a traditional welcome to Pohnpei Island. He invited all participants to attend that event.

### **1.3 Official Opening by a Representative of the National Government of the Federated States of Micronesia**

1.3.1 Mr. Wilson invited Mr. Marion Henry, Secretary of FSM's Department of Resources and Development and FSM's National Representative to SOPAC to address the meeting. Mr. Henry began his official opening by extending a warm welcome to participants on behalf of the people and Government of the FSM. Mr. Henry reminded the meeting that the EU National IWRM Planning Programme had been operating for several years and that he was pleased FSM could host this important meeting for the Micronesian sub-region. He expressed his hope that the meeting would lead to some tangible progress towards the development of national water policies and strengthened national coordination mechanisms for water and sanitation throughout Micronesia.

1.3.2 Mr. Henry informed the meeting that FSM faces serious challenges in ensuring sustainable water resource and wastewater management in each of its four States and outer atoll islands. He highlighted the importance of making sure island communities have secure supplies of safe and clean water in terms of meeting desired community health standards and the development of the food production and tourism sectors. He noted also that freshwater plays a vital role in coastal ecosystems from "*ridge to reef*". He expressed his view that the maintenance of water quality standards and environmental flows should be priority management actions for the small islands of Micronesia given that most communities are highly dependent on lagoon and nearshore coral reef resources.

1.3.3 In declaring the meeting officially open, Mr. Henry urged all participants to take the meeting as a serious collective effort by Micronesian countries to address the important challenge of ensuring secure access to safe and clean drinking water for Micronesia's small island communities. He wished participants a safe and enjoyable stay on Pohnpei and urged them to contact him or Mrs. Cindy Ehmes of FSM's Office of Environment and Emergency Management should they require any assistance or advice.

### **1.4 Group Photograph**

1.4.1 Mr. Wilson suggested and the meeting agreed that participants should assemble for a group photograph. It was agreed that the group photograph would be posted on the Pacific IWRM website.

## **2. ORGANISATION OF THE MEETING**

### **2.1 Introduction of Participants**

2.1.1 Mr. Wilson noted that several participants had not previously met one another and invited individuals to introduce themselves to the meeting. There followed a *tour de table* during which participants introduced themselves and their respective roles in water resource management. The final list of participants is included in Annex 1 of this report.

### **2.2 Election of Officers (Chairperson; Vice-Chairperson; and Rapporteur)**

2.2.1 Mr. Wilson informed the meeting that, as was standard in other Pacific IWRM meetings, it would be preferable that the meeting be chaired and managed by Officers from the participating countries. He invited the meeting to nominate individuals as Chairperson, Vice-Chairperson and Rapporteur.

2.2.2 It was agreed unanimously that Mrs. Ehmes and Mr. Joseph Aitaro, Acting Director of the Land and Water Division of Palau's Ministry of Natural Resources, Environment and Tourism (MNRET) would serve the meeting as Chairperson and Vice-Chairperson, respectively. It was further agreed that Mr. Tiy Chung, SOPAC Communications Adviser would take notes of each session which would be consolidated into a final report of the meeting by Mr. Chris Paterson, GEF Pacific IWRM Project Adviser.

### **2.3 Documentation Available to the Meeting**

2.3.1 The Chairperson, Mrs. Ehmes proceeded to invite Mr. Paterson to introduce the documentation available to the meeting. Mr. Paterson reviewed the discussion and information

documents listed in document SOPAC/EU/IWRM/Micronesia.1/Inf.2 and noted that these were available to all participants in hard copy format in their meeting folders. He noted further that electronic versions of these had been circulated to participants in advance of the meeting for their information. He briefly reviewed the contents of the discussion documents, highlighting the key issues which the meeting may wish to consider and discuss. Participants were invited to table any additional documents and the full list of documents available to the meeting is contained in Annex 2 of this report.

## **2.4 Programme of Work and Arrangements for the Conduct of the Meeting**

2.4.1 The Chairperson Mrs. Ehmes invited Mr. Paterson to brief participants on the administrative arrangements for the conduct of the meeting. Mr. Paterson outlined the proposed organisation of work as outlined in information document SOPAC/EU/IWRM/Micronesia.1/Inf.3 and dealt with a number of housekeeping items, including an overview of the social events planned for evenings. He thanked the FSM IWRM team for their efforts in leading the group on a tour of the GEF funded National IWRM Demonstration Project in the Nett Watershed the previous day.

2.4.2 Mr. Paterson proceeded to inform the meeting that a team of audio-visual specialists from Roll'em Productions in Palau were present at the meeting and would record video highlights of the event. He noted that this footage would possibly be used at a later date as part of a video documentary on water resource management initiatives in Micronesia. He explained that the Roll'em Production team had also been tasked with conducting video interviews with participants on water resource management issues in their respective countries and the Micronesian sub-region as a whole. He expressed his hope that participants would embrace these interviews as an opportunity to share their viewpoints and knowledge rather than as a burden.

2.4.3 Mr. Paterson noted that the Pacific IWRM Programme had developed a good working relationship with Roll'em Productions over recent months and that, to date, they had produced video documentaries on the national IWRM demonstration projects in Palau and FSM. He informed the meeting that Roll'em Productions had also produced a short film on water and climate issues in Palau which would be presented during the upcoming Conference of Parties of the United Nations Framework Convention on Climate Change (UNFCCC) meeting in Cancun, Mexico. He noted further that the Roll'em team would travel to RMI immediately after the current meeting to film a video documentary on the GEF supported Laura water lens national IWRM demonstration project.

## **3. ADOPTION OF THE MEETING AGENDA**

3.1 The Chairperson, Mrs. Ehmes noted that a Provisional Agenda had been developed in consultation with each country's IWRM team and was available to participants as document SOPAC/EU/IWRM/Micronesia.1/1. Mrs. Ehmes proceeded to review the Provisional Annotated Agenda, document SOPAC/EU/IWRM/Micronesia.1/2, and invited the participants to propose any amendments or additional items for consideration, prior to the adoption of the agenda.

3.2 There being no proposals or amendments the Provisional Agenda was adopted by the meeting and is presented in Annex 3 of this report.

## **4. STATUS OF THE REGIONAL PACIFIC IWRM INITIATIVE**

### **4.1 Status of the EU IWRM National Planning Programme and Linkages with the GEF Project**

4.1.1 The Chairperson, Mrs. Ehmes invited Mr. Wilson to provide the meeting with an overview of the Pacific IWRM Programme being implemented through the EU IWRM National Planning Programme and the GEF Pacific IWRM Project. Mr. Wilson proceeded to deliver a PowerPoint Presentation entitled the "*Pacific IWRM Programme*". This presentation can be accessed online at <http://www.pacific-iwrm.org>.

4.1.2 Mr. Wilson began by noting that there are currently three regional strategies relating to water and sanitation in the Pacific Islands, namely: the Pacific Wastewater Policy Statement and associated Pacific Wastewater Framework for Action (2001); the Pacific Regional Action Plan (RAP) on

Sustainable Water Management (2002); and the Drinking Water Quality and Health Framework for Action (2005).

4.1.3 Mr. Wilson explained that the Pacific Small Island States (SIDS) developed the Pacific RAP in 2002 for the World Summit on Sustainable Development. He noted that the Pacific RAP specifically identifies “*Integrated Water Resources Management*” (IWRM) as a solution to managing and protecting water resources, improving governance arrangements, and improving water supply and sanitation provision. He highlighted that this Pacific RAP had been endorsed by the Pacific Heads of State in 2003.

4.1.4 Mr. Wilson reminded participants that the intergovernmental endorsement of the Pacific RAP had coincided with the timing of the Third World Water Forum (WWF) convened in Kyoto, Japan in March 2003. He noted that at that time, the SIDS statement to the World Water Forum identified three critical challenges to achieving sustainable water management in SIDS, including: fragile and limited water resources highly vulnerable to climatic variability; water supply and sanitation provision restricted by human and financial resources; and complex water governance arrangements.

4.1.5 Mr. Wilson noted that the Pacific IWRM Programme had been developed through SOPAC with the support of the EU and the GEF to assist with the implementation of the Pacific RAP on Sustainable Water Management. Mr. Wilson expressed his view that Pacific Islanders generally prefer to see action before policy, and noted that the national demonstration projects of the GEF Pacific IWRM Project provided this focus. He proceeded to provide participants with an overview of IWRM, e.g., what do we mean by integration and why do we want it?

4.1.6 He explained that the IWRM is often defined in International literature as “*coordinated and participatory decision-making, planning and management of water resources across scales and sectors*”. He explained further that this same literature often notes that the aim of IWRM is to *inter alia*: set common goals; avoid duplication and conflict; improve coordination; and to ensure cost-effectiveness in decision-making, planning, governance and management of water resources.

4.1.7 Mr. Wilson noted that the integration in IWRM is often defined on three scales, i.e. vertical, horizontal, and spatial. Vertical integration refers to the involvement of different levels of governance in water resource management. Horizontal integration refers to the participation of different sectors (e.g. energy, agriculture, finance, industry, tourism, environment, fisheries) in planning and decision-making. Whereas spatial integration involves management focusing on a whole of geobiophysical system level (e.g. whole of watershed, or in the case of atoll environments, groundwater and rainwater harvesting systems).

4.1.8 Mr. Wilson expressed his view that whilst all of the above is relevant in Pacific Island contexts, there is a need to better define what IWRM means for island communities and for this to be reflected in water policy and planning. He suggested that given the importance of lagoon and fringing reef resources to most Pacific Islands, it was typically essential that water resource management focus not only on water sources and supply, but take a broader system level approach including receiving coastal waters, i.e., management from “*Ridge to Reef*”. He suggested also that, given the small size of many islands, management must often take a national approach to capacity building, awareness, and governance but should also foster a fully participative approach to planning and decision-making, i.e., participation from “*Community to Congress*”.

4.1.9 Mr. Wilson proceeded to describe the approach and objectives of the Pacific IWRM Programme in developing “*Ridge to Reef*” and “*Community to Congress*” based water resource management. He reviewed the budgets, staffing, and expenditures of both projects to date. He explained that the GEF Pacific IWRM Project was coordinating a network of country-driven and designed demonstration projects aimed at achieving significant environmental and water resource stress reduction benefits. He explained further that the EU National IWRM Planning Programme was focusing on developing the enabling environment for improved water resource management via policy development and legal reforms, strengthened national coordination mechanisms, and capacity development.

4.1.10 Mr. Wilson noted that it was hoped the demonstration projects would assist in building bottom-up support for broader water policy and legal reforms, and that the policy and planning

programme would help identify and refine priorities for site based action. He explained that it was anticipated that the combined results of the programme would be catalytic in terms of: stimulating the replication and scaling up of good water resource management practices in Pacific Island countries; and facilitating the mainstreaming of IWRM and Water Use Efficiency (WUE) principles into national development planning and financing.

4.1.11 Mr. Wilson reminded participants of the United Nations' Millennium Development Goals (MDG) which seek to halve by 2015 the number of people without access to improved sanitation, and to halve by 2015 the proportion of people without sustainable access to safe drinking water. He also noted the recent United Nations General Assembly resolution which declared the right to safe and clean drinking water and sanitation as a human right.

4.1.12 In this connection, he pointed out that despite the best of plans to improve access to safe and clean water in the Pacific region, progress was not readily noticeable. He highlighted that several reports had concluded that the Pacific was generally off-track with respect to the water and sanitation MDG targets, with one estimating that the percentage of the Pacific's population with access to safe drinking water and sanitation facilities was declining.

4.1.13 Regarding progress towards the achievement of the water and sanitation MDG's in the Pacific, Mr. Aitaro queried whether or not it was possible to provide some generalisations about where the Micronesian sub-region was at relative to countries in Melanesia and Polynesia. Mr. Wilson responded by noting that it was difficult to benchmark and compare progress between countries and sub-regions due to the limited availability of information and data on the state and use of water resources in most countries. He highlighted that for many countries, information on the basic links between access to clean water and diarrhoea did not exist. He explained that the project was working on setting benchmarks and meaningful indicators against which progress could be measured but it would be some time before this system would act as a useful platform for cross country comparisons.

4.1.14 Mr. Wilson expressed his view that overall the Micronesia sub-region was most likely moving forward, but noted the vulnerability of the countries to drought, particularly Palau and RMI. He highlighted the long drought experienced in Palau during March 2010 and pointed out that the impact of this may have been dire if it had coincided with a period of high visitor numbers, such as that associated with a visit from a large cruise ship or naval ship. Mr. Aitaro agreed that it was difficult to determine the resilience of a country such as Palau to large short term population increases associated with tourism, the development of tourism attractions such as golf courses, or climatic events such as drought.

4.1.15 Regarding progress of the GEF Pacific IWRM Project, Ms. Deborah Barker-Manase, General Manager of RMI's Environmental Protection Authority and IWRM Focal Point for RMI, pointed out that the execution of the Laura Water Lens IWRM demonstration project had been hindered as a result of delays in the disbursement of funds from UNDP. Ms. Barker-Manase informed the meeting that this had been discussed during the project's second RSC meeting in July but UNDP continued to take up to 6 weeks to process cash advance requests from the participating countries. Ms. Barker-Manase expressed her view that this should be brought to the attention of the GEF Secretariat.

4.1.16 Mrs. Ehmes echoed Ms. Barker-Manase's intervention and pointed out that these delays were also hindering other GEF projects in the FSM. It was noted that there were discussions about these delays during the recent Conference of Parties to the Convention on Biological Diversity meeting convened in Nagoya, Japan. At that meeting many countries were of the view that regional organisations such as SPC and SOPAC should be given greater responsibility to manage the flow of grant funds to the participating countries.

4.1.17 There followed a lengthy discussion regarding the fee UNDP derives for overseeing the project and that perhaps these funds could be used to improve performance in the processing of quarterly cash advances to the countries. It was pointed out that the UNDP Resident Representative at the Fiji multi-country office would be visiting Micronesia towards the end of 2010 and that this would be a timely opportunity to raise these concerns directly with him.

4.1.18 Mr. Jorelik pointed out that Micronesian communities typically have strong traditional customs and beliefs which influence the use of natural resources such as freshwater. He highlighted the

important roles and duties of Traditional Leaders in ensuring secure access to safe drinking water and sanitation. He expressed his view that, where possible, water policy and management interventions should be designed to build on and utilise traditional knowledge and practices as much as possible. Mrs. Ehmes agreed and suggested that finding ways to best incorporate traditional knowledge into water policy and law would be a challenge for all countries and would necessarily require a high level of consultation at the community level. Mrs. Ehmes concluded this agenda item by thanking Mr. Wilson for his presentation and all participants for their inputs to the discussion.

## 4.2 Country Reports on the Status of the National IWRM Demonstration Projects

4.2.1 The Chairperson, Mrs. Ehmes reiterated Mr. Wilson's view that Pacific Islanders prefer to see on-the-ground action rather than policy. Mrs. Ehmes suggested that the site-based actions being implemented through the national demonstration projects of the GEF Pacific IWRM Project had assisted in raising awareness at all levels of the need for more strategic and better coordinated approaches to water resource management and sanitation in the Micronesian sub-region. In this connection, Mrs. Ehmes invited the GEF IWRM National Demonstration Project Managers from Palau, FSM, and RMI to provide the meeting with brief overviews of their national projects. It was agreed that time for questions and discussion would be provided following the completion of the presentations.

### ***Republic of Palau***

4.2.2 The GEF IWRM National Demonstration Project Manager for Palau, Ms. Lynna Thomas began by outlining the objectives and core components of Palau's project. Ms. Thomas informed the meeting that the project entitled "*Ngerikiil Watershed Restoration for the Improvement of Water Quality*" aimed to reduce land degradation and preserve ecosystem stability, functions, and services of the Ngerikiil Watershed. Ms. Thomas reviewed the project components as: **Component 1** – Improvement of Surface Water Quality in the Ngerikiil Watershed; **Component 2** – Drainage Mitigation from the new COMPACT road; **Component 3** – Improving the use of bioindicators for watershed management; **Component 4** – Policy and Awareness; **Component 5** – Documentation; **Component 6** - Establish Long-term Sustainable Governance Body; **Component 7** – Project Management; and **Component 8** – Policy and Legal Reforms for IWRM.

4.2.3 Ms. Thomas highlighted some on-the-ground activities of the project to include: re-introduction of native plant species to help stabilise soil; studies on how to best mitigate the effects of drainage from the COMPACT road on Ngerikiil River water quality; pollutant source surveys; socio-economic surveys; and awareness raising on watershed protection. Ms. Thomas noted that the Ngerikiil and Kmekumel Rivers in Palau's Airai State, where the project is located, are the primary water sources for an estimated 78 percent of Palau's population and most of the country's International tourists. Ms. Thomas noted that increased sediment loadings in Airai Bay and a recent drought in March 2010 had resulted in increasing pressure for water resource management in Palau to focus on "*Ridge to Reef*" approaches.

4.2.4 Ms. Thomas informed the group that several Pacific IWRM programme activities had been beneficial in raising the profile of water and sanitation issues in Palau. The hosting of the project's Second Regional Steering Committee (RSC) Meeting in July 2010 had brought many water professionals to the country and had provided Palau's senior government officials with an opportunity to interact with these individuals and learn more about IWRM and the relevance of the national IWRM demonstration project to the wider Pacific region.

4.2.5 Ms. Thomas highlighted that Palau's President, His Excellency, Mr. Johnson Toribiong had officially opened the RSC meeting and expressed her view that this had been beneficial in building support for the project at the highest political levels. It was also highlighted that the Micronesian Heads of State had participated in a tree planting ceremony in the Ngerikiil Watershed as part of the Micronesian Presidential Summit convened in Palau during July 2010. Ms. Thomas informed the meeting further that the Roll'em Productions produced video documentary on the Palau IWRM project had been aired nationally on Oceania Television and that this had resulted in much higher levels of interest in the project.

4.2.6 Ms. Thomas reviewed some recent project achievements including: completion of a study investigating the effects of road drainage on river water quality; and development of a species

identification guide and the selection of indicator species for the project's bioindicators programme. Work planned for immediately after the meeting included: recruitment of a consultant to investigate the feasibility of a payment for ecosystem services scheme for the Ngerikiil Watershed; installation of hydrological stations to assist with developing a better understanding of localised differences and seasonal variation in rainfall; design of road signage and educational pamphlets; and a review of buffer zone literature.

#### ***Federated States of Micronesia***

4.2.7 The GEF IWRM National Demonstration Project Manager for FSM, Mr. Wendolin Roseo Marquez outlined the objectives and core components of FSM's project. Mr. Marquez informed the meeting that the project entitled "*Ridge to reef: protecting water quality from source to sea in the FSM*" aimed to improve drinking water quality and significantly reduce pollutants entering fresh and marine waters around Pohnpei Island. He reviewed the project components as: **Component 1** - Watershed Protection and Management; **Component 2** - Protecting Fresh and Marine Water Quality; **Component 3** - Water Quality and Quantity Monitoring and Planning; **Component 4** - Policy and Planning for IWRM and WUE; and **Component 5** - Project Management.

4.2.8 Mr. Marquez highlighted that the FSM project was being executed through a partnership comprised of: the FSM Department of Transport, Infrastructure, and Communication; the Pohnpei Utilities Corporation; the Pohnpei Environmental Protection Agency; the Conservation Society of Pohnpei; the Nett Municipal Government; and villages of Nett Municipality. He highlighted that this partnership approach was somewhat new to water resource management on Pohnpei Island and with that came several challenges in ensuring adequate coordination and communication between and amongst all partners.

4.2.9 Mr. Marquez informed the meeting that the project was still in its infancy and that priority actions for the project included: revitalisation and operation of the Demonstration Project Coordinating Committee; strengthened stakeholder engagement at the Nett Municipal level, including involvement of government, landowners and community leaders in project planning and implementation; improved communication and awareness of IWRM project activities; facilitating community agreement in Nett Municipality to support the survey and legal demarcation of the Nett Watershed Forest Reserve; recruitment of a locally based surveyor to delineate and map the Nett Watershed boundary; conduct of a pollutant source and sanitary survey of the Nett Watershed; and development of an operational water quality and quantity monitoring program for the Nanpil River and receiving coastal waters.

#### ***Republic of the Marshall Islands***

4.2.10 The GEF IWRM National Demonstration Project Manager for RMI, Ms. Moriana Phillip proceeded to review the objectives and core components of RMI's project. Ms. Phillip informed the meeting that the project entitled "*Integrated Water Management and Development Plan for the Laura Groundwater Lens, Majuro Atoll*" aimed to improve water resources management, reduce groundwater pollution, and improve water supply in the Laura area of Majuro Atoll. Ms. Phillip listed the project components as: **Component 1** - Strengthened Coordination for Integrated Land and Water Management at Laura, Majuro Atoll; **Component 2** - Identification of Key Threats and Management Issues for the Laura Water Lens; **Component 3** - Development of a Laura Integrated Water and Land Resources Management Plan; **Component 4** - Targeted Stress Reduction Demonstrations for the Laura Water Lens; **Component 5** - Enhancing Awareness and Understanding of the Laura Water Lens; and **Component 6** - Management and Coordination of the Laura Demonstration Project.

4.2.11 Ms. Phillip explained to the meeting that her appointment to the post of Project Manager occurred in the first quarter of 2010. Since then the focus of her work had been on liaison with stakeholders and representatives of the Laura community to devise the final project design (logframe) and agreement on the roles of all stakeholders in project execution. It was noted that this included an intensive awareness raising campaign on the role of the Laura water lens in providing water to residents of Majuro Atoll and the various land uses affecting the lens.

4.2.12 Ms. Phillip noted that the priority actions of the project in the final quarter of 2010 included: recruitment of a consultant to review the socio-economic political factors influencing IWRM in the Laura area; revitalisation of the National Integrated Water Resource Management Task Force to oversee development and implementation of a Laura Integrated Water and Land Resources

Management Plan; formalisation of the Laura Integrated Water and Land Management Advisory Committee, including endorsement from the National Integrated Water Resource Management Task Force; preliminary work on the development of vulnerability map for the Laura water lens including recommended zonings for land uses; compilation of data information on land use, pollutant sources, groundwater wells, and water quality (DO, pH, Salinity, coliform) for the Laura Water Lens; awareness activities on the Laura Water Lens management initiative; and production of a video documentary on the work of the IWRM programme in RMI.

4.2.13 Ms. Phillip explained that one of the biggest challenges they face in RMI is lack of awareness of the need for water conservation. As such, awareness raising activities had subsequently been integrated into all project activities with the ultimate aim of establishing a Laura Water Lens Learning Center at the Laura community using awareness materials developed through the project. Ms. Phillip informed the meeting that RMI EPA had also been working to recruit a National Water Policy Support Officer and a policy specialist to provide support to the policy aspects of the IWRM programme in RMI.

4.2.14 Mr. Robert Hadley of Pohnpei Utilities Corporation sought guidance from the representatives of SOPAC present at the meeting about how they thought the countries could improve delivery of the national IWRM projects. Mr. Wilson responded by explaining that there are a myriad of factors which influence the delivery of the national demonstration projects both positively and negatively, but that from his experience two are outstanding. The first is the sheer difficulty in establishing smooth administrative processes which are necessary in terms of getting contracts approved by offices of Attorney Generals, and having purchase requisitions and local orders raised and paid for in a timely manner by Finance Departments.

4.2.15 The second is the broad scope of the IWRM projects which is somewhat new to most lead agencies and supporting organisations. He explained that most agencies are more experienced in executing projects of a narrower focus, e.g., infrastructure projects involving public works such as digging trenches and laying pipes for water supply systems. He highlighted that the multi-stakeholder approach to IWRM involves a broad range of clientele, many of whom have competing interests in water resource management, land use, and land tenure. He expressed his view that in many cases there is a presumption that the “*integration*” required to make IWRM work would happen almost “*osmotically*”. He noted that the reality, however, is that “*integration*” requires the establishment of strong coordination mechanisms, efficient communication pathways (with feed back loops), and the building of relationships that are strong enough to withstand good debate and move things forward.

4.2.16 Using the example of the FSM demonstration project, Mr. Paterson expressed his view that the partnership approach to IWRM being developed for the Nett Watershed on Pohnpei Island depends significantly on the success of efforts to build strong relationships between and amongst project partners. He suggested however, that this relationship building must be nested within broader initiatives focusing on the development of an enabling environment for strengthened coordination in which: all partners’ roles and responsibilities in the project are clearly defined; the Terms of Reference and linkages between national and watershed level coordinating committees are well understood; and all project stakeholders are provided an opportunity to contribute to work planning and budgeting and to participate in the regular review of project progress and results. He noted that in the early phase of FSM project execution these considerations were not afforded high enough priority but, through trial and error, there is now a common understanding amongst the core group of partners of the importance of getting above mentioned elements of IWRM right.

4.2.17 Mr. Paterson noted that the Palau IWRM demonstration project had been particularly successful in establishing an enabling environment for effective coordination of project activities. He suggested that participants from Palau may wish to share their experiences in this regard. Ms. Metiek Kimie Ngirchechol, IWRM Focal Point for Palau pointed out that project activities had been planned in conjunction with, and to complement, a range of other projects being implemented by their partners. This provided a need for partners to meet regularly to discuss implementation progress and issues, as well as co-financing arrangements. It also resulted in partners working towards a common goal.

4.2.18 Mr. Wilson pointed out that the GEF project had been promoting the development and operation of “*active*” multi-sectoral, intergovernmental committees including community representatives. He noted further that, where possible, these committees were also being operated at

arms length from government and the lead agency to encourage local ownership over the body. He noted that this was somewhat novel in several countries which had in the past viewed project committees as a box ticking exercise and an opportunity for the collection of sitting fees.

4.2.19 Mr. Wilson explained that all IWRM demonstration projects were required to have such coordinating committees, with clearly defined Terms of Reference, work plans, deliverables, and responsibility for the planning of project activities and expenditures. He highlighted that this participative approach had been embraced in all countries, and that a high level of enthusiasm from most members had been demonstrated. He noted however, that the focus on providing the high levels of administrative and coordinating support required for the effective and efficient operation of the committees was something new to many Project Managers and their supervisors. In this connection, Mr. Hairens suggested that the fundamental issue is the motivation of the people making up the committees, and expressed his view that there needs to be effort made to build capacity and support amongst these individuals for IWRM.

4.2.20 Mr. Paterson pointed out that all countries had faced problems in bringing relevant IWRM stakeholders together. He expressed his view that this was to be expected and noted that often it may take several years to develop a productive, committed natural resource management committee. He noted that from his observations the countries in Micronesia were so far doing very well in moving towards more integrated approaches. He highlighted the example from FSM where the project committee itself had come up with a series of recommendations as to how the project management framework and committee structure could be adjusted to facilitate improved communication from “*community to congress*” and to better involve village representatives from Nett Municipality in project planning and decision-making. He pointed out there is no “*one size fits all*” recipe for these committees and that they will evolve with the projects and an ever improving information base for planning and management.

4.2.21 Ms. Phillip highlighted that from her experience as a Project Manager, senior government officials were often more focused on the amount of money that a project had rather than the objectives and possible impacts of a project. Ms. Phillip expressed her view that this could often hinder smaller sized projects in gaining the political support required to make IWRM work. Mr. Jorelik explained further that often many small projects with a range of donors are overseen by a multitude of committees each made up of the same people. He noted that the logical approach in these cases was for these people to meet at one time to address a range of different projects, and that often the focus for some projects is diluted or lost. Mr. Jorelik expressed his view that this could be prevented by ensuring that projects focus on relationship building, both formal and informal, from national government to community levels. He noted that it is these relationships which are critical in ensuring adequate buy-in from stakeholders to project activities.

4.2.22 Mr. Wilson highlighted the ever present need to raise the significance of water and sanitation issues with senior government officials. He suggested that achieving buy-in from these individuals will be central to any efforts to develop national water policy and to mainstream IWRM and WUE principles into national development planning. He noted that engagement at the municipal and village levels was often much easier as people had to deal with water and sanitation as a matter of daily life, but for many national government officials, water and sanitation issues often take a back seat to fisheries, tourism, communications, and trade matters.

### **4.3 Update from the Regional IWRM Technical Advisory Group**

4.3.1 The Chairperson invited Mr. Paterson to briefly update the meeting on work of the Regional IWRM Technical Advisory Group (RTAG). Mr. Paterson explained that the RTAG was established during the second RSC meeting in July 2010 and had been charged with the responsibility for: overseeing the scientific and technical elements of the project; ensuring effective implementation of technical activities undertaken during project execution; and providing sound scientific and technical advice to the RSC. He informed the meeting that the RTAG had initially been tasked with coordinating the development of the project’s regional indicator programme as well as oversight of national and demonstration project level monitoring and evaluation programmes.

4.3.2 Mr. Paterson noted further that the second RTAG meeting had been convened from 25th – 26th October 2010 in Nadi, Fiji Islands and had addressed issues including: the Pacific freshwater

vulnerability assessment study; the water chapter of the Pacific Environment Climate Change Outlook report; development of a regional and national project monitoring and evaluation programme; and consideration of options for a Regional Indicator Framework for IWRM and WUE. The meeting had also considered options to run scientific symposiums prior to RSC meetings, project technical quality control and assurance, and the regional capture and sharing of lessons learned from IWRM projects. It was agreed that the minutes of the RTAG meeting would be circulated to participants via e-mail for their information

#### **4.4 Consideration of a Proposed Process for Development of a Pacific Regional Water and Sanitation Strategy, including recent UN Resolution Declaring Safe Water as a Human Right**

4.4.1 The Chairperson, Mrs. Ehmes noted that there had been much International attention paid to the recent UN Resolution regarding water and invited Mr. Paterson to introduce document SOPAC/EU/IWRM/Micronesia.1/4 *“The United Nations General Assembly Resolution Declaring the Right to Safe and Clean Drinking Water and Sanitation as a Human Right”*. Mr. Paterson began by noting that on 28<sup>th</sup> July 2010 the United Nations General Assembly had adopted a draft resolution on the human right to water and sanitation (document A/64/L.63/REV.1) by a recorded vote of 122 in favour to none against.

4.4.2 He highlighted that the adopted resolution:

*“1. Declares the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights;*

*2. Calls upon States and international organizations to provide financial resources, capacity-building and technology transfer, through international assistance and cooperation, in particular to developing countries, in order to scale up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all;*

*3. Welcomes the decision by the Human Rights Council to request that the independent expert on the issue of human rights obligations related to access to safe drinking water and sanitation present an annual report to the General Assembly, and encourages her to continue working on all aspects of her mandate and, in consultation with all relevant United Nations agencies, funds, and programmes, to include in her report to the Assembly, at its sixty-sixth session, the principal challenges related to the realization of the human right to safe and clean drinking water and sanitation and their impact on the achievement of Millennium Development Goals.”*

4.4.3 Further to this, Mr. Paterson informed the meeting that the United Nations Human Rights Council, which is responsible for mainstreaming human rights within the United Nations system, had on 30<sup>th</sup> September 2010 adopted by consensus a resolution (A/HRC/15/L.14) affirming that water and sanitation are human rights. He explained that in International law this now means that, the right to water and sanitation is contained in existing human rights treaties and is therefore legally binding. He highlighted that the adopted resolution of the Human Rights Council calls upon States:

*“(a) To develop appropriate tools and mechanisms, which may encompass legislation, comprehensive plans and strategies for the sector, including financial ones, to achieve progressively the full realization of human rights obligations related to access to safe drinking water and sanitation, including in currently unserved and underserved areas;*

*(b) To ensure full transparency of the planning and implementation process in the provision of safe drinking water and sanitation and the active, free and meaningful participation of the concerned local communities and relevant stakeholders therein;*

*(c) To pay particular attention to persons belonging to vulnerable and marginalized groups, including by respecting the principles of non-discrimination and gender equality;*

*(d) To integrate human rights into impact assessments throughout the process of ensuring service provision, as appropriate;*

*(e) To adopt and implement effective regulatory frameworks for all service providers in line with the human rights obligations of States, and to allow public regulatory institutions of sufficient capacity to monitor and enforce those regulations; and*

*(f) To ensure effective remedies for human rights violations by putting in place accessible accountability mechanisms at the appropriate level.”*

4.4.4 Mr. Paterson suggested that these recent International developments placed additional expectations on the countries of Micronesia with respect the water resource management and that these should be considered in planning national water policy development. He expressed his view that the resolutions would also likely influence regional and International water policy over coming years and recommended that participants familiarise themselves with the detailed text of the documents. Mr. Airens requested that the two resolutions be circulated by e-mail to all participants and made available for download from the Pacific IWRM website.

4.4.5 Mr. Wilson recommended that participants could also use the resolutions in communicating with senior government officials and politicians regarding water resource management and sanitation issues. Mr. Jorelik agreed with Mr. Wilson but explained that as these resolutions were relatively recent it would be necessary for their implications to be considered and discussed nationally. Mrs. Ehmes echoed Mr. Jorelik’s point and suggested that a national level review of these resolutions would provide an excellent start-up activity for national water committees.

4.4.6 In communicating this nationally, Ms. Barker-Manase suggested that participants should be very clear that we are not talking about traditional rights. Mr. Jorelik agreed and noted that it would be very interesting to see guidance from United Nations experts working on this as to how these resolutions could best be interpreted in a small island context. He explained that on Majuro Atoll in RMI, the main sources of freshwater are the Laura water lens and rainwater. He highlighted that there were still people that would spend money on a new car rather than purchase a rainwater tank to help drought proof their household.

4.4.7 The Chairperson, Mrs. Ehmes proceeded to invite Mr. Paterson to present document SOPAC/EU/IWRM/Micronesia.1/5 “*Developing a Regional Strategy for Water and Sanitation*”. Mr. Paterson began by briefly reviewing the three regional water and sanitation policies outlined by Mr. Wilson at Agenda Item 4.1 and informed the meeting that there had been some regional level discussion of the need to revisit the Pacific RAP for Sustainable Water Management.

4.4.8 Mr. Paterson noted that the SOPAC Governing Council had, during its 39<sup>th</sup> and final meeting in October 2010, highlighted the need for a new Pacific Regional Water and Sanitation Strategy. He noted further that the Council had recommended that the new Applied Geoscience and Technology Division of the Secretariat of the Pacific Community (SPC) undertake a consultative process during 2011 towards the revision of the regional strategy and action plan to address the urgent issues pertaining to the sustainable management of water resources and delivery of water and sanitation services.

4.4.9 Mrs. Ehmes queried whether the development of the regional strategy was part of the current EU or GEF projects. Mr. Wilson responded by informing the meeting that it was hoped this process would be funded via an alternative funding source and that the resultant strategy would hopefully be endorsed by the Pacific leaders for presentation to the Asia-Pacific Water Summit to be held in Bangkok, Thailand in 2012. Mr. Paterson explained that this process should ideally be country driven and that the water policy work planned for the Micronesian countries should feed into this higher level regional work.

## **5. CONSIDERATION OF NATIONAL PROGRAMMES FOR WATER POLICY DEVELOPMENT AND COORDINATION MECHANISMS**

### **5.1. Review of Proposed IWRM Policy Activities in National Logframes and Anticipated Results**

5.1.1 The Chairperson, Mrs. Ehmes introduced this agenda item and invited Mr. Paterson to present document SOPAC/EU/IWRM/Micronesia.1/6 “*IWRM Project Logframes for the Republic of*

*Palau, the Federated States of Micronesia, and the Republic of the Marshall Islands*". Mr. Paterson began by highlighting that the logical framework approach had been selected as the basis for the results-based management of the GEF Pacific IWRM Project. He noted that all national IWRM projects had been required during the project's inception phase to develop project logframes which included: brief narrative description of project activities and anticipated results; objectively verifiable indicators of the activities having taken place and results achieved; a description of how results would be verified, and the assumptions and risks in the project design. Mr. Paterson led the meeting through PowerPoint presentations of each logframe and Mr. Airens requested that these documents be made available in the report of the meeting (Annex 4).

5.1.2 Mr. Paterson explained that, in developing the logframes for the IWRM demonstration projects in Micronesia it had quickly become apparent that, without supporting efforts to: (a) strengthen national coordination of government service delivery for water and sanitation; and (b) to establish comprehensive water policies with necessary budgetary support, it was unlikely that the results of the projects would be sustainable, and that it would be difficult to facilitate the replication and mainstreaming of best water resource management practices.

5.1.3 Mr. Paterson noted that in response to this, each country had planned, and integrated into their project logframes, a common series of water policy and coordination activities including: establishment of National Water Committees; review and analysis of existing policies and laws relating to water; the conduct of National Water Summits on World Water Day 2011 (March 22); and the drafting of national water policies and recommended legal reforms for submission to Congress. He explained that the idea to organise National Water Summits was aimed at bringing all water related stakeholders in the respective countries together to review the state of water resources and their management, and to seek commitments from the highest levels of government to support water policy development and legal reforms for water and sanitation.

5.1.4 Mr. Chung pointed out that he and the national teams had worked through each completed logframe to identify communications opportunities for each demonstration project activity and output. He informed the meeting that these discussions had focused on how communications could be used to influence national development policy and planning, as well as to stimulate civil society support for water conservation initiatives. Ms. Thomas expressed her view that this communications work had been very valuable in assisting the IWRM team in Palau identify and understand the linkages between the on-the-ground activities of the GEF project and the higher level policy initiatives of the EU programme.

5.1.5 In this connection, Mr. Airens expressed his view that, given all the work being done in the demonstration projects, there must be many good news stories each month that project managers could try to get into the media to help build awareness of the IWRM programme. Mr. Aitaro agreed and suggested that the Oceania Television Network may be well positioned to assist with this should they begin broadcasting in FSM and RMI.

## **5.2 Identification of Required Inputs and Expected Outputs for a Programme of Activities Leading to National Water Summits**

5.2.1 The Chairperson, Mrs. Ehmes noted that this agenda item flowed on from the recent discussion and invited Mr. Paterson to present document SOPAC/EU/IWRM/Micronesia.1/7 "*Proposed Inputs, Process, and Anticipated Outputs of Actions Leading to National Water Summits*".

5.2.2 Mr. Paterson noted that in addition to reviews of information on water resources and management, the group had identified key items for consideration by the National Summits. These included: review of the need for improved cross-sectorial coordination and streamlining of government service delivery in water resource management; recommendations for water policy and legal reforms, particularly those needed to ensure harmonisation between different sectorial policies and legislation, as well as between national, local, and traditional governance frameworks; proposed national co-ordinating mechanisms to strengthen water resource management; and development of inputs to the Asia-Pacific Leaders Forum and the World Water Forum.

5.2.3 Mr. Paterson explained that the national IWRM Focal Points and Project Managers had held several informal discussions regarding the steps required to facilitate improvements to the higher level

policy and coordination arrangements for water and sanitation in Micronesia. He informed the meeting that the group had developed a flow diagram of the proposed process for preparing inputs to the National Water Summits, including national and civil society consultations. This flow diagram was presented as a PowerPoint slide and discussed.

5.2.4 Mr. Paterson pointed out that operation of national water committees and the recruitment of national policy support officers were central to this process. These policy support officers would assist in planning and coordinating preparatory meetings, and in compiling water resource information and data for analysis by national water policy consultants. He noted it had been discussed that the consultants could provide short term (~3 months) support to summit preparation and follow-up actions if needed. He also noted that there was the possibility of appointing a short term International consultant to provide support across the three countries to help look at: national budgets and policies with respect to MDG targets for water etc; provide guidance on policy and legal reforms for IWRM; and (c) advise on the enabling environment for IWRM.

5.2.5 Mr. Paterson drew the attention of the meeting to the anticipated outputs of this proposed work, which included: (a) operational committees; (b) national reviews of options for strengthening national coordination for water and sanitation; and (c) national reports summarising available information on water resources and their management, inventories of planned/ongoing activities for water and sanitation, and recommendations for water policy and legal reforms. He highlighted that the key anticipated output of the National Water Summits had been identified as reports on the status of water resources and management for each country. These reports would also include an analysis of the need for mechanisms to strengthen national coordination and to improve water policy and legal frameworks, and any recommendations proposed therein. The key anticipated outcome had been identified as Ministerial level agreement on priority actions and financing for water resource management, and that this agreement would most likely be expressed as a joint resolution or communiqué to Congress.

5.2.6 Mr. Jorelik queried where the supporting staff would be based. Mr. Paterson explained that the proposed National Policy Support Officer would be local recruits and based in the identified lead agency for water policy development. He suggested that in the case of RMI, this person would perhaps initially best be situated with the water staff at the RMI Environmental Protection Agency whilst it was agreed which government agency would take the lead with respect to water. Mr. Jorelik agreed that this was probably a suitable interim arrangement. Mr. Paterson explained that it was also hoped national consultants could be recruited locally with the aim of ensuring that this process is as country-driven as possible.

5.2.7 Mr. Jorelik pointed out that the proposed anticipated outputs from the National Water Summits appeared to him to be steps moving towards policy reform, and that he would rather see the countries make a commitment to have actual water policies presented and agreed to at the summits. Mr. Wilson responded by suggesting it may be wise to work towards a three to four page framework policy, including an overarching goal, objectives, and a list of principles for agreement during the summits. He expressed his view that this could be feasible given the time frame involved and that such framework policies could be expanded and built upon during the period April-June 2010, and then reviewed regionally at the 3<sup>rd</sup> RSC meeting in July 2011. Mr. Wilson suggested that it would also be useful to have an endorsed resolution or communiqué referring to and supporting elaboration of these framework policies. Mrs. Ehmes explained that FSM's Food Security Policy had been developed in much the same way.

5.2.8 Mr. Aitaro expressed his view that in the case of Palau, it would be possible to develop a framework policy by March and be further elaborated during 2011 and then reviewed on a 2-3 year basis. Ms. Barker-Manase noted that in the case of RMI this will require extensive consultations with land owners, traditional leaders and communities. It was noted further that unless full agreement and buy-in from traditional leaders is reached in RMI then any policy developed will not be workable and that this will be central to their consultative process. Mr. Aitaro and Ms. Metiek Kimie Ngirchechol, IWRM Focal Point for Palau, noted that engaging with traditional leaders and women's groups will be particularly important in Palau also. Mr. Airens explained that there are many customs governing water and watershed use in FSM and, whilst these are not forgotten, they are often not adequately considered in natural resource management. Mr. Wilson suggested that it would be particularly

interesting to see some of the anthropological aspects of water use in Micronesia reviewed as part of this process.

5.2.9 Mr. Wilson expressed his view that critical policy issues relate to: ownership of the land where water is found and access rights; who controls the rules for capturing, storing and distributing water; and who manages water, both quantity and quality, as well maintenance of environmental flows and lagoon water quality. Mr. Paterson noted also that given the large number of agencies with small roles and narrow responsibilities in water management, policy must address issues such as how to strengthen coordination and streamline service delivery, and the mainstreaming of common IWRM and WUE principles into operational plans of government departments.

5.2.10 Mr. Jorelik shared his past experiences with how certain pieces of information or documents are interpreted and used by congress. He noted that often issues can be spun around to suit the current political climate, and that notwithstanding the necessary consultative processes, he feels it is often best to move towards final comprehensive water policies as soon as possible. He expressed his view that water and sanitation is such an important issue that it should not be too difficult to move towards final water policies in the near future. Mrs. Ehmes noted given the four States in FSM it may not be feasible to move towards a comprehensive policy in the short four month period leading up to the summits.

5.2.11 Mr. Aitaro queried what opportunities may exist for additional funding to convene second water summits during which lead agencies and water committees could report back with final, comprehensive water and sanitation policies. He suggested that this may force congress to work within their means to meet deadlines for policy adoption. Mr. Wilson suggested that, whilst it would be beneficial to explore what other national or sub-regional forums existed to provide this stimulus, the Asia-Pacific Water Summit planned for 2012 may be an appropriate target.

5.2.12 In conclusion, Mr. Paterson reminded participants that the proposed process had been devised during several informal meetings and that it is no way prescriptive. He suggested to the Chairperson that it may be beneficial for the meeting to split into country working groups to discuss and come up with any different approaches or modifications to the process outlined. It was agreed to follow this approach and for country teams to report back in plenary.

5.2.13 In reporting back, Ms. Ngirchchol pointed out that Palau was in full agreement with the proposed process but the key constraint would be how soon the policy officer could be recruited. Mr. Paterson noted that this depended on: when the preferable candidate is selected; and whether National Government would recruit the person directly, or whether it would be preferable for SOPAC to recruit the officers as consultants with a requirement to serve a certain agency and report to certain individuals in national government. It was agreed that, given the lengthy recruitment process of national governments, it would probably be faster for SOPAC to recruit directly on behalf of the governments. Ms. Ngirchchol informed the meeting that they had agreed that the minimum outputs from the Palau National Water Summit should be a framework water policy and signed communiqué.

5.2.14 Ms. Ngirchchol highlighted that the Micronesian Chief Executive Summit (MCES) would be convened in Palau from 14<sup>th</sup>-16<sup>th</sup> December 2010. It was explained that this forum could be useful in developing Presidential and Ministerial level support for the Summits and water policy reforms in Micronesia generally. It was noted that water and sanitation issues had not previously been discussed in the MCES framework, but that MCES does consider issues such as biodiversity, climate, and renewable energy. It was further noted that the Micronesian Traditional Leaders Conference (MTLC) would be convened in the weeks leading up to the MCES. Mr. Aitaro suggested that if the group were to work on having water placed on the agenda for MCES, it would be necessary for senior policy staff to attend the event in order that they could work with the Chief Executives to move the issue of water forward during and post meeting.

5.2.15 It was agreed that Mr. Aitaro would meet with Mr. Wilson and Mr. Paterson over breakfast on the final day of the meeting to discuss how the countries can best brief their CEOs about this. Mr. Wilson suggested that the recent United Nations General Assembly and Human Rights Council resolutions would be an excellent entry point, as would the need for the region to prepare for the upcoming 2012 Asia-Pacific Water Summit and 2013 World Water Forum.

5.2.16 Mrs. Ehmes expressed her support for the idea to try and get water placed on the agenda for the MCES. Regarding the proposed national summit process, Mrs. Ehmes noted that the proposed framework suited FSM's needs and that it was likely that FSM's Department of Resources and Development would lead the water and sanitation policy development work and host the national policy support officer. Mrs. Ehmes informed the meeting that the FSM team hoped to convince their President to declare World Water Day (22 March) as FSM National Water Day. Whilst the key anticipated output of the summit would also be a framework water policy, it had been identified that they would undertake an intensive elementary and high school programme to raise awareness of "Water for Life".

5.2.17 With respect to RMI, Ms. Barker-Manase informed the meeting that the RMI team in agreement with the process in general, but that they would also try to mainstream climate variability considerations into relevant elements of the work. Ms. Barker-Manase expressed her view that involvement with MCES would bring many positive benefits to the IWRM programme in RMI, and requested that the group do its best to share any MCES briefing papers with one another as they become available. RMI would also work towards development of a framework policy and a policy statement/communiqué as outputs from their national summit.

5.2.18 There followed a discussion about how to generate genuine buy-in domestically as this will be critical in developing comprehensive policies and ensuring appropriate budgetary support for implementation. Mr. Wilson suggested that one approach may be to appoint water champions, who could be highly respected ex government officials or civil society leaders. He explained that these water champions could be responsible for inducing and persuading senior officials and politicians to provide appropriate political and financial support to water. He expressed his view that this may lead to enough pressure from above to ensure that national water committee meetings are participated in by the right people, regularly. He suggested that additionally, young professionals could possibly be placed in country to serve national committees and undertake tasks such as developing water assessment and investment plans. He expressed his view that such activities would keep the committees active and current.

5.2.19 Mr. Jorelik agreed with Mr. Wilson's opinion about the need to provide stimuli to keep committees active. He said that so often it is the same group of people serving so many committees that the committees themselves become uncreative and lose momentum. He suggested that maybe a better approach would be to work with community level or civil society committees, focusing on involvement of Church groups, business representatives, and NGOs.

5.2.20 Mr. Wilson responded by noting he can understand committees losing momentum if they do not have clearly defined roles, responsibilities, and tasks to work on. He suggested that the preparation and update of water status assessment reports as outlined in the summit process would be an ideal starting point for national water committees. Members could be assigned discrete parts to complete and perhaps qualify for a small gratuity payment upon completion. Ms. Barker-Manase highlighted that there are so many dysfunctional committees and that there is a real need to improve: the mechanisms for the flow of information between levels of government and agencies and communities; and the separation of science and technical functions from higher level committees.

5.2.21 Following this lengthy and positive discussion, the Chairperson suggested, and the meeting agreed, that the proposed process leading to the summits be included in the report of the meeting as Annex 5.

## **6. RESOURCE NEEDS TO SUPPORT WATER POLICY DEVELOPMENT AND NATIONAL WATER SUMMITS**

### **6.1 Human Resource Needs**

6.1.1 The Chairperson, Mrs. Ehmes invited Mr. Paterson to introduce this agenda item and present document SOPAC/EU/IWRM/Micronesia.1/8 "Human Resource Needs to Support National Initiatives for Water Policy and Strengthened National Coordination of Government Service Delivery for Water and Sanitation".

6.1.2 Mr. Paterson began by recalling that the meeting had already discussed that each country would have specific needs for additional human resources to support national water policy review and development. It had been identified that the preparation of, and the organisation and conduct of National Water Summits and associated consultative meeting would require inputs from individuals with a broad range of technical, public policy, and administrative skills and knowledge relating to water and sanitation.

6.1.3 It was discussed that there is generally a shortage of people with such skill and knowledge sets in all countries of Micronesia, with most University graduates being quickly recruited into permanent government positions and then moving quickly up into middle and senior management positions. As such it was proposed that these needs would be addressed via appointment of water policy support officers to support national consultations, organise and convene the National Water Summits, and provide administrative support to national initiatives to strengthen mechanisms for national coordination of water and sanitation services. Additionally, it was discussed that the technical and public policy needs could possibly be met via the contracting of national and International consultants as required.

6.1.4 Mr. Paterson proceeded to introduce and review the draft terms of reference (ToR) for each of these posts as presented in document SOPAC/EU/IWRM/Micronesia.1/8. It was agreed that participants would form country working groups to discuss these ToR and modify them to meet country needs as required. It was suggested and the meeting agreed that the group should also give some consideration as to how these posts would be recruited and how the contracting of staff would be done.

6.1.5 Following group discussion, it was agreed unanimously that the draft ToR would serve all countries well for the year 2011. In the case of Palau it was suggested that SOPAC contract the policy support officer for an initial three to six month period, after which the recruitment would be regularised within MNRET. It was explained that effort would be made to mainstream this position as a permanent role in the new Land and Water Division. Regarding the use of a National Policy Consultant it was requested that SOPAC contract this individual based on the recommendation from a national selection committee. Mr. Wilson agreed this would be workable, and Ms. Ngirchchol requested that the only change to draft ToR for this post be the addition of a task to assist with building policy development capacity of EQPB and MNRET staff were required.

6.1.6 In the case of FSM, Mrs. Ehmes informed the meeting that the national policy support officer post would be advertised almost immediately with interviews and selection to be finalised in the final week of December to early January 2011. Mrs. Ehmes noted that this person would be based with the current Food Security Officer, and it was hoped the new staff member could gain some on the job training from both herself and the food officer. Mr. Airens explained that they would prefer the National Policy Consultant to be based in the Department of Resources and Development during the period April-June to work on the develop a comprehensive water policy from the framework policy to be launched at the March summit. Due to lengthy recruitment processes it was requested that SOPAC let the contracts on the basis of recommendations from the national IWRM committee.

6.1.7 In the case of RMI, Ms. Barker-Manase noted that the policy support officer post had already been advertised using the draft ToR. It was hoped that selection and subsequent contracting by SOPAC could be completed by mid-December 2010. Preliminary discussions had also been held with a policy specialist regarding the proposed policy development tasks and it was hoped the services of this person could be secured for several shorter term inputs from February to June 2011. As the consultancy would be funded using the GEF grant funds available to the national IWRM project, it was agreed that RMI EPA would contract this individual under a standard EPA service contract.

6.1.8 Ms. Barker-Manase and Mrs. Ehmes queried how SOPAC contracted staff would pay taxes. Mr. Wilson noted that a clause in the standard contract states that "*any tax liability arising out of the consultancy shall be borne by the Consultant themselves*". All participants agreed that the objectives and terms of reference for the regional consultancy would provide much needed higher level, strategic input to their work and welcomed staff of the Pacific IWRM Programme regional headquarters in Suva to issue a call for expressions of interest to undertake this work. It was recommended that at least 3 weeks advance warning of any in-country visits by the consultant be provided to the national IWRM

teams in order that they can arrange all meetings and compile any required information and data. The final agreed Terms of Reference for the 3 positions are included in Annex 6 of this report.

6.1.9 There followed a brief discussion of how “*National Water Champions*” could be used to support the organisation of the summits and water policy initiatives. It was agreed that participants would explore this concept with their national water committees and communicate the outcomes of these discussions back to the staff of the EU IWRM National Planning at SOPAC. It was suggested that staff of the EU programme may be able to help develop criteria for selecting champions.

## **6.2 Planning the Use of EU IWRM Funding Allocations for National Water Policy Activities**

6.2.1 The Chairperson invited Mr. Paterson to introduce this agenda item. Mr. Paterson explained that on the basis of discussions to date he had slightly modified the draft costed work plans contained in document SOPAC/EU/IWRM/Micronesia.1/9 “*Draft Costed Work Plans for the Preparation and Conduct of National Water Summits on World Water Day 2011*” overnight. He proceeded to present these which contained a serious of costed actions for each country which were broken down into the broad categories of: sub-regional IWRM Policy Workshop; Recruitment of Policy Support Officer; Recruitment of National Policy Consultant; Appointment of Water Champion; and National Water Policy Consultations, including National Water Summits. Mr. Paterson pointed out that the funds in the breakdown were from the national allocations from the EU National IWRM Planning Programme budget, and that as such countries needed to refine these as needed.

6.2.2 The Chairperson suggested that the meeting form country working groups so that national teams could work on these and then present final work plans and budgets to the group in plenary. This work was undertaken and the national teams were supported by Mr. Wilson, Mr. Chung and Mr. Paterson as required. Each national team presented and explained their final work plans to the group and these are contained in the report of this meeting as Annex 7.

## **7. COMPILATION AND REVIEW OF INPUTS TO NATIONAL WATER POLICY PLANNING**

7.1 The Chairperson, Mrs. Ehmes invited Mr. Paterson to introduce this agenda item. Mr. Paterson began by expressing his view that, for water resource policy and investment plan development and implementation to be successful, it should be based on scientifically sound water resource assessments and reflect existing development policy and legal frameworks. He noted that to date there has been lots of very good science done on water resource systems in the Pacific, but not a lot of work done in terms of putting this science into the policy context. He suggested that doing this would assist countries in coming up with sound water and sanitation management options and guidance for governments and communities.

7.2 Mr. Paterson explained also that there was a need to revisit and review national budgets and development policies and plans, as well as the operational plans of government departments responsible for water and sanitation. He noted that this review could be used as a basis for identifying the need for improved cross-sectorial coordination of water resource management and sanitation. Similarly he suggested that a review of National, State, Municipal, and Traditional policies and laws governing water and sanitation would enable the identification of gaps and weaknesses in existing frameworks.

7.3 He explained that he had encouraged IWRM Focal Points and Project Managers in the lead up to the meeting to compile available water resources data and information, national budgets and plans, and any water related policies and laws that they were aware of for consideration during the meeting. He suggested that it would be a useful output of the meeting for country teams to put together an inventory of these materials which could be used as a starting point for the national policy support officers and consultants. He proceeded to present a template he had developed for use by country teams in listing these materials and for providing information regarding their format, availability, and file name.

7.4. Mr. Wilson reiterated his view that he thought the preparation and regular (3-5 year) review of water resource assessment reports would be extremely valuable inputs to the water and sanitation policy and planning process in Micronesia. He noted that a lot of the information Mr. Paterson had suggested be compiled would be extremely valuable in this regard. Mr. Paterson expressed his hope

that such reports would provide reviews of available information on: (a) overall volume of water supplied by accessible via other known sources (e.g. groundwater and surface water); (b) variation in water availability, including seasonal effects, longer term drought cycles, El Niño/La Niña-Southern Oscillation patterns and flood frequency; and (c) population proximity to secure supplies of safe drinking water and sanitation services, and implications of water demand trends and pollution pressures.

7.5 The Chairperson then encouraged participants to split into country working groups to prepare inventories of the national information and data resources available to them and to discuss any confidentiality issues likely to arise from the sharing of such materials. Following a lengthy discussion instigated by Ms. Barker-Manase on the issue of confidentiality, it was agreed that materials already in the public domain would be openly shared and that information resources which the countries wished to keep confidential would be managed accordingly. Following completion of this work, country representatives presented their country lists in plenary. These lists are included in this report as Annex 8.

7.6 In addition to the lists of country information and data, Ms. Phillip noted that the RMI team had also prepared a summary table of water related projects in RMI. It was agreed that this would be included in the report of the meeting as Annex 9. It was agreed further that Mr. Paterson would include in Annex 9, suggestions for additional data fields which could possibly be used in the development of a simple online database of water projects in the Micronesia sub-region.

7.7. There followed a discussion of information regarding national budgetary planning processes and how this information could be used to ensure mainstreaming of IWRM and WUE in government. It was agreed that a template would be prepared for the countries to provide information about these processes and it would be sent out for their completion by mid February 2011. It was pointed out by Mr. Wilson that if the countries are really going to develop sustainable water resource management then they need to ensure appropriate national budgetary support is provided and that government expenditure on water and sanitation is streamlined as much as possible. He said the information regarding national budget planning processes would help in identifying appropriate times to lobby departmental Secretaries and agency managers regarding activities, and the human and financial resources required to implement IWRM.

## **8. PREPARATION OF DRAFT AGENDAS FOR NATIONAL CONSULTATIONS AND WATER SUMMITS**

8.1 The Chairperson, Mrs. Ehmes reminded participants that the National Water Summits planned for World Water Day 2011 (22 March) were aimed at benchmarking the state of water resources and their management. In addition to reviews of available information on water resources, it had been noted that key items for consideration by the National Summits included:

1. The need for improved cross-sectorial coordination and streamlining of government service delivery in water resource management;
2. Recommendations for water policy and legal reforms, particularly those needed to ensure harmonisation between different sectorial policies and legislation, as well as between national and local level governance frameworks;
3. Proposed national co-ordinating mechanisms to strengthen water resource management; and
4. Development of national inputs to: (a) a Pacific level Ministerial consultation on water planned for Quarter 3, 2011; (b) the Asia Pacific Leaders Forum (2012); and the World Water Forum (2013).

8.2 Mrs. Ehmes noted also that proposed outputs from the Summits had been previously identified at Agenda Item 5.2 and that these were summarised in the process diagram provided in Annex 6. Mr. Wilson suggested that since these were nationally driven summits, the meeting agendas should be developed in consultation with national water committees and with input from community representatives and traditional leaders where possible. He suggested that a thematic approach addressing issues such as "*Water and Health*", "*Water and Food Production*" etc might be effective. It was agreed that participants would undertake these discussions with their national committees and stakeholders and that final agendas for the National Water Summits would be sent to Mr. Paterson by 19<sup>th</sup> February 2011.

## **9. CONSIDERATION OF POSSIBLE MECHANISMS FOR STRENGTHENING INFORMATION EXCHANGE FOR WATER RESOURCE MANAGEMENT IN THE MICRONESIA SUB-REGION**

9.1 The Chairperson, Mrs. Ehmes invited Mr. Paterson to introduce this agenda item. Mr. Paterson began by noting that regular face-to-face meetings of the IWRM Focal Points and Project Managers had provided the stimulus for discussions on water policy and had ultimately led to the development of plans for the consultative process for water policy development discussed during this meeting. He noted that these meetings had assisted with developing some good momentum and a team approach. It was suggested that the meeting may wish to consider whether it would be beneficial to continue this sub-regional collaboration and possible funding opportunities to support it.

9.2 Mr. Jorelik noted for a change it would be nice to hear that cost is not an issue and that this exchange between the Micronesian countries could continue on a regular basis. Mr. Wilson noted that, whilst cost is always an issue, if it is decided that face-to-face meetings are beneficial and the countries can demonstrate positive impacts as a result of the meetings, then it may be possible to allocate some resources to continue this sub-regional exchange.

9.3 Mr. Paterson noted that the demonstration projects had convened a 5 day sub-regional planning workshop in September 2010 using national funds to support their travel. He explained that this had been very useful for the Palau, FSM, and RMI projects in terms of learning from one another about the project reporting and planning requirements. He highlighted an example in which the Palau and FSM projects had shared information about sediment control practices developed in Palau which could be applied in the FSM project activity to fence the Nanpil dam and build a new access road with associated vegetated buffer zone.

9.4 Ms. Thomas expressed her view that these regular meetings had been very useful for her and suggested that where possible such meetings of demonstration project managers should be organised in the month prior to the annual RSC meetings. Ms. Thomas explained that project managers in the past had been expected to work very late in the evenings during RSC meetings. Ms. Thomas noted that this made it difficult to fully participate in the evening social events which are often very useful for informal information exchange and learning.

9.5 Mr. Aitaro expressed his view that it may be useful to organise a follow-up meeting of the group in April to report on the results of the National Water Summits and to discuss the development of the framework water policies. He noted that possible opportunities may also arise within the framework of the Micronesian Chief Executive Summits which are organised twice a year. Mr. Wilson noted that ultimately decisions to convene additional meetings will be based upon how well countries are performing, and urged all participants to give their best to making the planned summits a success. He suggested that in addition to having draft agenda's in place by 19<sup>th</sup> February, it would also be useful to have three or four of the key discussion papers finalised by that time also.

## **10. PARTNERSHIPS AND LINKAGES WITH OTHER PROJECTS AND PROGRAMMES, INCLUDING GEF PACC AND DISASTER**

10.1 The Chairperson, Mrs. Ehmes invited Mr. Paterson to introduce this agenda item. Mr. Paterson began by informing the meeting that efforts had been made to invite Micronesian representatives of the GEF funded Pacific Adaptation to Climate Change (PACC) project but no response had been received from the project coordinators. He expressed his view that regardless of this it would be beneficial for participants to ensure that PACC project staff and staff of other climate and disaster mitigation projects be invited to participate in the National Water Summits and preparatory activities. He noted that Micronesia's water systems are particularly vulnerable to increased climate variability and that this should be central to any water policies established. Similarly, the flood and drought proofing of water supply and sanitation systems are critical considerations for small atoll islands.

10.2 Mr. Aitaro and Ms. Ngirchechol noted that all efforts would be made in Palau to ensure close collaboration with the Palau PACC project which focuses on food security. Ms. Ngirchechol noted that the Palau Environmental Quality Protection Board was mandated to work with this project and was a

member of the Steering Committee. Ms. Barker-Manase explained that the RMI PACC Project Coordinator had only recently been appointed and that RMI EPA would do its best to engage with this project and to mainstream climate considerations into water related discussions over coming months. Ms. Barker-Manase suggested that RMI EPA would also approach the PACC project with respect to co-financing of the National Water Summits.

10.3 Regarding the co-financing of the national IWRM policy initiatives it was agreed that the countries would aim to raise co-financing at the ratio of 1:1. Mr. Wilson issued a challenge to the countries by highlighting that he would be prepared to issue a prize to the country which raised the highest co-financing for the Summits. It was noted that an effort would be made to establish a facility of the Pacific IWRM website in which countries could add information about co-financing raised as the commitments were made. He noted that to enter the competition, countries simply needed to submit a statement of the membership of their National Water Committee and draft agenda for the National Water Summits by 19<sup>th</sup> February 2010.

## **11. FINALISATION OF COMMUNICATION STRATEGIES AND MEDIA ENGAGEMENT PLANS IN SUPPORT OF NATIONAL IWRM INITIATIVES**

11.1 The Chairperson, Mrs. Ehmes invited Mr. Chung to introduce this agenda item. He explained that this agenda item was aimed at generating ideas about the types of communications events and strategies needed to promote the upcoming water summits and to get commitment from stakeholders to contribute to water policy development and implementation.

11.2 Mr. Chung highlighted the “*Blue Water Ribbon*” concept which he and the RMI EPA team had come up with during his recent visit to Majuro Atoll. He explained that this concept was based around the iconic pink “*Cancer Ribbon*” or red “*HIV Ribbon*” campaigns. He suggested that the ribbons could be presented under a banner of “*Water for Life*” and be accompanied by a set of values which the blue ribbons represent. He suggested further, and the meeting agreed, that this could be an excellent marketing tool for the Summits and water conservation in Micronesia generally. It was agreed that the “*Blue Water Ribbon*” concept would be used a key marketing tool for the Summits.

11.3 In considering other options, Ms. Phillip suggested that in the RMI they could possible organise a “*Water Ball*” including dinner and dancing. Ms. Phillip suggested that such an event might not only be useful in terms of raising awareness amongst senior government officials and traditional leaders, but if designed well it could also represent a significant fund raising opportunity.

11.4 Mr. Aitaro suggested that countdown billboards could be erected in Koror, Kolonia Town, Laura, and Delap to keep people informed in the lead up to the summits. He noted that these billboards could display prominent and simple messages on the importance of ensuring continued access to safe drinking water and sanitation. He suggested further that these messages could be changed regularly and promoted on local television news and in newspapers. In terms of using television and print media, Mr. Jorelik expressed his view that it is often more effective to do interviews with regular members of the community about how the issues at hand effect their day-to-day lives.

11.5 Mr. Clayton Santos of Pohnpei Environmental Protection Agency suggested that the group should also consider longer term strategies aimed at engaging schools and teachers in this process. Mr. Airens explained that one of his ideas for FSM was to have the Telecom recharge cards printed with messages promoting water conservation and the National Water Summits. He suggested also that local water bottling plants could be approached to put promotion messages on their bottles.

## **12. ANY OTHER BUSINESS**

12.1 The Chairperson, Mrs. Ehmes invited participants to raise any other matters they considered of interest to the group. Mr. Aitaro began by noting that the involvement of Roll'em Productions in the meeting had been good and requested that if possible they could be invited to film any water related sessions at the Micronesian Traditional Leaders Conference, Micronesian Chief Executive Summit, and the National Water Summits. He noted that this would provide a good audio-visual record of the steps taken towards improving water resource management through the Pacific IWRM initiative.

12.2 There followed a discussion of the Micronesian Chief Executive Summit and Mr. Wilson expressed his view that if water was added to the agenda that he would prefer one of the group, perhaps Mr. Aitaro, make the presentation to the Chief Executives. Mrs. Ehmes expressed her view that in order to make this effective they would need to ensure their Presidents are fully briefed in advance and possibly also supported by a water or policy specialist.

12.3 Mr. Paterson proceeded to distribute a work plan with performance indicators that national teams could follow over coming months. This is included in this report in Annex 10.

### **13. CLOSURE OF THE MEETING**

13.1 The Chairperson, Mrs. Ehmes closed the meeting at 5.00pm on 11<sup>th</sup> November 2010.

## ANNEX 1

### List of Participants

#### Micronesia Sub-Regional Planning Workshop for Implementation of the EU IWRM National Planning Programme

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## ANNEX 2

### List of Documents

#### Micronesia Sub-Regional Planning Workshop for Implementation of the EU IWRM National Planning Programme

##### Discussion Documents

SOPAC/EU/IWRM/Micronesia.1/1	Provisional Agenda
SOPAC/EU/IWRM/Micronesia.1/2	Provisional Annotated Agenda
SOPAC/EU/IWRM/Micronesia.1/3	Report of the Meeting ( <i>this document</i> )
SOPAC/EU/IWRM/Micronesia.1/4	The United Nations General Assembly Resolution Declaring the Right to Safe and Clean Drinking Water and Sanitation as a Human Right
SOPAC/EU/IWRM/Micronesia.1/5	Developing a Regional Strategy for Water and Sanitation
SOPAC/EU/IWRM/Micronesia.1/6	IWRM Project Logframes for the Republic of Palau, the Federated States of Micronesia, and the Republic of the Marshall Islands
SOPAC/EU/IWRM/Micronesia.1/7	Proposed Inputs, Process, and Anticipated Outputs of Actions Leading to National Water Summits
SOPAC/EU/IWRM/Micronesia.1/8	Human Resource Needs to Support National Initiatives for Water Policy and Strengthened National Coordination of Government Service Delivery for Water and Sanitation
SOPAC/EU/IWRM/Micronesia.1/9	Draft Costed Work Plans for the Preparation and Conduct of National Water Summits on World Water Day 2011

##### Information Documents

SOPAC/EU/IWRM/Micronesia.1/Inf.1	Provisional List of Participants
SOPAC/EU/IWRM/Micronesia.1/Inf.2	Provisional List of Documents
SOPAC/EU/IWRM/Micronesia.1/Inf.3	Draft Programme

## **ANNEX 3**

### **Agenda**

- 1. OPENING OF THE MEETING**
  - 1.1 Welcome Address on Behalf of SOPAC
  - 1.2 Opening Prayer
  - 1.3 Welcome Address by a Traditional Leader from Pohnpei Island
  - 1.4 Official Opening by a Representative of the National Government of the Federated States of Micronesia
  - 1.5 Group Photograph
- 2. ORGANISATION OF THE MEETING**
  - 2.1 Introduction of Participants
  - 2.2 Election of Officers (Chairperson; Vice-Chairperson; and Rapporteur)
  - 2.3 Documentation Available to the Meeting
  - 2.4 Programme of Work and Arrangements for the Conduct of the Meeting
- 3. ADOPTION OF THE MEETING AGENDA**
- 4. STATUS OF THE REGIONAL PACIFIC IWRM INITIATIVE**
  - 4.1 Status of the EU IWRM National Planning Programme and Linkages with the GEF Project
  - 4.2 Country Reports on the Status of the National IWRM Demonstration Projects
  - 4.3 Update from the Regional IWRM Technical Advisory Group
  - 4.4 Consideration of a Proposed Process for Development of a Pacific Regional Water and Sanitation Strategy, including recent UN Resolution Declaring Safe Water as a Human Right
- 5. CONSIDERATION OF NATIONAL PROGRAMMES FOR WATER POLICY DEVELOPMENT AND COORDINATION MECHANISMS**
  - 5.1 Review of Proposed IWRM Policy Activities in National Logframes and Anticipated Results
  - 5.2 Identification of Required Inputs and Expected Outputs for a Programme of Activities Leading to National Water Summits
- 6. RESOURCE NEEDS TO SUPPORT WATER POLICY DEVELOPMENT AND NATIONAL WATER SUMMITS**
  - 6.1 Human Resource Needs
  - 6.2 Planning the Use of EU IWRM Funding Allocations for National Water Policy Activities
- 7. COMPILATION AND REVIEW OF INPUTS TO NATIONAL WATER POLICY PLANNING**
- 8. PREPARATION OF DRAFT AGENDAS FOR NATIONAL CONSULTATIONS AND WATER SUMMITS**
- 9. CONSIDERATION OF POSSIBLE MECHANISMS FOR STRENGTHENING INFORMATION EXCHANGE FOR WATER RESOURCE MANAGEMENT IN THE MICRONESIA SUB-REGION**
- 10. PARTNERSHIPS AND LINKAGES WITH OTHER PROJECTS AND PROGRAMMES, INCLUDING GEF PACC AND DISASTER**
- 11. FINALISATION OF COMMUNICATION STRATEGIES AND MEDIA ENGAGEMENT PLANS IN SUPPORT OF NATIONAL IWRM INITIATIVES**
- 12. ANY OTHER BUSINESS**
- 13. CLOSURE OF THE MEETING**

## Annex 4 – IWRM Demonstration Project Logframes

### IWRM LOGFRAME FOR THE REPUBLIC OF PALAU

<b>Goal</b>	<b>The purpose of this project is to promote proper watershed and integrated management practices in the Ngerikiil Watershed. The promotion of proper watershed practices will reduce land degradation while preserving ecosystem stability, functions, and services such as soil and watershed protection, water purification and nutrient retention.</b>
<b>Purpose</b>	<b>By improving the quality of water in the Ngerikiil River the project will improve water quality, decrease the amount of chemicals needed to treat the water, and establish effective institutional arrangements to protect the Ngerikiil watershed.</b>

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
<b>Component 1: Improvement of Surface Water Quality in the Ngerikiil Watershed</b>					
1	To improve surface water quality in the Ngerikiil Watershed			That the water source is potentially at risk. This is the water supply that supplies water to 80% of the population of Palau.	
1.1	Survey pollutant sources				
1.1.1	Pollutant source and sanitary survey of the lower section of the Ngerikiil River	Land use, pollutant sources, riparian zones, river water use, and water quality (DO, pH, Salinity, coliform) in the lower section of the Ngerikiil River identified to establish Year 1 baselines by 30 June 2010	Report on land use, pollutant sources, riparian zones, river water use, and water quality in the lower Ngerikiil Watershed reviewed and endorsed by Palau's IWRM Steering Committee	Capacity and access to consultants. Sampling strategy provides data representative of baseline conditions in the Ngerikiil River	Environmental Quality Protection Board and Bureau of Agriculture
	Audience: Airai State and National Government Product: Press release and briefing paper, reference to photos collected during survey, particularly those depicting pollution Distribution: Local media and project website				
1.1.2	Land use, pollutant sources (current and potential), riparian zones, and water uses in the lower Ngerikiil River mapped	ArclInfo GIS map of land uses (market gardens, household farms, aquaculture, piggeries, hatcheries), pollutant sources (current and potential), distribution and extent of riparian zones, and water uses/sites in the Ngerikiil River produced by 31 July 2010	GIS map of land use, pollutant sources (current and potential), riparian zones, and water uses in the lower Ngerikiil River reviewed and endorsed by Palau's IWRM Steering Committee	Capacity and access to GIS mapping specialist Survey provides data and information representative of existing land uses, pollutant sources, riparian zones, and water use	Environmental Quality Protection Board and Palau Automated Land and Resources Information System (PALARIS)
	Audience: everyone Products: map and Google Earth kmz file Distribution: public display of map, TV news story, project website				

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
1.1.3	Establishment of buffer zones for pollutant reduction in the Ngerikiil Watershed	Buffer zones planted adjacent to key pollutant sources in the lower Ngerikiil Watershed by end 2010 Increased buffer zone area in the Ngerikiil Watershed	Length, breadth, and percent cover of buffer zones adjacent to the pollutant sources identified during EQPB's 2010 pollutant and sanitary survey	Willingness of landowners to use land for buffer areas Availability of seedlings and suitable climatic and soil conditions for planting	Environmental Quality Protection Board, Bureau of Agriculture, and Landowners
	Communications Event: Micronesian games athletes tree planting Audience: sub-regional (Micronesia) Product: media advisory (all media in Micronesia), press release, web stories, video cast Distribution: all media (TV, radio, print)				
1.1.4	Best Management Practices to reduce pollutant loading trialed in the Ngerikiil Watershed and upscaling plan agreed with landowners	One year trial of pollution reduction initiative at one market garden/livestock area, and comparison of pollutant loading with control farm completed by end 2011 Results of trial used as basis for development of best pollution management practices amongst landowners by June 2012	Report on the trial of best pollution management practices reviewed and endorsed by the IWRM Steering Committee by end 2011 Up-scaling plan for pollution management agreed amongst landowners and adoption of best management practices by farmers	Trial design provides significant reduction in pollutant loading Control and trial sites are representative of existing land use and farming practices	Environmental Quality Protection Board, Bureau of Agriculture, Landowners, and Palau Community College Cooperative Research Extension Office
	Audience: land owners, farmers, other GEF IWRM demonstration projects Product: report, flyer/poster and brochure (possible press release based on findings) Distribution: web story, handouts, media (based on findings)				
1.2	Revegetate riparian zones to minimize sedimentation levels in the Ngerikiil River				
1.2.1	Priority riparian zones of the Ngerikiil River identified and revegetated with native tree species	Priority riparian zones of the Ngerikiil River identified and agreed by IWRM Steering Committee by September 2010. Priority zones revegetated by June 2012.	Ground-truthed GIS maps of riparian zones of the Ngerikiil River pre and post revegetation. Percentage increase in cover and width of the Ngerikiil's riparian zones.	Availability of native plant species and ability to propagate seedlings Native plant species provide adequate bank stability and assist with reducing sedimentation	Environmental Quality Protection Board and Bureau of Agriculture
1.2.2	Removal of invasive plant species from priority riparian zones in the lower Ngerikiil Watershed	Invasive plant species in the lower Ngerikiil Watershed identified and percent cover estimated by September 2010. Physical removal of invasive plants from priority zones by end 2010.	Ground-truthed GIS maps of riparian zones of the Ngerikiil River pre and post invasive plant removal. Percentage reduction in cover of invasive species.	Physical removal of invasive plants and replanting of native species is effective in reducing cover of invasive species	Bureau of Agriculture and Community Volunteers

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
	Event: Earth Day 2011 and 2012 (Billion Acts of Green) (Activities 1.2.1 and 1.2.2) Audience: Public Product: Press Release, photographs, video footage				
1.3	Establish long-term monitoring program				
1.3.1	Compilation of water quality and water treatment data from the Koror-Airai Water Treatment Plant in a centralised database	Database of water quality data and water treatment data developed, maintained, and updated. EQPB laboratory staff and Koror-Airai Water Treatment Plant staff trained in data collection and management.	Database containing all available water quality data for the Ngerikiil River Laboratory staff trained	Capacity to populate database with historic datasets Sufficient buy-in from EQPB and water treatment plant staff to ensure regular database updating Expertise to maintain database	Environmental Quality Protection Board and Bureau of Public Works
1.3.2	Operational water quality monitoring program for the Ngerikiil River and receiving coastal waters	Water quality sampling strategy developed, reviewed, and endorsed by the IWRM Steering Committee Monthly water quality monitoring visits and necessary laboratory analysis undertaken Water quality database updated monthly with new and additional data	Agreed water quality sampling strategy Monthly water quality data and updated database	Capacity of EQPB to make staff available for monthly sampling Availability of sampling and laboratory equipment	Environmental Quality Protection Board
1.3.3	Operational water quantity monitoring program for the Ngerikiil watershed	Water quantity data collected monthly	Data compiled by EQPB staff	Externally funded activity, with associated risks, including ongoing drivers to deliver monitoring program that is consistent with the needs of this activity	Pacific Hydrological Cycle Observing System Project (HYCOS)
1.3.4	Quality of storm water runoff from the Compact Road assessed and monitored	Annual water quality data (metals, petroleum, inorganics) from Compact Road runoff collected	Water quality data compiled by EQPB staff	That the sampling strategy provides representative data	Environmental Quality Protection Board and Design and Engineering Office, Bureau of Public Works
	Audience: Koror and Airai residents, politicians Product: public water gauge billboard, press release for launch, monthly media update, water bottle labels Distribution: billboards at key locations (e.g. EQPB, Airport)				
<b>Component 2: Drainage Mitigation</b>					

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
2	To improve the quality of water draining to the Ngerikiil River			We assume that the existing conditions are contributing to decreased water quality. Increased development (additional contributing factors) presents a risk	
2.1	Survey of storm water drainage lines from the Compact Road in the Ngerikiil Watershed, and identification of options for reducing impacts of runoff	Survey conducted and report reviewed and endorsed by IWRM Steering Committee by 30 September 2010. Report to include recommendations regarding management of storm water from Compact Road.	Report and agreed recommendations for storm water management from the Compact Road	Survey period is representative of conditions affecting storm water drainage in the Ngerikiil Watershed	Environmental Quality Protection Board and Design and Engineering Office, Bureau of Public Works
2.2	Recommendations from 2.1 regarding management of storm water drainages followed through	Management strategies to reduce impacts of storm water drainages from the Compact Road in place by December 2011	Management plans for all Compact Road Storm water drainages in the Ngerikiil Watershed	Need for management of storm water drainage from the Compact Road Financial and human resources to meet recommendations from Activity 2.1	Environmental Quality Protection Board, Design and Engineering Office, Bureau of Public Works, Bureau of Agriculture, and Airai State
2.3	Awareness of the impacts of storm water runoff and mitigation measures raised among construction contractors	Storm water management workshop convened by December 2009 Examples of inappropriate and best practices compiled into public awareness materials and distributed to constructed contractors by December 2010 80 percent of Airai State construction projects following recommended best practice principles	Workshop convened and participated in by key construction contractors operating in Airai State Public awareness materials on best practices in managing storm water runoff from constructed sites produced	Adequate participation by construction contractors	Environmental Quality Protection Board
	Audience: construction contractors Product: PowerPoint presentation, brochure, and manuals Distribution: delivered as part of licensing provisions				
<b>Component 3: Improvement of Biodiversity Bioindicators</b>					
3	To sustain biodiversity in the Ngerikiil Watershed			We assume that we have the capacity and access to consultants. Coordinating finances with	

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
				availability of consultant presents a risk	
3.1	Monitoring of ecosystem health through bioindicators				
3.1.1	Bio-indicator programme, including sampling protocols, developed for the Ngerikill Watershed	Report outlining planned indicator species groups, sampling techniques, study sites, data collection and analysis, and data management discussed and endorsed by the IWRM Steering Committee by end 2010	Report outlining selected species groups, methodology, and data management IWRM Steering Committee members familiar with use and limitations of bio-indicators in assessing effectiveness and limitations of management interventions	Availability of specialists with Palau invertebrate/biodiversity assessment experience	Environmental Quality Protection Board and Palau National Museum (Natural History unit)
3.1.2	Capacity built for bio-indicator data collection, management, and analysis	One staff of EQPB trained in sampling techniques, species identification, and data management and analysis by end 2010	EQPB staff capable of conducting bio-indicator field surveys, species identification, and calculation of key diversity and abundance indices	Availability of specialist trainers Continuity of EQPB staffing arrangements	Environmental Quality Protection Board and Palau National Museum (Natural History unit)
3.1.3	Review and compilation of existing data sources for bio-indicators and development of bio-indicators database	Meta-database of existing data sources developed and endorsed by IWRM Steering Committee by December 2010 Relational database for bio-indicators data developed and maintained by EQPB by end 2010	Meta-database of existing data Relational database for bio-indicators data	Accessibility to data from past and ongoing projects Sufficient scientific input into design of fields and queries for relational database	Environmental Quality Protection Board and Palau National Museum (Natural History unit)
3.1.4	Monthly collection of bio-indicators data for the Ngerikiil Watershed, including aquatic and terrestrial invertebrates and bird population surveys to establish baselines	Monthly field surveys conducted at and data compiled in bio-indicators database (3.1.3)	Field survey reports and data	Availability of skilled field and laboratory technicians	Environmental Quality Protection Board and Palau National Museum (Natural History unit)
	Audience: students, tourists, naturalists Product: poster of key species in Ngerikiil Watershed, postcards Distribution: schools, shops, and resorts				
	Audience: school science students Product: participatory data collection programme for students, including field guide Distribution: High Schools and Community College				

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
<b>Component 4: Policy / Awareness</b>					
4	To provide recommendations to policy makers			We assume that the success of this project is dependent on policy intervention.	
4.1	Feasibility study including options and recommendations for the development of a "Payment for Ecosystem Services" scheme for the Ngerikiil Watershed	Feasibility report reviewed and endorsed by the IWRM Steering Committee by end 2011	Report including options and agreed recommendations	Available human resource capacity required to effectively reconcile scientific, technical, and political issues influencing the Ngerikiil Watershed	Environmental Quality Protection Board, Palau Conservation Society, and consultant
	Audience: Palau residents Product: report, flyer press release, feature story, interviews with Governor of Airai State Distribution: web story, handouts, and media				
4.2	Study of socio-economic impacts of recommended options for a "Payment for Ecosystem Services" (PES) scheme for the Ngerikiil Watershed, including identification of barriers to the uptake of the PES concept	Survey design reviewed and endorsed by IWRM Steering Committee by September 2010 Survey executed by December 2010 Report including estimates of willingness-to-pay for ecosystem services of the Ngerikiil Watershed, and socio-economic effects of watershed protection on local communities and Airai State development endorsed by the IWRM Steering Committee by March 2011	Report including estimates of willingness-to-pay for ecosystem services and socio-economic benefits and costs of watershed protection	Available human resource capacity required for survey design Willingness of water users to participate in survey	Environmental Quality Protection Board, Palau Conservation Society, and consultant
	Audience: Politicians, water users Product: press releases, news stories, specific communications strategy Distribution: All media (TV, press, Internet)				
4.3	Scoping study of necessary institutional and legislative reforms required to implement "Payment for Ecosystem Services" scheme in the Ngerikiil Watershed	Stakeholder consultation on outputs of socio-economic impact study convened by June 2011 Scoping of institutional and legal needs completed, and reviewed and commented on	Consultation with full representation of key stakeholder groups convened Draft report commented on by land and water users, government officials, IWRM Steering Committee Final report endorsed by IWRM Steering Committee and presented to relevant	Available human resource capacity required to effectively reconcile scientific, technical, and political issues influencing the Ngerikiil Watershed	Environmental Quality Protection Board and consultant

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
		by stakeholders by September 2011 Report including proposed recommendations endorsed by IWRM Steering Committee and presented to relevant government officials	government officials		
4.4	Operational Payment for Ecosystem Services scheme for the Ngerikiil Watershed	Institutional and legislative basis for PES scheme in place	Payments made by water users Payment to land owner for protection	Government and land and water user support for the concept	Environmental Quality Protection Board
<b>Component 5: Documentation</b>					
5	To develop and implement a strategy to replicate outcomes in other parts of Palau and the Pacific				Socio-Economic
5.1	Replication strategy developed and implemented				
5.1.1	Replication strategy developed with input from key stakeholders	A plan identifying catchment management needs at a national level, identifying mechanisms for transferring learnings and tools and key policy and financial enabling factors	Plan identifying catchment management needs at a national level, identifying mechanisms for transferring learnings and tools and key policy and financial enabling factors reviewed and Endorsement by Steering Committee	Plan coming out of the Ngerikiil Watershed Demonstration Project will be adequate to identify catchment management needs at a national level.	
5.1.2	Recommendations from 5.1.1 regarding replication from the Ngerikiil Watershed Demonstration Project transmitted to the appropriate agencies				
<b>Component 6: Establish Long-term Sustainable Governance Body</b>					
6	Establish Long-term sustainable governance body				
6.1.1	Community catchment committee reviewed and reactivated	TOR developed and signed the Ngerikiil Working Group by June 2013	TOR endorsed by the Airai State Governor	Reliant on donors providing support to strengthen the program, with associated funding, commitment, integration, resources and timing concerns; Assumed that sufficient information is obtainable to provide confidence in decisions, adequate resources available, adequately skilled people can be attracted and retained	EQPB, Airai State Government

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
	Management plan for Ngerikiil watershed	Management plan created and approved by the Ngerikiil Working Committee by June 2013	Management plan endorsed by State governor	Continuity without outside funding	Airai State government
	Establish sustainable funding mechanism	PES established	Approval of increase in water rates by Congress, implementation by Finance Voluntary contributions by tourists	Assumed that Congress will buy-in	EQPB, ASG
	Establish long-term National support for the Ngerikiil Working Group	Become a member of the Protected Areas Network	Watershed becomes a nationally recognized Protected Area	Rotating funds will be available for implementation of management plan	EQPB, PAN, ASG
<b>Component 7: Successfully deliver the Palau demonstration project</b>					
7	Successfully deliver the Palau demonstration project				
7.1	Project Management Unit deliver successful sustainable strategies				
7.1.1	Establish Project Management Unit for the GEF Funded Ngerikiil Watershed Demonstration Project	Project Manager hired housed at EQPB by 30 August 2009. Letters of Agreement between SOPAC and EQPB reviewed and endorsed by 1 September 2009.	Contract between EQPB and the Ngerikiil Watershed Demonstration Project Manager signed by 30 August 2009. Letters of Agreement between SOPAC and EQPB endorsed and transmitted to Regional Project Management Unit.	The project manager would have enough support on island/in-house to properly run the project.	Environmental Quality Protection Board
7.1.2	Ngerikiil Watershed Stakeholders and their roles and responsibilities identified	Register of stakeholder roles, expectations and responsibilities, reviewed annually	Annual register of the Ngerikiil Watershed Stakeholder roles, expectations and responsibilities endorsed by the IWRM Steering Committee.	Stakeholders are representative of the Ngerikiil Watershed	Project Manager and IWRM Steering Committee
7.1.3	GEF Funded Ngerikiil Watershed Demonstration Project Reports	1 Progress report per year outlining what has been accomplished, what still needs to be accomplished and problems that were encountered.	PCU Reporting		Project Manager
7.1.4	Develop and Implement Engagement Strategy that facilitates increased engagement, identifying mechanisms for communicating issues, outputs and outcomes to key stakeholders and incorporates approaches targeting engagement opportunities and capacity	Engagement strategy Implemented  Engagement Indicators	Endorsement of strategy by Steering Committee  Project reporting		

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
	building strategies for the whole community				
7.1.5	Develop and implement Communication Strategy	Identification of what needs to be communicated, who we are communicating to, how we are going to communicate.	Newspaper Advertisement, Radio or TV spot, Press Release, pamphlets, school visits, etc.	Financial and Human resources to effectively deliver message.	-Environmental Quality Protection Board and Palau Conservation Society
7.1.6	Develop and implement capacity building strategy	Generic targets, such as increased awareness and community capacity  Specific capacity targets such as: Capacity developed for Community and Government to independently operate PES  Capacity developed for community to undertake ongoing biological monitoring	Surveys  Steering Committee endorsement of PES operated by community and government  Participatory M&E programs endorsed by Steering Committee		
7.1.7	Manage budgets, deliverable and timelines	Financial and Narrative Report outlining what has been accomplished, what still needs to be accomplished and problems that were encountered submitted to the PCU on a quarterly basis.	Financial and Narrative Report endorsed by the PCU on a quarterly Basis.	The PMU will be able to get the financial support to the Partners and consultants for the deliverables to be accomplished on time.	Project Manager/EQPB
<b>NATIONAL POLICY AND LEGAL REFORMS FOR IWRM</b>					
P.1	Terms of Reference and Identification of Members for a National Water Committee	Terms of Reference developed and endorsed by the IWRM Steering Committee by end 2010 Proposed list of members and justification for involvement by end 2010	Terms of Reference and Membership List	High level understanding by the Minister of Natural Resources, Environment, and Tourism of the need for and purpose of the Committee	EQPB and MNRET
P.2	Executive Order from President for creation of National Water Committee	Draft Executive Order drafted and reviewed by IWRM Steering Committee by end 2010 for submission to cabinet by December 2010	Executive Order	Sufficient high level political buy-in	EQPB and MNRET

Output No.	Output	Key Indicators	Means of Verification	Assumptions / Risks	Responsible Partner(s)
		Proclamation of Executive Order by February 2011			
P.3	National Water Summit to inform stakeholders of: (a) National Water Committee Mandate and Responsibilities; and (b) proposed process for policy and legislative reform for IWRM and WUE	National Water Summit convened on World Water Day (22nd March) 2011 Stakeholders informed of Executive Order and proposed process for IWRM and WUE policy and legal reform. Comments received by 22nd April 2011	National Water Summit convened Policy paper outlining: membership; ToR/mandate; and responsibilities of National Water Committee; and agreed steps for undertaking policy and legislative reform for IWRM and WUE in Palau.	Sufficient high level political buy-in Sufficient interest amongst stakeholders to comment on proposed process	EQPB and MNRET
P.4	Review of existing policies and laws relating to water and sanitation, and identification of needs with respect to national policy and legislative reform	Policy Adviser recruited by February 2011 Policy report reviewed and endorsed by National Water Committee and circulated for public comment by June 2011 Final report published and commented by July 2011	Policy review report	Availability of specialist with expertise required to effectively reconcile scientific, technical, and political issues relating to IWRM and WUE in Palau	EQPB, MNRET, and consultant
P.5	Draft national water policy and recommended legal reforms endorsed by National Water Committee for submission to Cabinet	Public hearing to present recommendations to stakeholders September 2011 Comment received and final draft policy submitted to Cabinet by October 2011	Public hearing records Draft policy document Final draft submitted to Cabinet	Adequate time to ensure sufficient buy-in from senior officials	EQPB, MNRET, and consultant

## IWRM LOGFRAME FOR THE FEDERATED STATES OF MICRONESIA

**Project Goal:** Sustainable Integrated Water and Waste Water Management in the Federated States of Micronesia  
**Purpose:** Improvement of drinking water quality and significant reduction in pollutants entering the fresh and marine water around Pohnpei and Chuuk States.

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
<b>COMPONENT 1 : Watershed Protection and Management</b>					
1	Output				
<b>1.1 Nett Watershed Forest Reserve (WFR) boundary line survey and legally demarcated</b>					
1.1.1	Community agreement in Nett Municipality to support the survey and legal demarcation of the Nett Watershed Forest Reserve	Consultation with Village Chiefs on need for demarcation of Nett Watershed boundary conducted by September 2010 Community consultation and agreement on the role of Nanpil, Eirke, Meitik, and Kahmar Villages in boundary demarcation conducted by October 2010	Summary reports of consultation meetings including record of key concerns, watershed issues and agreements reached	Adequate buy-in and sense of ownership among village chiefs Adequate buy-in and support from paramount chiefs	GEF IWRM PMU, Village Chiefs, Department of Land and Natural Resources, CSP
Audience: Village Chiefs from Nett Watershed Product: Meeting including delivery of information brochures depicting area and proposed boundary Distribution: public					
1.1.2	Demarcation of the Nett Watershed Boundary Line, including community involvement in boundary demarcation with monuments and GPS data collection	Locally based surveyor identified in consultation with village and paramount chiefs by December 2010 Survey report reviewed and endorsed by the IWRM Steering Committee and Village Chiefs by March 2011  Survey and boundary markers/monuments erected by March 2011 Survey and boundary	Survey team contract, including terms of reference and key deliverables Endorsed survey report Boundary monuments erected	Adequate buy-in and sense of ownership among village chiefs Adequate buy-in and support from paramount chiefs Availability of surveyors and labour for monument erection	GEF IWRM PMU, Village Chiefs, Department of Land and Natural Resources, CSP

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
		markers/monuments erected by March 2011			
1.1.3	GIS and community produced maps of the Nett Watershed Forest Reserve, including agreed boundary line	Official map of Nett Watershed Forest Reserve boundary line and marker location produced by May 2011 Community produced maps with watershed boundary lines, monument locations, and traditional village landmarks produced by June 2011	Official map displayed at the Nett Municipal Government Office Community map(s) of agreed boundary line, and monument locations, and traditional village landmarks displayed at key locations	GIS mapping expertise Buy-in and/or agreement from communities in identifying traditional village landmarks	GEF IWRM PMU, Village Chiefs, Department of Land and Natural Resources, CSP
<p>Audience: People of Nett, Sokehs, and Kitti Municipalities/other countries  Product: Local language video with subtitles depicting monument installation and mapping of traditional village landmarks  Distribution: local and regional (OTV) TV, regional and national IWRM websites</p>					
1.2 Capacity Building for Improved Watershed Management in Nett Municipality					
1.2.1	Capacity of Conservation Society of Pohnpei (CSP) terrestrial program staff strengthened for improved watershed management in the Nett Municipality, including: forest monitoring; best practices for invasive species eradication; grow low sakau campaign; and piggery and human waste management.	Improved capacity of four (4) CSP terrestrial program staff to: Conduct Pohnpei State forest surveys, including data collection, analysis, and reporting by August 2011 Follow the Pohnpei Invasive Species Task Force (PIST) protocol for environmentally friendly invasive species removal and disposal techniques Better inform and support sakau farmers in methods for improved sakau yields from low land farms Support land owners to meet Pohnpei EPA standards with respect to pig pen and pit toilet site selection and design requirements	Summary report of training events on: Forest surveys PIST invasive species removal protocols Grow low sakau production methods EPA standards for pig pen and toilet site selection and design Complete forest survey data sets Increase number of low grow sakau farmers supported by CSP Decrease in number of upland forest clearings	Availability of expertise to train and oversee work of CSP terrestrial program staff Continuity of employment of CSP terrestrial program staff Institutional knowledge, skills and experience retained by CSP	GEF IWRM PMU, CSP, PIST, EPA, Pohnpei State

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
<p>Audience: Conservation Society of Pohnpei, Terrestrial staff  Product: Training workshops on Invasive species detection and eradication, and Grow low sakau campaign  Distribution: Nett Municipality and public</p>					
1.3 Informing Sustainable Watershed Management in Nett Municipality					
1.3.1	Feasibility study and assessment of socio-economic impacts of a "Payment for Ecosystem Services" (PES) scheme for the Nett Watershed Forest Reserve, including identification of barriers to the uptake of the PES concept	Survey design reviewed and endorsed by IWRM Steering Committee by December 2010 Survey executed by March 2011 Report including estimates of willingness-to-pay for ecosystem services of the Nett Watershed Forest Reserve, and socio-economic effects of watershed protection on local communities and Pohnpei State development endorsed by the IWRM Steering Committee by July 2011	Report including estimates of willingness-to-pay for ecosystem services and socio-economic benefits and costs of watershed protection	Available human resource capacity required to effectively reconcile scientific, technical, and political issues influencing the Nett Watershed Forest Reserve Available human resource capacity required for survey design and execution Willingness of water users to participate in survey	GEF IWRM PMU and CSP
1.3.2	Scoping study of necessary institutional and legislative reforms required to implement "Payment for Ecosystem Services" scheme in Pohnpei State	Stakeholder consultation on outputs of socio-economic impact study convened by September 2011 Scoping of institutional and legal needs completed, and reviewed and commented on by stakeholders by November 2011 Report including proposed recommendations endorsed by IWRM Steering Committee and presented to relevant government officials by December 2011	Consultation with full representation of key stakeholder groups convened Draft report commented on by land and water users, government officials, IWRM Steering Committee Final report endorsed by IWRM Steering Committee and presented to relevant government officials	Available human resource capacity required to effectively reconcile scientific, technical, and political issues influencing the Nett Watershed Forest Reserve Participation of stakeholders in consultations and review of recommendations	GEF IWRM PMU, PUC, Pohnpei State, and consultant
<p>Audience: Nett Municipality and consumer  Product: Questionnaire surveys, outreach programs, interviews, consultation meetings, workshops and TV  Distribution: Nett Municipality and public</p>					
1.4 Management Plan Development for the Nett Watershed Forest Reserve					
1.4.1	Review of existing information and data relating to the Nett Watershed Forest Reserve and	Report of the state of Nett Watershed Forest Reserve and its management produced by July 2011	Report including compilation of existing information and data Summary reports of consultation	Buy-in and participation of stakeholders in consultation process	GEF IWRM PMU

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
	the need for Management Plan development	Community consultation process on need and key elements for a Nett Watershed Forest Reserve Management Plan completed by March 2012 Key elements for Management Plan identified and agreed by IWRM Steering Committee by June 2012	meetings Report on key elements for Nett Watershed Forest Reserve Management Plan	Agreement between and among communities of the need for a Nett Watershed Forest Reserve Management Plan	
Audience: Communities of Nett Municipality Product: Consultation meetings and public announcements for the need of a watershed management plan Distribution: Nett Municipality and public					
1.4.2	Draft Nett Watershed Forest Reserve Management Plan, including updated information and data from 1.4.1 and targets, indicators, identified management actions, and funding mechanisms (e.g. PES)	Draft Management Plan produced by June 2013 Public review and comment of draft plan by July 2013 Draft management plan submitted to the Nett Municipal Government Legislature by August 2013 Draft management plan submitted to Pohnpei State Government Legislature by December 2013	Draft management plan Public submissions on plan Summary report of community inputs Legally endorsed Management Plan	Available technical expertise to design targeted, cost effective management interventions and funding mechanisms Support amongst Nett Municipality and Pohnpei State Government legislators for Watershed Management Plan	GEF IWRM PMU, IWRM Steering Committee, Nett and Pohnpei Governments
Audience: Nett municipal communities Product: workshops on management plan development Distribution: Nett Municipality, PUC, CSP and public					
1.5 Extension of examples of best practice and lessons learned from Nett Watershed in Chuuk State					
1.5.1	Review of existing information and data relating to Watershed Management in Chuuk State, including: (a) identification of the need for and barriers to IWRM and WUE management; and (b) selection of priority watershed for management.	Draft terms of reference and key deliverables for consultancy study agreed by IWRM Steering Committee by December 2010 Consultant identified and contracted by March 2011 Report of the state of Watershed Management in Chuuk State produced by December 2011	Terms of reference Consultant contract Field mission summary reports Final consultancy report	Available technical expertise to undertake study in Chuuk State Availability and access to data and information sources Willingness of communities and officials of Chuuk State to participate in review	GEF IWRM PMU and consultant
1.5.2	Identification and documentation of best practices and lessons learned in Nett Watershed Management for	Best practices and lessons learned in Nett Watershed Forest Reserve Management identified and documented annually	Annual lessons learned reports Extension and awareness materials and packages	Lessons and best practices align with needs of other watersheds/States	GEF IWRM PMU and CSP

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
	replication in Yap, Chuuk, Pohnpei, and Kosrae States	Extension and awareness materials promoting key lessons and best practices produced annually			
1.5.3	Promotion of best practices from Nett Watershed management for replication in resolving Chuuk State's priority IWRM and WUE management issues	Chuuk State Watershed Management Consultation to present findings of review report (1.5.1) by March 2012 Study tour of Chuuk State water and village leaders to Nett Municipality Watershed by June 2012 Preparation of technical exchange project from Nett Watershed Forest Reserve to priority Chuuk State watershed	Summary report of consultation Study tour involving representation of key water stakeholders and village leaders Project concept paper for funding of technical exchange between Pohnpei and Chuuk States (e.g. GEF Small Grants Programme project)	Preparedness of Chuuk Village leaders to participate in study tour to Pohnpei Available technical expertise in Chuuk State for the development of concept paper for technical exchange Availability of GEF SGP or similar funding opportunities	GEF IWRM PMU, Nett Municipal Government, Chuuk State Government, Village Leaders, and CSP
Audience: Chuuk state ( Yap and Kosrae) Product: Consultation meetings, Video, posters, Outreaches and power point presentation on "ridge to reef" approach. Distribution: Chuuk, Yap and Kosrae States					
	COMPONENT 2				
2	Protecting Fresh and Marine Water Quality (including grow low sakau demonstration plots; pig waste bio-gas demonstration; and pig waste dry litter demonstration)				
2.1 Survey pollutant sources					
2.1.1	Pollutant source and sanitary survey of the Nett Watershed	Land use, pollutant sources, riparian zones, river water use, and water quality (DO, pH, Salinity, coliform) in the Nett Watershed identified to establish Year 1 baselines by August 2010	Report on land use, pollutant sources, riparian zones, river water use, and water quality in the Nett Watershed reviewed and endorsed by IWRM Steering Committee	Access to data sources and information Sampling strategy for collection of new data provides information representative of baseline conditions in the Nett Watershed	GEF IWRM PMU, CSP, and EPA
2.1.2	Land use, pollutant sources (current and potential), riparian zones, and water uses in the Nett Watershed mapped	GIS map of land uses (household farms, piggeries, community gardens (e.g. taro, sakau), pollutant sources (current and potential), distribution and extent of riparian zones, and water uses/sites in the Nett Watershed produced by December 2010	GIS map of land use, pollutant sources (current and potential), riparian zones, and water uses in the Nett Watershed reviewed and endorsed by IWRM Steering Committee	Capacity and access to GIS mapping specialist Survey provides data and information representative of existing land uses, pollutant sources, riparian zones, and water use	GEF IWRM PMU, CSP, EPA, Nett Municipal Government, and IWRM Steering Committee

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
Audience: Nett Municipality Product: Reports, pollution map, Distribution: Nett Municipality and public					
2.2 Improving efforts to reduce sedimentation of the Nanpil River through testing and promotion of high yield grow low sakau methods					
2.2.1	Develop experimental design and methods for the comparison of grow low sakau methods (e.g. control v. pig pen dry litter v. chicken manure v. household waste compost fertilizers)	Study design developed and reviewed by regional PCU by June 2011 Design endorsed by IWRM Steering Committee and Pohnpei Farmers Association by July 2011	Endorsed study design report	Capacity and access to agricultural science expertise Support from Pohnpei Farmers Association Land availability and agreement amongst sakau farmers on study site selection	GEF IWRM PMU, CSP, and PFA
2.2.2	Experimental trials of high yield grow low sakau methods and fertilizer application methods	Study plots identified and prepared by December 2010 Study trials conducted during 2011-2013 Annual reports of study results produced	Study plots in place and experimental trials operating Annual reports of study results and progress	Availability of land for sakau plots Suitable and representative environmental/farming conditions	GEF IWRM PMU, CSP, and PFA
Audience: Nett Municipality Product: Demonstration sakau farm and photos of different fertilizers on grow low sakau Distribution: Nett Municipality and public					
2.3 Building Capacity of Pig Farmers in Nett Municipality to Improve Waste Management techniques for Reduced Organic Pollution of the Nanpil River					
2.3.1	Identification and development of techniques for the use of cocunut husk in dry litter waste management at one piggery in Nett Municipality	Community training workshop convened by March 2011 Pig farmer using waste and shredded coconut husk to produce compost by June 2011 Pig waste used as fertilizer for sakau grow low trial by June 2011 Method promoted for uptake by other farmers by December 2011	Training workshop conducted Fertilizer produced for grow low sakau trial	Support from farmers	GEF IWRM PMU, CSP, and PFA
Audience: Nett Municipality Product: A demonstration dry litter piggery, posters on dry litter piggery and training workshops Distribution: Nett Municipality and public					
2.3.2	Identification and development of techniques for the use of biogas digesters to treat pig waste in Nett Municipality	Community training workshop convened by March 2011 Pig farmer using biogas digester to treat waste by June 2011	Training workshop conducted Biogas digester in operation at pig farm Biogas used at farm level for	Support from farmers Availability and affordability of technology	GEF IWRM PMU, CSP, and PFA

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
		Pig farmer utilizing biogas as a farm energy source by December 2011	energy		
Audience: Nett Municipality Product: A demonstration biogas digester piggery , posters on biogas digester piggery and training workshops Distribution: Nett Municipality and public					
	COMPONENT 3				
3.1	Water Quality Monitoring and Planning				
3.1.1	Compilation of water quality and water treatment data from the Kolonia Water Treatment Plant in a centralised database	Database of water quality data and water treatment data developed, maintained, and updated. PUC staff and Kolonia Water Treatment Plant staff trained in data collection and management.	Database containing all available water quality data for the Nett Watershed Laboratory staff trained	Capacity to populate database with historic datasets Sufficient buy-in from PUC and Kolonia water treatment plant staff to ensure regular database updating Expertise to maintain database	GEF IWRM PMU and PUC
3.1.2	Operational water quality monitoring program for the Nanpil River and receiving coastal waters	Water quality sampling strategy developed, reviewed, and endorsed by the IWRM Steering Committee Monthly water quality monitoring visits and necessary laboratory analysis undertaken Water quality database updated monthly with new and additional data	Agreed water quality sampling strategy Monthly water quality data and updated database	Capacity of EPA to make staff available for monthly sampling Availability of sampling and laboratory equipment	GEF IWRM PMU and EPA
3.1.3	Operational water quantity monitoring program for the Nett Watershed	Water quantity (rainfall) data collected monthly	Data compiled by DTC&I staff	Externally funded activity, with associated risks, including ongoing drivers to deliver monitoring program that is consistent with the needs of this activity	Pacific Hydrological Cycle Observing System Project (HYCOS)
3.1.4	Develop water quality and safety baselines for the Nett Watershed Forest Reserve/Nanpil River	Compilation of water quality data and information regarding its variability (e.g. seasonal/annual) by June 2011 Baselines set by December 2011	Compilation of data Baselines agreed by IWRM Steering Committee	Sufficient data to enable setting of baselines	GEF IWRM PMU and EPA
Audience: Nett Municipality, Public Product: Public water billboard, newsletters on water quality issues Distribution: Nett Municipality and public					

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
COMPONENT 4 – POLICY AND PLANNING FOR IWRM AND WUE IN FSM					
4.1	Draft Terms of Reference and Identification of Members for a National Water Committee	Terms of Reference developed and endorsed by the IWRM Steering Committee by end 2010 Proposed list of members and justification for involvement by end 2010	Terms of Reference and Membership List	High level understanding by the Secretary of Resources and Development of the need for and purpose of the Committee	EU IWRM Focal Point, GEF IWRM PMU, IWRM Steering Committee
Audience: Public Product: An approved TOR, news letter Distribution: public					
4.2	National Round-Table Consultation(s) of Need for National Water Committee, and Identification of Mandate, Responsibilities, and Membership for such a Committee	Invitation from the President's Office to State Governors to participate in National Round-Table Nominations received from Governors for representatives to participate in discussion Round-table discussion convened with representation of all States by end 2010 Agreement on the need for, mandate and responsibilities, Terms of Reference, and Membership of a National Water Committee	Report of meeting Terms of Reference Draft list of parties to be represented on Committee	High level understanding by the Secretary of Resources and Development of the need for and purpose of the Committee Willingness of all States to participate in Round-Table and to progress national water policy reform	DR&D, EU IWRM Focal Point, GEF IWRM PMU, IWRM Steering Committee
Audience: Public Product: Letter of invitation for the round table for all four states Distribution: Yap, Chuuk, Pohnpei and Kosrae					
4.3	Executive Order from the President for creation of National Water Committee	Executive Order drafted and reviewed by IWRM Steering Committee by January 2011 for submission to cabinet by February 2011 Proclamation of Executive Order by February 2011	Executive Order	Sufficient high level political buy-in	DR&D, EU IWRM Focal Point, GEF IWRM PMU
Audience: Yap, Chuuk, Pohnpei and Kosrae Product: An executive order Distribution: Four states					
4.4	National Water Summit to inform stakeholders of: (a) National Water Committee	National Water Summit convened on World Water Day (22nd March) 2011 Stakeholders informed of Executive	National Water Summit convened Policy paper outlining:	Sufficient high level political buy-in Sufficient interest amongst	DR&D, EU IWRM Focal Point, GEF

Output No.	Output	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partner(s)
	Mandate and Responsibilities; and (b) proposed process for policy and legislative reform for IWRM and WUE	Order and proposed process for IWRM and WUE policy and legal reform. Comments received by 22nd April 2011	membership; ToR/mandate; and responsibilities of National Water Committee; and agreed steps for undertaking policy and legislative reform for IWRM and WUE in Palau.	stakeholders to comment on proposed process	IWRM PMU
4.5	Review of existing policies and laws relating to water and sanitation, and identification of needs with respect to national policy and legislative reform	Policy Adviser recruited by November 2010 Policy report reviewed and endorsed by National Water Committee and circulated for public comment by June 2011 Final report published and commented by July 2011	Policy review report	Availability of specialist with expertise required to effectively reconcile scientific, technical, and political issues relating to IWRM and WUE in FSM	DR&D, EU IWRM Focal Point, GEF IWRM PMU, Consultant
4.6	Draft national water policy and recommended legal reforms endorsed by National Water Committee for submission to Cabinet	Public hearing to present recommendations to stakeholders September 2011 Comment received and final draft policy submitted to Cabinet by October 2011	Public hearing records Draft policy document Final draft submitted to Cabinet	Adequate time to ensure sufficient buy-in from senior officials	DR&D, EU IWRM Focal Point, GEF IWRM PMU, Consultant
Audience: FSM national Government Product: Report on legal reform Distribution: National Government and State governments					

## IWRM LOGFRAME FOR THE REPUBLIC OF THE MARSHALL ISLANDS

Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
<b>Component 1: Strengthened Coordination for Integrated Land and Water Management at Laura, Majuro Atoll</b>					
1.1	Review of socio-economic and political factors influencing IWRM and Water Use Efficiency in the Laura Area of Majuro Atoll, including: (a) incentives; formal and informal institutions; and economic structures relating to water and land use in the Laura area; (b) recommendations for national level reform of water sector	Terms of Reference and Key Deliverables for study identified by August 2010 Consultant/personnel for study recruited by October 2010 Draft report presented to NIWRMTF and LIWLMAC for review and comment by January 2011 Final report endorsed by March 2011	Call for expressions of interest in appropriate national and regional media Consultant or RMIEPA staff contract List of comments from national and Laura committees Final endorsed report	In-country capacity and access to consultants able to address complex scientific, technical, socio-economic, institutional, and political factors influencing water resource management in Majuro/Laura	RMIEPA, GEF IWRM Project Management Unit (RMI), consultant
1.2	Revitalisation and Operation of a National Integrated Water Resource Management Task Force, to: (a) promote the effective development and management of water resources; (b) oversee development and implementation of a Laura Integrated Water and Land Resources Management Plan (LIWLRMP)	Terms of Reference; Membership List; and Programme of Work, including Meeting Schedule agreed between RMIEPA and water stakeholders by September 2010. Quarterly meetings of the National Integrated Water Resource Management Task Force, chaired by RMIEPA	Report of Inception Meeting to launch Integrated Water Resource Management Task Force, containing agreed Terms of Reference; Membership List; and Programme of Work. Minutes of quarterly meetings.	Sufficient buy-in/support from relevant government Ministries and agencies for Integrated Water Resources Management Demand from government officials for sitting fees	RMIEPA, GEF IWRM Project Management Unit (RMI), Ministry of Resources and Development
1.3	Formalise the Laura Integrated Water and Land Management Advisory Committee, including endorsement from the National Integrated Water Resource Management Task Force	Agreed Terms of Reference; Membership List; and Programme of Work, including meeting schedule by September 2010. Quarterly meetings of the Laura Integrated Water and Land Management Advisory Committee	Report of Meeting including agreed Terms of Reference; finalised Membership List; and Programme of Work 2010-2011 Minutes of quarterly meetings.	Sufficient buy-in/support from Laura landowners, farm operators, and private sector (including Marshalls Water and Sewage Company) Cost of sitting fees	RMIEPA, GEF IWRM Project Management Unit (RMI)
1.4	Develop and Implement a Laura Community Stakeholder Engagement Plan, including identification of roles and responsibilities of local partners in project implementation	Community Stakeholder Consultation Workshop(s) convened by December 2010 Roles of local partners in project implementation identified and stakeholder engagement plan	Documentation of consultation workshops (summaries, news items, audio-visual materials) Endorsed engagement plan	Local partner commitment to consultative process Conflict of interests between and among local community representatives and local partners (e.g. NGOs)	RMIEPA, GEF IWRM Project Management Unit (RMI), LIWLMAC

Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
		endorsed by LIWLMAC by March 2011			
1.5	Develop and Implement an IWRM and Water Use Efficiency Capacity Building Programme for the Laura Integrated Water and Land Management Advisory Committee	Capacity needs assessment of LIWLMAC conducted by September 2010 Capacity building programme developed by December 2010 Workshops conducted in conjunction with quarterly meetings of the LIWLMAC	Capacity needs assessment report, including survey results Report summarising capacity building programme Workshop documentation, audio-visual materials, e.g., (PowerPoint slides)	Availability of engaging and interactive training materials and activities Willingness of committee members to participate	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
1.6	Develop and Implement a Community Based Project to Foster Involvement of Women's Groups in Water Management and Decision-Making in the Laura Area	Project concept developed in conjunction with NGO and Women's Groups by December 2010 Project funding source identified by March 2011 Project operational and completed by December 2012	Project concept note and proposal to funding agency (e.g. GEF Small Grants Programme) Project approval and funding received Project implementation reviews and reports	Availability of funds for community projects on water in the Pacific Island Countries Commitment from NGO's and Women's Groups to develop and execute project	RMIEPA, GEF IWRM Project Management Unit (RMI), NGOs, and Women's Groups
<b>Component 2: Identification of Key Threats and Management Issues for the Laura Water Lens</b>					
2.1	Development of a fine scale topographical map of the Laura Area	Terms of Reference for survey agreed by LIWLMAC by July 2010 Consultant/personnel for study recruited by September 2010 Survey conducted and map produced by March 2011	Agreed Terms of Reference Consultant/personnel contracts Topographical map	Availability of surveyors	RMIEPA, GEF IWRM Project Management Unit (RMI), consultants
2.2	Review of sanitation and waste management systems in Laura, including: (a) identification of all septic systems and those requiring remediation; (b) solid waste disposal methods and sites; and (c) farm waste management. Summary of sanitation and waste management recommendations for Laura.	Terms of Reference for survey agreed by LIWLMAC by September 2010 Consultant/personnel for study recruited by December 2010 Review completed and report including recommendations produced by March 2011	Agreed Terms of Reference Consultant/personnel contracts Review report endorsed by LIWLMAC	Availability of suitable sanitation and waste management expertise Participation of landowners and	RMIEPA, GEF IWRM Project Management Unit (RMI), and consultant(s)
2.3	Review of the status of Laura water and land resources, including identification of current	Terms of Reference for survey agreed by LIWLMAC by December 2010	Agreed Terms of Reference Consultant/personnel contracts Review report	Availability of specialist with capacity to reconcile scientific, technical, and political issues	RMIEPA, GEF IWRM Project Management Unit

Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
	and projected impacts, and recommendations for land use zoning.	Consultant/personnel for study recruited by February 2011 Review completed and report produced by June 2011		relating to the Laura area	(RMI), and consultant(s)
2.4	Compilation of existing data and information to produce a GIS map of land use and potential sources of pollutants in the Laura area	Land use, pollutant sources, groundwater wells, and water quality (DO, pH, Salinity, coliform) for the Laura Water Lens mapped to establish baselines by June 2011	Report including maps of land use, pollutant sources, riparian zones, groundwater wells, and water quality of the Laura Water Lens reviewed and endorsed by the LIWLMAC	Capacity and access to information and data Existing information provides data representative of baseline conditions for the Laura Water Lens	RMIEPA, GEF IWRM Project Management Unit (RMI)
2.5	Identification of the benefits and costs of integrated water and land management in the Laura area with: (a) identification of water allocation issues; (b) tariffs and price mechanism; (c) possible extraction fee; and (d) possible cost sharing arrangements (e.g. polluter versus beneficiary pays).	Terms of Reference developed by March 2010 Initial survey of stakeholders and information gathering by June 2010 Draft report produced for review by LIWLMAC by September 2010 Final report published and endorsed by LIWLMAC by December 2010	Study design document Consultant/economist recruited Committee comments Final endorsed report, outlining costs and benefits of water use and management, and recommendations for pricing mechanisms and cost sharing	Capacity and access to information and data Bias, inconsistencies, and Secondary data sources Primary data sources provide representative information without bias and about water use system Assumptions used in economic analysis are closely aligned to realities of water use and management systems in Majuro	RMIEPA, GEF IWRM Project Management Unit (RMI), SOPAC Economics Adviser
<b>Component 3: Development of a Laura Integrated Water and Land Resources Management Plan</b>					
3.1	Establishment and Operation of a Technical Working Group of the LIWLMAC to develop a Laura Integrated Water and Land Resources Management Plan (LIWLRMP)	Terms of Reference and work programme developed by March 2011 Working group members identified with agreed membership list by June 2011	Terms of Reference Work programme and timetable Membership list Summary report of LIWLMAC meeting with endorsement of members Minutes of	Available expertise in the LIWLMAC for integrated management plan development Willingness and commitment of LIWLMAC members to commit to plan development	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
3.2	Agreement between and amongst water related agencies and funding bodies (both Government and external) of priority water problems and required management interventions at Laura, including benchmarking of current and planned projects and financing levels.	Round-Table meeting of amongst water related agencies and funding bodies convened by September 2011 Priority water problems at Laura identified Priority management interventions agreed by December 2011, including commitments to support management plan approach	Report of Round-Table meeting Agreed list of priority water problems at Laura Concept notes on priority management interventions required for integrated water and land management at Laura	Representatives of government agencies and donors familiar with Laura water issues Inability of agencies and funding bodies to agree on priority actions due to limited scientific and technical information available for the area	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC

Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
3.3	Community forum meetings to agree needs and vision for the Laura community for integrated water and land management at Laura, including desired management goals, objectives, and targeted management actions.	Community forum meetings convened to June 2013 Community needs and vision agreed by community representatives by August 2011 Community aspects of management plan developed for presentation at Round-Table (see 3.2)	Summary reports of community forum meetings Community statement on need, vision, management goals, objectives, and priority management actions List of key considerations for community elements of management plan	Capacity of participants in community forum to conceptualise broad range of issues in planning integrated water and land management at Laura	RMIEPA, GEF IWRM Project Management Unit (RMI), LIWLMAC, and community members
3.4	Draft Laura Integrated Water and Land Resources Management Plan, including targeted costed action plan and financing mechanisms presented to Laura community for comment and reviewed by and endorsed by LIWLMAC for submission to cabinet	First draft management plan developed for comment from government, private sector, community, NGO and other civil society groups by December 2012 Laura stakeholder workshop(s) to present and discuss management plan and targeted costed action plan (January-March 2012) Management plan submitted to cabinet by June 2013	First draft management plan Stakeholder comments Summary reports of stakeholder workshops including participant lists Final management plan submitted to Cabinet	Willingness and commitment of stakeholders to contribute to Ability to reach agreement between government, landowners, and other stakeholders on the financing of management plan implementation	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
3.5	Laura Integrated Water and Land Resources Management Plan and Action Plan submitted for Cabinet endorsement	First draft action plan for community consultation by March 2013 Action plan agreed and endorsed by LIWLMAC and submitted to cabinet by June 2013	First draft management plan Stakeholder comments Summary reports of stakeholder workshops including participant lists Final management plan submitted to Cabinet	Willingness and commitment of stakeholders to contribute to Ability to reach agreement between government, landowners, and other stakeholders on the financing of management plan implementation	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
<b>Component 4: Targeted Stress Reduction Demonstrations for the Laura Water Lens</b>					
<b><i>Sub-Component 4.1 – Reducing Stress from Overloaded and Leaking Septic Systems at Laura</i></b>					
4.1.1	Development of a septic monitoring, collection, and disposal program to: (a) monitor sewage levels of septic tanks at Laura; and (b) initiate timely sewage collection from overloaded and leaking septic systems and subsequent disposal using Majuro's public	Landowner agreement on system for monitoring septic status by December 2011 Remediation actions including pumping of overloaded and leaking septic systems underway by June 2012 All overloaded and leaking septic systems clean and operational by	Technical report and education materials on septic monitoring, collection, and disposal system Number of clean septic systems Volume of septic waste collected and safely disposed	Willingness and agreement of landowners to participate in septic monitoring Availability of septic pump truck Ability of Majuro town sewage system to cope with septic waste disposal Available human resources for septic remediation works	RMIEPA, GEF IWRM Project Management Unit (RMI), LIWLMAC, Majuro Water and Sewage Company (NWSC)

Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
	sewer system. [Activity 2.2 to provide baseline information]	June 2013 Reliable cost estimate of septic maintenance and annual collection volumes agreed by LIWLMAC by March 2013			
4.1.2	Composting toilet designed and operational at central Laura location, including: survey of community perceptions; preferred design features; and operational considerations.	Report of community perceptions and desired design feature survey by December 2011 Selection and installation of one demonstration composting toilet by March 2012 Community demonstration of composting toilet and use of compost by June 2013	Technical report of survey results Technical note on community preferred design(s) for composting toilet Composting toilet operational by June 2013	Willingness of community members to participate in survey Survey results provide representative information and data for setting realistic baselines	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
<b>Sub-Component 4.2 – Reducing Stress from Domestic Solid Waste Leachate Pollution at Laura</b>					
4.2.1	Based on results of 2.2 develop community-based project for solid domestic waste management at Laura	Community agreement on project concept for domestic solid waste demonstration by December 2011 Community based project executed by December 2012	Report of community meetings and project concept document Project proposal and evaluations	Willingness and commitment of landowners and community members to sustainable waste management	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
4.2.2	Community survey of numbers, types, and suitable locations for solid waste bins and disposal areas	Technical report of survey by June 2011	Technical report Map of suitable locations for bins and disposal areas	Survey responses reflect community needs	RMIEPA and GEF IWRM Project Management Unit (RMI)
4.2.3	Development of education materials and activities to inform the community on domestic waste management (link to component 5).	Education materials produced by March 2012 Materials distributed to all Laura landowners and displayed at prominent locations in Laura (April 2012 – December 2013)	Posters, brochures, videos etc produced Number of education packages produced and distributed	Available expertise for production of community education and awareness materials	RMIEPA, GEF IWRM Project Management Unit (RMI), Marshall Islands Conservation Society (MICS)
<b>Sub-Component 4.3 – Building Capacity of Pig Farmers to Reduce Stress on the Laura Water Lens</b>					
4.3.1	Identification of priority pig farms for involvement in trial, preferably farms located in low-lying coastal lands adjacent to water lens	Pig farm sites identified by December 2011 Agreement of landowners/ farmers to participate in pilot activity	Map depicting piggery sites to be used in trial activity Minutes of meetings with landowners regarding their participation in trial	Sites selected are representative of priority areas for action Pig farmer willing to be involved in pilot activity	RMIEPA, GEF IWRM Project Management Unit (RMI), and landowners
4.3.2	Identification and development of techniques for the use of	Community training workshop convened by June 2012	Community training materials Summary report of community	Willingness of landowners to trial new pig waste management	RMIEPA, GEF IWRM Project

Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
	coconut husk in dry litter waste management at selected piggeries, specifically to produce compost for market garden fertiliser	Pig farmer using waste and shredded coconut husk to produce compost by September 2012 Method assessed for replication/uptake by other piggeries by March 2013 Cooperation with other projects as appropriate Reliable cost estimates of compost production by March 2013	training workshop, including audio-visual presentations Number of pig farmers trialling coconut husk as dry litter for compost production Technical report detailing assessment of the method and reliable cost estimates	techniques and participate in training events Availability of coconut husk	Management Unit (RMI), and landowners
4.3.3	Establishment of communal composting site for production of pig waste fertiliser	Communal composting site established and in operation, and following best practices for waste handling by December 2012	Composting site operating Volume of waste processed and compost produced	Availability of land Best waste management practices ensure compost production does not impact on Laura lens water quality	RMIEPA, GEF IWRM Project Management Unit (RMI), and landowners
<b>Component 5: Enhancing Awareness and Understanding of the Laura Water Lens</b>					
<b>Sub-Component 5.1: Public Awareness</b>					
5.1.1	Laura Water Lens Learning Center in the Laura Area to assist with promotion of demonstration project and dissemination of information materials	Community support for establishment of Center Learning Center location agreed, launched, and operational by June 2011	Minutes of LIWLMAC meetings agreeing to location Learning Center operational Number of days open and staffed Number of visitors	Agreement and support of LIWLMAC for Learning Center Availability and cost of premises	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
5.1.2	Exhibition materials for the Learning Center, including: learning displays (e.g. posters), interactive database/DVD-ROM of information and data relating to Laura water lens, and audio-visual materials (e.g. videos).	Learning Center containing exhibition materials (ongoing June 2011-December 2013) Learning displays depicting progress and results of stress reduction demo activities on display from June 2011 and updated regularly Interactive DVD-ROM of Laura Water Lens information produced by June 2012	Number of Laura Water Lens management issues addressed by learning displays Frequency at which information from stress reduction demonstrations are displayed Number of requests for copies of learning materials, DVD-ROM, audio-visual products	Available expertise to produce engaging and informative exhibition materials Costs of exhibition material production and required technology (printing etc) on Majuro Atoll Stress reduction demo activities provide tangible examples of good practices in integrated water and land management	RMIEPA, GEF IWRM Project Management Unit (RMI), LIWLMAC, MICS, and student volunteers
5.1.3	Promotion of Learning Center role via local radio, local and regional television and print media, and a programme of visits by schools and other civil	Radio, television, and newspaper news items on Center (ongoing 2011-2013) Programme of visits by schools and other groups underway by	Number of radio, television, and newspaper news items Number of groups visits and total number of visitors Number of requests to visit	Learning Center exhibitions and activities considered newsworthy by local news Interest of schools and other groups in Laura water lens	RMIEPA and GEF IWRM Project Management Unit (RMI)

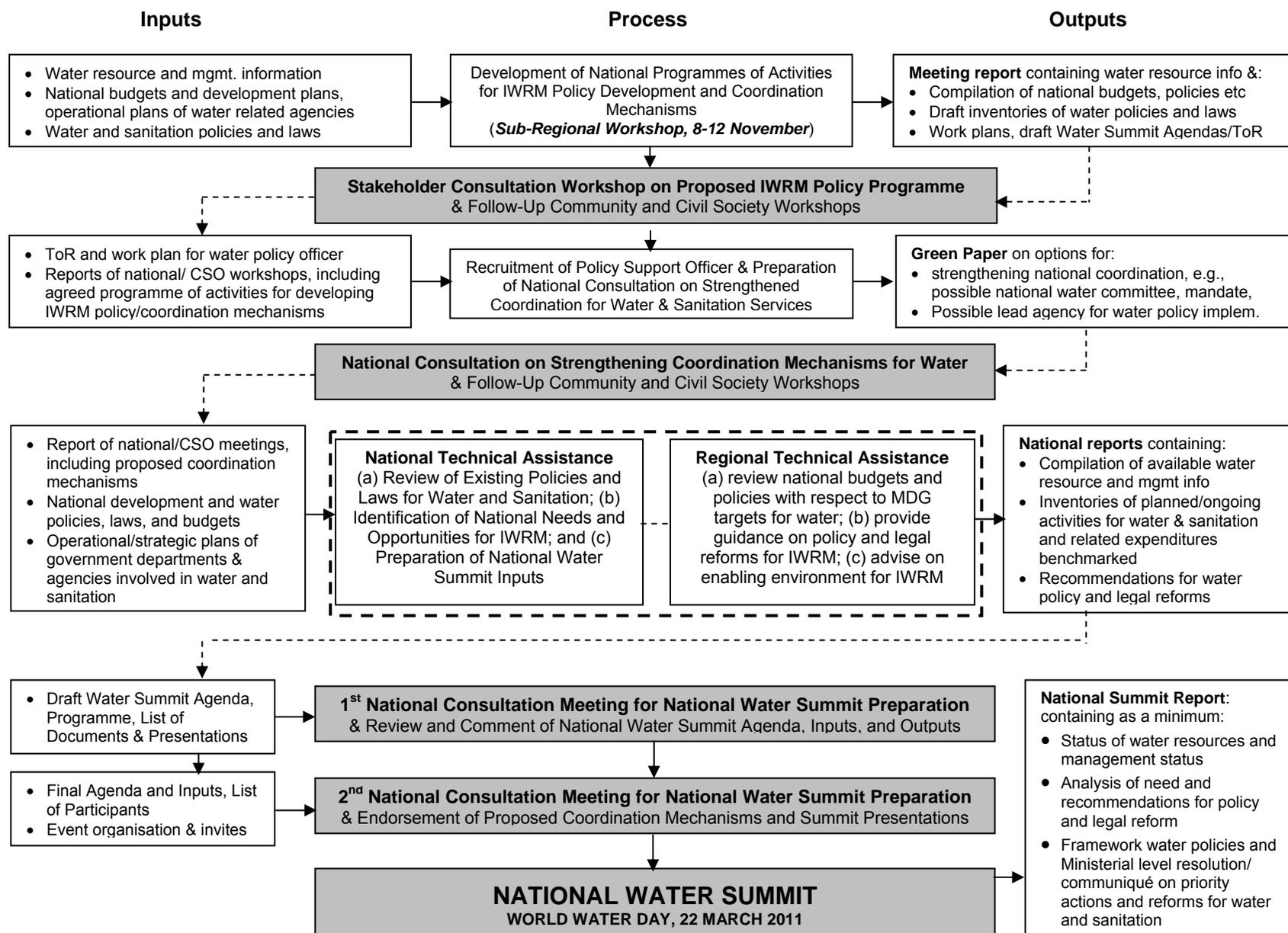
Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
	society groups	March 2012	Center or for information	issues	
5.1.4	Network of local journalists and government communications staff to organise television and radio broadcasts and news articles about water conservation and stress reduction demonstration activities	Meeting(s) of local journalists and government communications staff convened by December 2011 Information and press releases on demonstration project activities distributed to network of journalists on a quarterly basis	Minutes of meeting(s) with local journalists and communications staff Number of information packages and press releases issued to network Number of news items from press releases	Interest and support amongst local journalists for water resource management and sanitation issues on Majuro Availability of journalists to meet and plan water and sanitation communications actions	RMIEPA and GEF IWRM Project Management Unit (RMI)
5.1.5	Laura Water Lens website based on Open Source Content Management System Software (e.g. Joomla) to act as a central repository of information and data relating to integrated water and land management at Laura	Laura Water Lens website operational by March 2011 Website containing all project related documents, information, data, and audio-visual outputs (ongoing)	Website accessible at <a href="http://www.laurawater.org">http://www.laurawater.org</a> Number of project related documents, news stories, photographs, and other outputs accessible online Number of websites with links to Laura project site Google rank for search on "Laura Water Lens"	Accessibility to expertise for online Content Management System setup and management Local Internet connection speed and reliability enables efficient uploading of project information and outputs	GEF IWRM Project Management Unit (RMI)
5.1.6	Electronic dissemination of a quarterly demonstration project newsletter	Project E-Newsletter sent quarterly to project stakeholders	Copies of e-newsletter List of individuals the e-newsletter is sent to	Quarterly e-newsletter is sufficiently regular	Project Management Unit
<b>Sub-Component 5.2: Training and Education</b>					
5.2.1	Training needs assessment and preparation of a training programme targeting government officers and local communities, including, identification of needs for specific training in areas such as sanitation, composting toilets etc.	Results of training needs assessment generated by December 2010 Training programme target audience, topics, delivery mode, and timetable agreed by LIWLMAC by March 2011	Report of training needs assessment Training programme report, including list of individuals to participate, topics, delivery mode and timetable	Availability of training needs assessment and capacity building expertise Availability of government officers and community members to participate	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
5.2.2	Implementation of the training programme at the <b>community level</b> . It is envisaged that training needs may include but not be limited to: principles and practice of water resource management; sanitation and	Training conducted as planned at 5.2.1 during period April 2011 – December 2012 Training materials and summaries loaded to Laura project website within 2 weeks of training activity completion Summaries of all training events	Number of training events Number of community members involved Number of training materials produced and accessible on the project website Number of training event summary reports and their	Availability and interest of community members to participate in training activities Available expertise to develop and deliver training materials to address priority needs for community members Skill development survey	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC

Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
	sustainable solid waste disposal methods; septic maintenance and remediation techniques; water quality monitoring; and resource use zoning.	included in quarterly electronic newsletters Survey to measure skill development (ongoing April 2011 - March 2013)	inclusion in the quarterly e-newsletter Results of skill development survey	provides realistic baselines and measures of improvement	
5.2.3	Implementation of the targeted training programme for <b>government agencies and personnel</b> . It is envisaged that training needs may include but not be limited to: economic valuation and cost sharing principles; interpretation of socio-economic and scientific data and its use in planning and zoning land use; and IWRM policy and planning.	Training conducted as planned at 5.2.1 during period April 2011 – December 2012 Training materials and summaries loaded to Laura project website within 2 weeks of training activity completion Summaries of all training events included in quarterly electronic newsletters Survey to measure skill development (ongoing April 2011 - March 2013)	Number of training events Number of government involved Number of training materials produced and accessible on the project website Number of training event summary reports and their inclusion in the quarterly e-newsletter Results of skill development survey	Availability and interest of community members to participate in training activities Available expertise to develop and deliver training materials to address priority needs for community members Skill development survey provides realistic baselines and measures of improvement	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
5.2.4	Identification of needs and opportunities for a group study tour (including RMIEPA management staff and selected NGO and community group members from Laura) to selected GEF IWRM demonstration projects in the Pacific region.	Learning and exchange needs and opportunities with other GEF demonstration projects identified at annual Regional Steering Committee Meetings Study tour convened by December 2013	Republic of Marshall Islands' learning and exchange needs and opportunities noted in annual RSC meeting report Number of participants and duration of learning exchange study tour	Availability of regional funds or national demo project funds to support learning exchange Suitability of other GEF IWRM demonstrations to learning needs of the Republic of Marshall Islands	RMIEPA, GEF IWRM Project Management Unit (RMI), and LIWLMAC
5.2.5	Preparation and distribution of posters, brochures and booklets on topics of relevance to IWRM and Water Use Efficiency as identified in the training needs assessment.	Learning materials produced and distributed (ongoing April 2011 - March 2013)	Number of books, brochures, booklets including dates of completion Distribution lists (i.e. who received them and how many)	Available expertise to develop materials	GEF IWRM Project Management Unit (RMI)
<b>Component 6: Management and Coordination of the Laura Demonstration Project</b>					
6.1	Successful management, coordination, and implementation of: the project to achieve the Demonstration objectives and to meet the strategic needs of the Republic	Completion of planned activities agreed with RMIEPA, LIWLMAC, the Regional Project Manager, and the Regional Project Steering Committee Production of specified	Quarterly progress reports Annual Demonstration Project Implementation Review Reports Mid-Term Evaluation Terminal Evaluation	Consistency of staffing arrangements at RMIEPA Consistent environmental conditions, e.g., no severe, lengthy droughts or other disasters which could require	RMIEPA and GEF IWRM Project Management Unit (RMI)

<b>Output No.</b>	<b>Output/Outcome</b>	<b>Key Indicators</b>	<b>Means of Verification</b>	<b>Assumptions/Risks</b>	<b>Responsible Partners</b>
	of Marshall Island's Environmental Protection Authority.	Demonstration deliverables within the agreed period and cost		redirection of RMIEPA and project staff time Adequate participation of stakeholders	
6.2	Effective planning and control of the endorsed demonstration project budget, including development of cash flow predictions consistent with the approved project work plan and budget for the duration of the project	Budget shows dissected estimates of the cost of key demonstration activities by UNDP Cost Codes Estimates of cost for a given year, future years and the demonstration as a whole endorsed by the Regional Project Steering Committee Cash flow predictions consistent with work plan and updated on a quarterly basis	Annual budgets and work plans Quarterly budgets and work plans Endorsement of budget by LIWLMAC and subsequent approval by Regional Steering Committee meetings	Consistency of staffing arrangements at RMIEPA Financial planning and management expertise in Project Unit Management Unit	RMIEPA and GEF IWRM Project Management Unit (RMI)
6.3	Establishment and effective operation of a Demonstration Project Management Unit (PMU) to: (a) manage the interface between the lead agency and the regional Project Coordinating unit, user groups, and other stakeholders and government agencies; and to (b) manage the consultation process to ensure comprehensive input from user groups and other stakeholders into the development and implementation of the project	Project Manager and Assistant contracts Office established with necessary communication technology Project issues dealt with as they arise, including identification of options for their resolution Project coordination meetings convened regularly and according to work plan Project progress and financial reports submitted quarterly to regional PCU Maintenance of accurate records of meetings, reports, financial monitoring data, specifications, and briefs related to the implementation of the project	Quarterly progress reports Annual Demonstration Project Implementation Review Reports Mid-Term Evaluation Terminal Evaluation	Consistency of staffing arrangements at RMIEPA Consistent environmental conditions, e.g., no severe, lengthy droughts or other disasters which could require redirection of RMIEPA and project staff time Adequate participation of stakeholders	RMIEPA and GEF IWRM Project Management Unit (RMI)
6.4	Consistency between the various project components and related activities provided or funded by other donor	Design of new water and land projects and programmes at Laura, both government and externally funded, consistent	Quarterly progress reports Annual Demonstration Project Implementation Review Reports Mid-Term Evaluation	Consistency of staffing arrangements at RMIEPA Willingness of other projects and donors to collaborate	RMIEPA and GEF IWRM Project Management Unit (RMI)

Output No.	Output/Outcome	Key Indicators	Means of Verification	Assumptions/Risks	Responsible Partners
	organisations, including realisation of co-financing where possible	with demonstration project objectives and activities	Terminal Evaluation		
6.5	Participation of project representatives in meetings of the Regional Project Steering Committee Meetings, and associated regional training and capacity building sessions	IWRM Focal Point and GEF IWRM demonstration project manager participate in annual Regional Steering Committee meetings	Regional Steering Committee Meeting Report participant list	Consistency of staffing arrangements at RMIEPA	RMIEPA and GEF IWRM Project Management Unit (RMI)
<b>NATIONAL POLICY AND LEGAL REFORMS FOR IWRM</b>					
P.1	National Committee (named " <i>National Integrated Water Resource Management Task Force</i> ") established and activities to revitalise at 1.2				
P.2	National Water Summit to inform stakeholders of: (a) National Integrated Water Resource Management Task Force Mandate and Responsibilities; and (b) proposed process for policy and legislative reform for IWRM and WUE	National Water Summit convened on World Water Day (22 <sup>nd</sup> March) 2011 Stakeholders informed of proposed process for IWRM and WUE policy and legal reform. Comments received by 22 <sup>nd</sup> April 2011	National Water Summit convened Policy paper outlining: membership; ToR/mandate; and responsibilities of National Integrated Water Resource Management Task Force; and agreed steps for undertaking policy and legislative reform for IWRM and WUE in RMI.	Sufficient high level political buy-in Sufficient interest amongst stakeholders to comment on proposed process	RMIEPA and IWRM Policy Officer
P.3	Review of existing policies and laws relating to water and sanitation, and identification of needs with respect to national policy and legislative reform	Policy Adviser recruited by February 2011 Policy report reviewed and endorsed by National Integrated Water Resource Management Task Force and circulated for public comment by June 2011 Final report published and commented by July 2011	Policy review report	Availability of specialist with expertise required to effectively reconcile scientific, technical, and political issues relating to IWRM and WUE in RMI	RMIEPA and IWRM Policy Officer
P.4	Draft national water policy and recommended legal reforms endorsed by National Water Committee for submission to Cabinet	Public hearing to present recommendations to stakeholders September 2011 Comment received and final draft policy submitted to Cabinet by October 2011	Public hearing records Draft policy document Final draft submitted to Cabinet	Adequate time to ensure sufficient buy-in from senior officials	RMIEPA and IWRM Policy Officer

## Annex 5 – Proposed Inputs, Process, and Anticipated Outputs of Actions Leading to National Water Summits



## ANNEX 6

### Terms of Reference for the Recruitment of Staff to Support National Water Policy Initiatives in the Micronesia Sub-Region

#### Background

National representatives of the Pacific IWRM Programme identified that each country would have specific needs for additional human resources to support national water policy review and development. It was subsequently proposed that these needs would be addressed via appointment of water policy support officers to conduct national consultations, organise and convene the National Water Summits, and provide administrative support to national initiatives to strengthen mechanisms for national coordination of water and sanitation services. Additionally, it was discussed that the technical and public policy needs could possibly be met via the contracting of national and International consultants as required. The following information boxes contained the agreed Terms of Reference for these positions.

#### INFORMATION BOX 1

##### *Draft Terms of Reference for National Policy Support Officers*

**1. Provide coordination and administrative support to the development and operation of a mechanism for strengthened coordination of national water resource management and planning.** Specific tasks include:

- (a) Assist with the organisation of and provide administrative support to meetings and consultations;
- (b) Maintain official records of meetings including recording, drafting, archiving and dissemination of meeting proceedings;
- (c) Facilitate communications between and amongst key organisations, institutions and persons involved in national IWRM planning processes and related activities/processes;
- (d) Organise and manage a comprehensive and sustainable hard copy and e-copy archive filing system for the NWAB within a designated repository;
- (e) Establish and maintain a national water resources contacts database and including a register for the NWAB;
- (f) Provide monthly reports to key IWRM stakeholders on national programme progress including achievement of activities, outputs and impacts of the national IWRM planning process;
- (g) Provide regular briefings on programme progress to the director of the host institution, direct supervisor, national IWRM FP and national GEF IWRM Project Team; and
- (h) Facilitate the implementation of consultancies related to the national IWRM planning process;

**2. Support national initiatives for water resources management planning and reform.** Specific tasks include:

- (a) development and implementation of a consultative process towards identifying needs, opportunities, and barriers to water resources management and planning;
- (b) compile national budgets and development plans, key policy and strategic documents (water policy, action plans/strategies, and legislation);
- (c) organise meetings and events for high-level and stakeholder engagement and support for the national IWRM planning and water governance process;
- (d) organise and ensure high level participation in National Water Summits planned for 22 March 2011; and
- (e) support the organisation of training workshops and events on IWRM and related subjects.

**3. Facilitate improved information management and sharing on water resources management and planning.** Specific tasks include:

- (a) Work together with the GEF-funded IWRM project manager to transfer lessons from the IWRM demonstration project;
- (b) Liaise with relevant organisations (civil society, private sector, communities, provincial/municipal level government, media, etc.) as part of the national IWRM planning process and to exchange best practice of IWRM on the regional and national level;
- (c) Support the implementation of communications and stakeholder engagement strategies for national IWRM planning;
- (d) Organise, manage and promote the use of a national IWRM resource centre with information, publications, tools and resources in hard and e-copy, with links to the regional Pacific IWRM Resource Centre hosted by SOPAC;
- (e) Coordinate the compilation of background materials for policy, legislative and institutional reviews relating to IWRM and WUE planning; and
- (f) Facilitate and assist the preparation, editing, formatting and dissemination of communications materials and processes to the IWRM planning process as directed by national agency (including press releases, articles for the Pacific Water Partnership newsletter, national newspapers and other publications).

#### INFORMATION BOX 2

### ***Draft Terms of Reference for National Water Consultants***

#### **1. Compile and analyse national budgets, development policies and plans, and the operational plans of relevant government ministries and/or departments to:**

- (a) Prepare an inventory of ongoing and planned national level actions for freshwater management and sanitation;
- (b) Determine and benchmark budget allocations and government expenditure on water resource management; and
- (c) Assess national level need for improved cross-sectorial coordination and streamlining of government service delivery in water resource management.

#### **2. Assess existing policy and legal arrangements for water resource management and sanitation and provision of guidance for their reform.** Specific tasks include:

- (a) Preparation of an inventory of existing policies, laws, Executive Orders, Presidential Decrees etc. relating to water resources and sanitation;
- (b) Compilation of stakeholder recommendations for water policy and legal reforms, particularly those needed to ensure harmonisation between different sectorial policies and legislation, as well as between national and local level governance frameworks; and
- (c) Documentation of national budgetary planning processes and timings to inform national initiatives to mainstream IWRM into government service delivery for water resource management.

#### **3. Support national lead agencies in developing and implementing plans to strengthen national co-ordinating mechanisms and to ensure successful conduct of National Water Summits.** Specific tasks include:

- (a) Drafting and facilitating the intergovernmental adoption of recommended mechanisms for strengthened national coordination bodies for water management;
- (b) Preparing and presenting technical inputs to national preparatory consultations and National Water Summits; and
- (c) Drafting national inputs to higher level Pacific-wide consultations on development of a regional water and sanitation strategy for the Pacific.

### **INFORMATION BOX 3**

#### ***Draft Terms of Reference for Sub-Regional Water Consultants***

#### **1. Compile and analyse water resources information, specifically with respect to:**

- (a) overall volume of water supplied by rainwater and accessible via other known sources (i.e. groundwater and surface water);
- (b) variability in water availability, including seasonal effects, longer-term drought cycles, El Niño/La Niña-Southern Oscillation patterns; and flood frequency.
- (c) existing water supply and treatment systems, including: storage capacity; known water losses due to leakages; known volume and cost of chemicals used in disinfection; and appraisal of infrastructure options (e.g. piped gravity fed, rainwater harvesting, desalinisation); and
- (d) population proximity to secure supplies of safe drinking water and sanitation services, and implication of water demand trends and pollution pressures.

#### **2. Guide National Lead Agencies in identifying the enabling environment, including co-ordinating mechanisms, required to facilitate water resource management reforms such as IWRM.** Specific tasks include:

- (a) Review of the elements characteristic of strong and weak co-ordinating mechanisms for water resource management in the Small Island States of Micronesia; and
- (b) Documentation of existing national co-ordinating mechanisms for water resource management, appraisal of the strengths and weaknesses of these and identification of gaps in areas of competence; and
- (c) Preparation of a sub-regional green paper on options for strengthening national coordination, including recommendations for how they can be strengthened or expanded; or if they are inadequate, propose alternative national mechanisms, and analyse the feasibility of establishing the proposed mechanisms.

#### **3. Using inputs from national IWRM staff, compare and contrast:**

- (a) budget allocations and government expenditure on water resource management, and the need for improved cross-sectorial coordination and streamlining of government service delivery in water resource management;
- (b) existing policies and laws with respect to their adequacy in enabling the achievement of Millennium Development Goals for water and sanitation, including establishment of Integrated Water Resource Management and improved access to safe drinking water; and
- (c) needs for improved harmonisation of different sectorial policies and legislation, as well as between national and local level governance frameworks



**Federated States Micronesia**

Federated States of Micronesia/Activity	2010				2011								Funding Source	
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	EU IWRM	Co-finance
<b>Sub-regional IWRM Policy Workshop</b>														
Preparation of inputs to workshop (5 days)		x											-	?
Stakeholder meeting to finalise inputs (2 days preparation time and ~15 participants * 1 day)		x											250	-
Participation in meeting (4 persons * 5 days)			x										250	-
Follow up stakeholder meeting on workshop outputs and agreements (2 days preparation time and ~15 participants * 1 day)			x										250	-
<b>Recruitment of Policy Support Officer</b>														
Terms of Reference for post finalised (1 day)		x											-	-
Policy support officer position advertised		x											-	200-
Candidates shortlisted and interviewed (6 person days)			x										-	-
Policy support officer operational													20,000	?
Computing & communications equipment			x										3,000	5,000
<b>Recruitment of National Policy Consultant</b>														
Terms of Reference finalised and post advertised (1 day)				x										200
Candidates shortlisted and interviewed (6 person days)					x								-	-
National Policy Consultant operational													8,000	?
<b>Appointment of National Water Champion</b>														
Role defined and communicated nationally			x										-	-
Nominations for representative sought				x									-	-
Representative selected and contracted					x								-	-
Representative operational													7,500	?
<b>National Water Policy Consultations</b>														
Meeting to Discuss Preliminary Outputs of Sub-Regional Consultancy (~30 persons)				x										2,000
Meeting to Review First Draft of Sub-Regional Consultancy Report (~30 persons)					x								500	?
National Round-Table Meeting on National Water Policy Development (~30 persons)					x								6,000	6,000
Preparatory Meeting for National Water Summits (~30 persons)						x							1,000	1,000
National Water Summit (~100 persons)							x						10,000	15,000
													<b>56,650</b>	<b>29,200</b>

**Republic of the Marshall Islands**

Activity	2010				2011								Funding Source	
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	EU (Nat)	GEF (Demo)
<b>Sub-regional IWRM Policy Workshop</b>														
Preparation of inputs to workshop (5 days)		x											-	-
Stakeholder meeting to finalise inputs (2 days preparation time and ~15 participants * 1 day)		x											250	-
Participation in meeting (4 persons * 5 days)			x										250	-
Follow up stakeholder meeting on workshop outputs and agreements (2 days preparation time and ~15 participants * 1 day)			x										250	-
<b>Recruitment of Policy Support Officer</b>														
Terms of Reference for post finalised (1 day)		x											-	-
Policy support officer position advertised		x											200	-
Candidates shortlisted and interviewed (6 person days)			x										-	-
Policy support officer operational													22,000	-
Computing & communications equipment			x										3,000	-
<b>Recruitment of National Policy Consultant</b>														
Terms of Reference finalised and post advertised (1 day)				x									200	-
Candidates shortlisted and interviewed (6 person days)					x								-	-
National Policy Consultant operational													-	15,000
<b>Appointment of National Water Champion</b>														
Role defined and communicated nationally			x										-	-
Nominations for representative sought				x									-	-
Representative selected and contracted					x								-	-
Representative operational													6,500	-
<b>National Water Policy Consultations</b>														
Meeting to Discuss Preliminary Outputs of Sub-Regional Consultancy (~30 persons)				x									1,000	-
Meeting to Review First Draft of Sub-Regional Consultancy Report (~30 persons)					x								1,000	-
1st Preparatory Meeting for National Water Summits (~30 persons)					x								1,000	3,000
2 <sup>nd</sup> Preparatory Meeting for National Water Summits (~30 persons)						x							1,000	3,000
National Water Summit (~100 persons)							x						4,000	3,000
													<b>40,650</b>	<b>15,000</b>

**ANNEX 8**

**National Information and Data Sources for Use in  
National Water and Sanitation Policy Development**

**Republic of Palau**

<b>Budgets</b>				
<b>Title</b>	<b>Description</b>	<b>Copy Available</b>	<b>Copy Needed</b>	<b>Filename/ Document No</b>
National Budget 2008-2009	Palau National Budget for 2008-2009	Yes		NationalBudget 2008-2009.pdf
National Budget 2009-2010	Palau National Budget for 2009-2010		Yes/EQPB	
National Budget 2010-2011	Palau National Budget for 2010-2011	Yes		RPPL 8-18.pdf
<b>Water Resource Information and Reviews</b>				
Rainfall Data from USGS	Excel file compilation of rainfall data for the Republic of Palau of USGS data		Yes/HYCOS Palau	
Rainfall Data from Babeldaob Palau	HYCOS data on rainfall in Palau		Yes/HYCOS Palau	
Stream Flow Data for the 5 Rivers in Palau	HYCOS stream flow data for 5 Rivers in Palau		Yes/HYCOS Palau	
<b>Development Plans and Policies</b>				
Palau National Development Plan 2020	Development plans for the Republic of Palau for 1996-2020	Yes		National Development Plan 2020
Actions for Palau's Future The Medium-Term Development Strategy 2009 to 2014	The medium term development strategy (MTDS) – described as —Actions for Palau's Future   – sets out the key strategies and actions to help achieve economic, social, environmental and cultural goals over the 5 year period 2009 to 2014.	Yes		Final MTDS Feb 09.pdf
The Millennium Development Goals: Initial Status Report 2008	This Report provides information with which Palau, in partnership with national and international development partners, can engage in public discussion on policy priorities for achieving not only sustainable but also equitable growth.	Yes		MilleniumDevelopmentGoalsPalau.pdf
<b>Government Department/Operational Plans/Corporate Plans</b>				
Nil Provided				
<b>National and State Laws for Water</b>				
EQPB Regulations 1996	Environmental Quality Protection Board Regulations which include regulation of water.	Yes		EQPB Regulations.pdf
Palau National Code	Palau National Code which include regulations on water such as the establishment of the Environmental Quality Protection Act of 1983		Yes/Law Search CD	
Draft Public Works Regulations 2000	Regulations governing the Bureau of Public Works		Yes/ Director Rengulbai	
<b>Other (reviews etc)</b>				
ADB-Preparing the Babeldaob Water Supply Project	Water sector development plants for Koror and Babeldaob	Yes		BabeldaobWaterSupply2.pdf

ADB-Preparing the Babeldaob Water Supply Project Draft Legislative Review	Review of water related laws in Palau	Yes		Water Related Laws in the ROP.pdf ADB-Preparing the Babeldaob Water Supply.pdf
Water and Sanitation Corporation Act of 2010	Draft of a bill to create a water and sanitation corporation	Yes		sbno.8-1520001.pdf sbno.8-1530001.pdf

### **Federated States of Micronesia**

<b>Budgets</b>				
<b>Title</b>	<b>Description</b>	<b>Copy Available</b>	<b>Copy Needed</b>	<b>Filename/ Document No</b>
FY2010 Budgets			yes	
FY2011 Budgets			yes	
<b>Water Resource Information and Reviews</b>				
WERI Technical report on water resources No. 129 (2010)				www.weriguam.org
WERI Groundwater resources of Atoll Islands No. 119				www.weriguam.org
Water Resource Analysis at Fais Island No. 111				www.weriguam.org
Qualitative Examination of Groundwater from Yap and neighboring islands No.115				www.weriguam.org
Rainfall Climatology for Pohnpei island No. 100				www.weriguam.org
Slow Sand Filter Conceptual Design for FSM NO.101				www.weriguam.org
FSM Erosivity factors for selected islands in the FSM No. 92				www.weriguam.org
FSM MDG Report			Yes	
PUC Water and Power Tariff Study			Yes	
CSP Rain water harvesting project			Yes	
State EPAs water quality data			Yes	
Outer islands drinking water survey			Yes	
Climate Change in the FSM: Food and Water Security				www.seost.hawaii.edu
Other water reports for FSM				http://hi.water.usgs.gov/publications/pubsmicronesia.html
ADB Water & Waste water Projects			yes	
US Army Corps of Engineer Report				
Utility Easement PUCs/Department of Lands				
Water Bench Marking PWA/ADB				
<b>Development Plans and Policies</b>				
FSM SDP			Yes	
FSM IDP			Yes	
FSM Census 2010 (prelim. Report)			Yes	
FSM Food Security Policy			Yes	
FSM nationwide Climate Change Policy			Yes	
2008 Disaster Report			Yes	
EI Nino 1998 Report			Yes	

Government Department/Operational Plans/Corporate Plans				
FSM 5yr Env. Sector Plan			Yes	
FSM Second National Communication	Ground and surface water assessment report		Yes	
National and State Laws for Water				
FSM and State EPA water laws and regulations				www.fsmlaw.org
Other (reviews etc)				
FSM Environmental Law Review 2009			Yes	

### Republic of Marshall Islands

Budgets				
Title	Description	Copy Available	Copy Needed	Filename/ Document No
Nitijela of the republic of the Marshall Islands 31 <sup>st</sup> Constitutional Regular Session 2010-Appropriations Bill FY11	Appropriations Bill FY11	Yes		Hard copy/on email
Integrated Water Management & Development Plan for Laura Groundwater Lens, Majuro Atoll		Yes		
Pacific Climate Change Project...				
Inception Report for TA 7394-REG Strengthening the Capacity of Pacific Developing Member Countries to Respond to Climate Change	Project inception report with budget details for a prefeasibility study on adaptation pilot project in the RMI	Yes		
Water Resource Information and Reviews				
HYCOS Laura Report				Laura report final- Smaller.pdf
A Survey of Issues for RMI Water Resources Management	Situation analysis of RMI's water resources issues, priorities and needs			A Survey of Issues for RMI Water Resources Management
RIYAD-Water Resources in the Marshall Islands			FSM	
2010 Army core of engineers-Infrastructure Survey Ebeye	Infrastructure Survey of Sewer, Water, Electric, Trash	Yes		
ADB. 2010. Attaining Water for all: Pro-poor Policy and Regulation for Water and Energy Services.		e-copy		
Draft concept paper on the 2011 RMI national development plans & strategies		e-copy		
HYCOS progress report No.7		e-copy		
Impacts of Climate Change on Ground Water lens in the Marshall Islands.				
Infrastructure survey of sewer, water, electricity on Ebeye		e-copy		
JIRCAS/Dr.Yamano		Yes		
Pacific sea level climate & monitoring project-monthly data for September		e-copy		
RMI Climate Change Road Map		e-copy		
SOPAC Governing Council 39th session - water and sanitation program		e-copy		
Pacific IWRM Planning Programme Progress Report 2.	Update on the Planning			EU IWRM Planning Prog.

	programme for the period July – December 2009			Progres Report no.2 July-Dec2009 Progress Report Annexes Binder
Pacific IWRM Planning Programme Progress Report 3.	Update on the Planning programme for the period January – June 2010			Pacific IWRM Planning Prog. PR.3
USAID Water resource assessment for climate change adaptation	Assessment of water resources in Majuro & climate change adaptation recommendations	Yes		
2009 EPPSO Water Survey	Household survey of water resources for Majuro and Ebeye	Yes		
Disaster risk management national action plan workshop for members of Parliament-RMI		e-copy		
HYCOS progress report No.5		e-copy		
Report on HYCOS archived water level, rainfall and groundwater data as at 9 April 2009	This report compiled by the HYCOS Hydrometric Database presents detailed information on gauging, rating, water level/flow, rainfall and groundwater data collected from recording sites operated by the 14 member countries since the 1930's water years			TIDEDA Annual Report - Mosely
Review of the priorities of the Mauritius for sustainable development SIDS-Marshall Islands		e-copy		
Planning for integrated Management of Water Resources in the Pacific. Why Do We Need it and How Does it Work!	The IWRM planning brochure has been put together and produced as a resource to help programme managers and water committees understand the planning process better.			IWRM Planning Brochure
SPSLCMP IV field survey visit, Majuro		e-copy		
Status of SOPAC/EU/RMI Envelope B Water Projects. 12 March 2009	Memo from EPPSO to Office of the President dated 12 March 2009 on Status of SOPAC/EU/RMI Envelope B Water Projects	e-copy		EU SOPAC ENV B project March 09.doc
An assessment of the impact of climate change on agriculture & food security- case study RMI		e-copy		
Hydrological Study of Laura area		e-copy		

Majuro Atoll, Republic of the Marshall Islands				
EU-SOPAC Reducing vulnerability of Pacific ACP States-Closure report 142 -RMI		e-copy		
Final Report on the National Implementation Plan on Stockholm Convention for POPs -RMI		e-copy		
Marshall Islands Mission Report 465- Water quality monitoring program pilot project		e-copy		
Report on water resources utilizations in atoll islands in 2008		e-copy		
The Pacific Integrated Water Resources Management Programme.	Awareness aid to disseminate information on IWRM, the Planning Process and the GEF demonstration projects			Pacific IWRM Programme Brochure
1 <sup>st</sup> Edition. National Water Apex Bodies. A guide for Pacific Island Countries	The guide provides a brief introduction to some of the key issues and steps to be considered in the establishment and strengthening of National Water Apex Bodies (NWABs) in Pacific Island Countries			
Status of SOPAC/EU/RMI Envelope B Water Projects 7 April 2008	Memo from EPPSO to Office of the President dated 7 April 2008 on Status of SOPAC/EU/RMI Envelope B Water Projects	e-copy		Revised EU SOPAC ENV B project April 08.doc
Questionnaire 2008 on Environment Statistics	Responses to questionnaire on renewable freshwater resources, water use balance, freshwater abstraction, water supply industry, total water use, wastewater treatment facilities, population connected to wastewater treatment, and supplementary information.			Marshall Islands_Water.xls
Hot Spot Analysis and Selection of Demonstration site for IWRM		e-copy		RMI_Final Formatted HSA Final Report.pdf
Issues in water supply & sanitation of North Camp community, Ebeye, RMI		e-copy		
National Integrated water resource management diagnostic report, RMI		e-copy		
Pacific DRM Partnership Network Mission to the RMI		e-copy		
RMI-SPC Joint Country Strategy		e-copy		

2008-2010				
RMI Technical mission report- water (kra2) mission to Laura		e-copy		
RMIEPA Sustainable Development Regulations		e-copy		
Water quality monitoring & water demand management, Majuro		e-copy		
Rainwater Harvesting Calculations-Marshalls Airport	Daily record of rainwater harvested at Majuro International Airport from 1 January 1997 to 31 May 2006	e-copy		Rainwater Harvesting Calculations-Marshalls Airport.xls
A review of disaster & mitigation plans arrangements-RMI		e-copy		
A survey of issues for RMI water resources management		e-copy		
Effects of the 1998 Drought on the Freshwater Lens in the Laura Area,RMI		e-copy		
Preliminary Findings and Recommendations - USEPA Drinking Water / Public Water System technical assistance and training mission to RMI EPA – September 27-October 10, 2005		Yes		Findings and ReportRMItrip October10,2005.doc
RMI Country Environmental Analysis: Mainstreaming Environmental Considerations in Economic and Development Planning Processes Final Report	This country environmental analysis (CEA) for the RMI describes the environmental issues that are most important to RMI's development strategy as well as ADB's role in helping remove the environmental constraints on sustained development.	e-copy		ADB_Environmental_Analysis_Marshall_Islands.pdf
Final Trip Report for the USEPA Drinking Water Quality technical assistance and training for RMI EPA September 27-October 1, 2004		e-copy		
Proceedings of the 1st multi-stakeholders consultation, Majuro		e-copy		
Project completion report on the Majuro water supply & sanitation in the RMI		e-copy		
Project Completion Report on the Majuro Water Supply and Sanitation (Loan1289RMI[SF]) in the Marshall Islands		e-copy		pcr_rmi_26408.pdf
Republic of the Marshall Islands Updated Report on the Barbados Programme of Action (BPOA)		e-copy		
Surveillance of drinking Water quality in the Pacific-situation analysis & needs assessment-RMI		e-copy		
EVI country profile-RMI		e-copy		
Pacific Regional Action plan on sustainable water management		e-copy		
Pacific regional consultations in small island countries		e-copy		
Pacific Dialogue on water and climate- synthesis report		e-copy		
Regional meetings of stakeholders in		e-copy		

waste water management-RMI				
Synthesis report- Pacific Dialogue on Water & Climate		e-copy		
Pacific regional waste water policy statement & framework for action-RMI		e-copy		
Report of visit to Ebeye, RMI		e-copy		
Pacific Island Developing Country Water Resources. The World's Water: The Biennial Report on Freshwater Resources, 2000-2003.		e-copy		
EVI Data profiles-summary trip. RMI		e-copy		
Marshall Islands country profile		e-copy		
Final Report on Water Resources Evaluation on Proposed Water Development for Ten atoll, Republic of the Marshall Islands		Hard copy		
1999 United Nations Framework Convention on Climate Change	Initial Communication Under the United Nations Framework Convention on Climate Change	Hard copy		
Small scale waste water treatment plants, RMI		e-copy		
Hydrodynamic simulations with Mike2 for Majuro atoll		e-copy		
Water supply for Majuro-a technical appraisal for feasible options		e-copy		
Hazard Mitigation Plan-RMI		e-copy		
Marshall Islands Hazard Mitigation Plans-revised edition		e-copy		
1996: Water and Sanitation Strategic Plan		Yes		
ADB,1996. The Environmental Indices Project. Technical Assistance No. 5542-Regional		Hard copy		
RMI Water & sanitation sector-strategy & action plan		e-copy		
Water and sanitation project-RMI		e-copy		
Technical Assistance to the Republic of the Marshall Islands for Strengthening the Environmental Protection Authority		Hard copy		
Report and recommendation on a proposed loan for the Majuro water supply & sanitation		e-copy		
Water and sanitation project visit to Marshal Islands		e-copy		
Crawford. J. M. 1993. Republic of the Marshall Islands. Environmental Management Strategy. SPREP.	This report identifies and describes the major environmental challenges presently facing the Republic of the Marshall Islands			RMI NEMS
Harding. E. 1992. Federated States of Micronesia. Review of Environmental Law. Regional Environment Technical Assistance (RETA) 5403. Strengthening Environment Management Capabilities in Pacific Island Developing Countries. SPREP	The legal aspect of this Strategy, is designed to offer an overview of existing environmental legislation in FSM and a summary of draft legislative initiatives not yet enacted, to offer suggestions for future legal and			

	administrative initiatives in a number of specific Environmental areas.			
RMI-National Environment Management Strategy		e-copy		
Groundwater geochemistry of Kwajalein, RMI		e-copy		
Groundwater resources and contamination at Roi-Namur Island, Kwajalein atoll, RMI, 1990-91		e-copy		
Planning and Zoning Act 1987				planning and zoning act 1987
Bacterial counts in surface open waters of Eniwetok atoll		e-copy		
Hydrology of Arno atoll		e-copy		
Country Report for UNCED. Republic of the Marshall Islands	The report reviews the state of environment and development in the Marshall Islands.	Hard copy		
Country Risk profile-RMI		e-copy		
Demonstration project paper-Integrated water management & dev't plans for Laura		e-copy		
Ground-Water Resources and Contamination at Kwajalein Island, Republic of the Marshall Islands, 1990-91				
Ground-Water Resources and Contamination at Roi-Namur Island, Kwajalein Atoll, Republic of the Marshall Islands, 1990-91				
Ground-Water Resources of the Laura Area, Majuro Atoll, Marshall Islands				
Limited current and underwater biological surveys of proposed sewer outfall sites in the Marshall Islands District: Ebeye, Kwajalein Atoll		Hard copy		
Live and Learn Environmental Education. Mobilising People towards Integrated Water Resources Management, A guide to Community Action.	The purpose of these guidelines is to support government departments and organisations in mobilising people towards IWRM.			Community Participation Manual
Pacific IWRM Planning Programme Annual Session Presentation Handout	Presentation provided country focal points and representatives with an overview of the progress of the Planning Programme since Palau.			Pacific IWRM Planning Programme - Handout Notes
Pacific IWRM Planning Programme Focal Point Email Blast	Update on the progress of the Pacific IWRM Planning programme since last email blast.			Pacific IWRM Planning Programme Update
Proposed Parallel Session on Sustainable Water Management in Small Island Countries. 2nd Asia-Pacific Water Summit, Bangkok, Thailand. January 2012. Asian	Summary Paper submitted to the ADB on the proposed water Ministerial and			Proposed session 2nd APWS on Water in Small Island

Pacific Small Island Countries. Key messages from the Regional Consultation on Water in Small Island Countries	participation at the Asia Pacific Water Forum and the World Water Forum.			Countries
Report of Laura lens status report in response to potential El Nino development		e-copy		
RMI Home Rainwater Household Esimates		e-copy		RMI Home RWH estimates.xls
RMI water statistics		e-copy		
RMI-IWRM Diagnostic Report				RMI Integrated Water Resource Mgt Draft 4.0.pdf
RMIEPA Water Data				
Sustainable Water Management Consultation. Pacific Island Countries	Paper drafted and to be finalised outlining the need for the proposed water Ministerial and participation at the Asia Pacific Water Forum and the World Water Forum and what it will do for water issues in the region.			Pacific Regional Water and Sanitation Consultation Process 2010 2012
The 1983 Drought in the Western Pacific				
UNCED RIO+10: National report to the WSSD		e-copy		
USDA Soil survey of the Islands of Airik, Arno, Majuro, Mili, and Taroa, Republic of the Marshall Islands	The soil survey contains invormation that can be used in land planning programs in the RMI	Hard copy		
<b>Development Plans and Policies</b>				
National Climate Change Policy				
Nitijela Marshall Islands Parliament Corporate Plan 2010				
National Energy Policy and Action Plan				
PINZ Facility for Economic and Infrastructure Management Project. 2008. Natural Resources Development Action Plan	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.			Environmental and Natural Resources Development Action Plan
Agreement Concerning Procedures for the Implementation of United States Economic Assistance Provided in the Compact, as amended, of Free Association Between the Government of the United States of America and the Government of the Republic of the Marshall Islands 2003-2023				
Compact of Free Association, as amended				

Meto 2000				
Vision 2018. Development Plan				
RMI National Action Plan for Disaster Risk Management 2008-2018				
Work Plan leading up to the World Water Forum	The workplan lists out the activities against the timelines that need to be completed before the world water forum in 2012.			The workplan ministerial.
<b>Government Department/Operational Plans/Corporate Plans</b>				
Sectoral Strategic Plans-EPA				
Sectoral Strategic Plans-R&D				
<b>National and State Laws for Water</b>				
Public Water Supply Regulations 1994	Regulations are pursuant to Section 21 of the National Environmental Protection Act 1984.			Regulations are pursuant to Section 21 of the National Environmental Protection Act 1984.
Toilet Facilities and Sewage Disposal Regulations 1990	Regulations are pursuant to Section 21 of the National Environmental Protection Act 1984.			Regulations are pursuant to Section 21 of the National Environmental Protection Act 1984.
Planning and Zoning Act 1987	planning and zoning act_1987			Planning and Zoning Act 1987
Cabinet Minute establishing IWRM Task Force		Yes		
Cabinet Minute on water allocation for Laura landowers		Yes		
Water Quality Monitoring Regulations		Yes		
Public Health and Sanitation Act		Yes		
National Environmental Protection Act		Yes		
Public Health, Safety and Welfare Act	An Act to provide for the health, safety and welfare of the people of the Republic through the establishment of health services, and control of sanitation, and related matters.			RMI Public Health, Safety and Welfare Act
United Nations General Assembly. The Human Right to Water and Sanitation. A/64/L.63/Rev.1*	Full text of the resolution declaring right to water and sanitation a human right			UN General Assembly Right to Water resolution
Infrastructure Development and Maintenance Plan 2003 for RMI: Volume 11, Majuro Improvements to Water Supply. Majuro, RMI. Beca International Consultants, Ltd. 2003.				
Infrastructure Development and Maintenance Plan 2003 for RMI: Volume 11, Majuro Improvements to Water Supply. Majuro, RMI.				
Infrastructure Development and Maintenance Plan 2003 for RMI:				

Volume 12, Ebeye Water and Wastewater Strategy. Majuro, RMI. Beca International Consultants, Ltd. 2003.				
<b>Other (reviews etc)</b>				
The Hydrology of Arno Atoll <a href="http://www.sil.si.edu/digitalcollections/atollresearchbulletin/issues/00008.pdf">http://www.sil.si.edu/digitalcollections/atollresearchbulletin/issues/00008.pdf</a>				

**ANNEX 9 – MATRIX OF WATER RELATED PROJECTS IN THE REPUBLIC OF THE MARSHALL ISLANDS**

<b>Title of Project</b>	<b>Description</b>	<b>Ministry/ Agency</b>	<b>Donor/ Agency</b>	<b>Amount</b>	<b>Timeframe</b>	<b>Status</b>
Japan International Research Center for Agricultural Sciences (JIRCAS)	Monitoring of Laura Lens	R&D	Japan	\$540,000	2006-2011	5 years of Study on Laura Lens-possibility for extension this year
Pacific Adaptation to Climate Change (PACC)	Incorporate climate change in the water policy and address current water storage issues at the airport reservoir and Laura.	OEPPC	SPREP /UNDP/ GEF	\$800,000	2009-2013	Commenced in late 2010 and currently collecting and reviewing literature, plans, etc on water; need for technical assessment on site project by international consultant & developing communication strategy
IWRM Demonstration Project	Laura Lens Protection	EPA	GEF	\$500,000	2009-2013	Currently gathering information for levels of sustainable yield given rainfall data, implementation of activities per 4th IWRM GEF Quarter Work plan Attached
EU/EDF Projects EDF9 B envelop Disaster Risk Reduction Project	Rainwater Harvesting in Outer Islands, Maj, and Ebeye, WQ training and capacity bldg, Protection of Laura Water Lense, Septic Suction and Water truck procurement	EPPSO	EU	€935,000	2008-2013	Project launched off the ground Nov 2008 upon hiring of Project Mgr. Provision of 173 catchments of Outer Islands, 200 for Ebeye, 350 for Majuro, water truck, septic suction truck has been realized. Activities planned for protection of laura lens, and cleaning of the water distribution pipe (airport pipework and cleaning of runway surfaces) has not been done. Household survey on Ebeye and Majuro collected has provided data very useful beyond access to clean safe water. Project to end Dec 2010, with possibility of extension discussed. Proj Mgr reports to Chief Sec.
IWRM EU Policy/Planning Component	Policy Planning Component for Integrated Water Resources Management	EPA	EU			Awaiting draft Terms of Reference for Sub regional consultant, Recruitment of NWABS Officer (national), and identification of National Consultant (Ben Graham)
Water Demand Project	TA for leak detection demand side	MWSC	SOPAC /EU		2010	
Water Safety Planning	TA for finalization of Majuro Water Safety Plan	MWSC	WHO/S OPAC/ EU		2010	Draft Water Safety Plan currently being finalized, lead agency is MWSC supporting is EPA
DRM?US Funding?						
<b>Projects/Technical Assistance in the Pipeline</b>						
PACTAM-Water Engineer/Adviser	Placement of Water Engineer/Policy Adviser for RMI	MWSC/R&D/ EPA	AUSTR ALIA/A VI		2011-2013	Terms of reference being to be submitted to AVI 2nd week of October
Water Catchments for Majuro & Ebeye	Add on to EDF funding for catchments to the US	MOFA	US			Submission to US Ambassador on October 8th 2010 proposal for 200 catchments for Majuro and 200 for Ebeye-Awaiting response from US through MOFA

**Proposed Database Fields for Micronesian Water Projects Database**

<b>Project Summary</b>	<b>Project Contacts</b>	<b>Project Design</b>	<b>Project Resources</b>	<b>Project Outputs</b>
Project Title	Contact Person	Rationale	Government Cash	Documents
Project Focus	Telephone	Project Goals	Government In-Kind	Photographs
Project Country	Cell Phone	Project Objectives	Donor Cash (name)	Videos
Project Summary	Fax	Project Activities	Other In-Kind (name)	Awareness Materials
Donor Name	Email	Intended Outputs	Other Cash (name)	
Location – Name	Website	Intended Outcomes	Staffing (Position Titles)	
Location – Lat/Long		Project Indicators	Specialist Equipment	
Start Date				
End Date				

## ANNEX 10 – AGREED NATIONAL AND SUB-REGIONAL WORK PLAN

**Table 1** Work Plan, Timelines, and Targets for National Activities of IWRM Policy Programme

National Activities	2010		2010					Performance Target		
	Nov	Dec	Jan	Feb	Mar	Apr	Jun		Jul	
<b>Follow-Up Sub-Regional Workshop</b>										
Finalisation of Inventories of Information and Data Resources and Copies Filed in Central Repository	19/11								All relevant information resources compiled, inventoried, and filed by 19/11/2010	
Finalisation of Co-Financing Estimates for Preparation and Conduct of Water Summits	19/11								Co-financing estimates for conduct of water seminars by 19/11/2010	
Meeting Report Summary Disseminated (translated into local language where required)	26/11								National/Project Committee members informed of outcomes of sub-regional workshop by 26/11/2010	
Presentation of Proposed Water Policy Development Process to Water Committees	26/11								National Water Stakeholders Briefed on Planned Water Policy Activities and Resourcing by 26/11	
National Budgetary & Planning Processes Documented		10/12							Template on budgetary and planning processes completed and returned to SOPAC by 10/12/2010	
<b>Recruitment of Water Policy Support Officer</b>										
Post advertised and applications received	26/11								Post advertised and applications by 26/11	
Candidates shortlisted and interviewed		10/12							Interviews completed by 10/12	
National Policy Support Officer selected and operational		31/12							Policy officers recruited and operational by 31/12	
<b>Recruitment of National Policy Consultant (~3 months with 1 or 2 inputs)</b>										
Post advertised and applications received	19/11								Post advertised by 19/11	
Candidates shortlisted and interviewed		31/12							Interviews completed by 31/12	
National Policy Consultant operational			<i>Timing Dependent on National Needs</i>						Consultant operational as required	
<b>Engagement of National Water Champion</b>										
Role defined and communicated nationally		31/12							Minutes of water commission discussions	
Nominations for water champion sought			14/1						Nominations received by 14/1	
Water champion selected			28/1						Water champion identified and selected by 28/1	
Representative operational				<i>Based on country needs</i>						Water champion operational/country need based
<b>Water Status Reports and Draft Water Policy</b>										
Meeting to Discuss and Agree Outputs Needed from National & Sub-Regional Assistance		10/12							Meeting convened and outputs from national/regional assistance identified by 10/12	
Preparation of Draft Water Status Reports and Policy Recommendations/Framework				19/2					Draft water status reports and draft policy framework prepared by 19/2	
Presentation of Final Water Status Report and Draft Policy to Multi-Stakeholder Forum					22/3				Status report and policy/framework presented to water summit by 22/3	

<b>Water Policy Consultations</b>									
National Consultation(s) on Draft Status Reports and Policy Frameworks				26/2					Consultation convened to discuss draft reports/policies and feedback provided by 26/2
Preparatory Meeting(s) for Water Summits									Consultations convened as required
Draft Agenda and Required Inputs Identified				19/2					Draft agenda & inputs for summit identified
Conduct of National Water Summits					22/3				Water Summit convened on WWD 2011
<b>Communications and Marketing</b>									
Implementation of Communications Strategies									Ongoing activity

**Table 2** Work Plan, Timelines, and Targets for Regional Activities of IWRM Policy Programme

Regional Activities	2010		2010						Performance Target
	Nov	Dec	Jan	Feb	Mar	Apr	Jun	Jul	
<b>Recruitment of Water Policy Support Officer</b>									
Draft contract circulated to lead agency, selected officer, and Water Committee Chairperson		3/12							Draft contract prepared and circulated to participants to 3/12
Contract signed and officer operational		31/12							Contract signed by 31/12
Monthly payment to officer									Ongoing
<b>Recruitment of National Policy Consultant (~3 months with 1 or 2 inputs)</b>									
Draft contract circulated to lead agency, selected officer, and Water Committee Chairperson		17/12							Draft contract prepared and circulated to participants to 17/12
Contract signed and officer operational		31/12							Contract signed by 31/12
Payments to consultants			<i>As required/dependent on national timing</i>						
<b>Engagement of National Water Champion</b>									
Contract between SOPAC and lead agency		31/12							Contracted drafted and signed by 31/12
Transfer of funds from SOPAC to lead agency			28/1						Funds sent from SOPAC to lead agency by 28/1
<b>Technical Assistance to Water Policy Development and Water Summit</b>									
Review and comment on water resource reviews and draft policy documents/frameworks	<i>As required by countries/committees</i>								SOPAC IWRM programme responds to country requests within 5 days
<b>Water Policy Consultations</b>									
Attendance at National Water Summits					22/3				SOPAC IWRM programme staff participation in summits