



***Mid-Term Status of the Federated States of Micronesia's
National IWRM Demonstration Project:***

***“Ridge to Reef: Protecting Water Quality from Source to Sea
in the Federated States of Micronesia”***



***Pohnpei Island, Federated States of Micronesia
September 2011***

An Initiative of the Global Environment Facility Supported Project:
“Implementing Sustainable Water Resources and Wastewater Management in Pacific Island Countries”

GEF PACIFIC IWRM PROJECT

Table 1 Assessment of Project Status at October 2011¹

Output No	Output/Outcome	Key Indicators	Percent Completion
Component 1: Watershed Protection and Management			
<i>Sub-Component 1.1 – Nett Watershed Forest Reserve (WFR) Boundary Line Survey and Legally Demarcated</i>			
1.1.1	Community agreement in Nett Municipality to support the survey and legal demarcation of the Nett Watershed Forest Reserve	<ul style="list-style-type: none"> • Ongoing consultations with Village Chiefs on need for demarcation of Nett Watershed boundary. • Ongoing Community consultation and agreement on the role of Nanpil, Eirke, Meitik, and Kahmar Villages in boundary demarcation and watershed management. 	40%
1.1.2	Refined demarcation of the Nett Watershed Boundary Line, including community involvement in boundary demarcation with monuments and GPS data collection	<ul style="list-style-type: none"> • 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 markers/monuments erected by March 2011. 	20%
1.1.3	GIS and community produced maps of the Nett Watershed Forest Reserve, including agreed boundary line	<ul style="list-style-type: none"> • 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. 	40%
<i>Sub-Component 1.2 – Capacity Building for Improved Watershed Management in Nett Municipality</i>			
1.2.1	Capacity of community members in Nanpil, Eirke, Meitik, and Kahmar Villages 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.	<p>Improved capacity of community members in Nanpil, Eirke, Meitik, and Kahmar Villages to:</p> <ul style="list-style-type: none"> • participate in Pohnpei State forest surveys, including data collection, analysis, and reporting by August 2010; • follow the Invasive Species Task Force of Pohnpei (ISTOP) 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; and • support land owners to meet Pohnpei EPA standards with respect to pig pen and pit toilet site selection and design requirements 	10%
<i>Sub-Component 1.3 – Informing Sustainable Watershed Management in Nett Municipality</i>			
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	<ul style="list-style-type: none"> • 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. 	0%
1.3.2	Scoping study of necessary institutional and legislative reforms required to implement “Payment for Ecosystem Services” scheme in Pohnpei State	<ul style="list-style-type: none"> • 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 	0%

¹ The Memorandum of Agreement between SOPAC and FSM's nominated lead agency for the IWRM demonstration project, the Department of Transport, Infrastructure and Communications (DTC&I) was terminated in July 2010. Contact the Regional Project Manager for more information regarding the circumstances contributing to this action, and efforts to revitalise this project over the past 18 months.

Output No	Output/Outcome	Key Indicators	Percent Completion
		<p>by November 2011.</p> <ul style="list-style-type: none"> Report including proposed recommendations endorsed by IWRM Steering Committee and presented to relevant government officials by December 2011. 	
Sub-Component 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 the need for Management Plan development	<ul style="list-style-type: none"> Report of the state of Nett Watershed Forest Reserve and its management produced by July 2011. 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. 	0%
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)	<ul style="list-style-type: none"> 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. 	0%
Sub-Component 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.	<ul style="list-style-type: none"> 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. 	0%
1.5.2	Identification and documentation of best practices and lessons learned in Nett Watershed Management for replication in Yap, Chuuk, Pohnpei, and Kosrae States	<ul style="list-style-type: none"> Best practices and lessons learned in Nett Watershed Forest Reserve Management identified and documented annually Extension and awareness materials promoting key lessons and best practices produced annually 	0%
1.5.3	Promotion of best practices from Nett Watershed management for replication in resolving Chuuk State's priority IWRM and WUE management issues	<ul style="list-style-type: none"> 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. 	0%
Component 2: Protecting Fresh and Marine Water Quality and Quantity			
Sub-Component 2.1 – Survey Pollutant Sources			
2.1.1	Pollutant source and sanitary survey of the Nett Watershed	<ul style="list-style-type: none"> 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 	80%
2.1.2	Land use, pollutant sources (current and potential), riparian zones,	<ul style="list-style-type: none"> GIS map of land uses (household farms, piggeries, community gardens (e.g. taro, sakau), pollutant sources (current and potential), distribution and 	80%

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	and water uses in the Nett Watershed mapped	extent of riparian zones, and water uses/sites in the Nett Watershed produced by December 2010	
Sub-Component 2.2 – Strengthening of Efforts to Reduce Sedimentation and Climate Proof Water Supply System			
2.2.1	Protection of the Nanpil Dam from encroachment and increased sedimentation associated with access road runoff, including rehabilitation of the existing raw waterline screen at the Nanpil intake	<ul style="list-style-type: none"> Chain link fencing of Nanpil Dam and intake area by June 2011 Rehabilitation of Nanpil dam access roads by June 2011 Establishment of vegetated buffer zone to protect dam water quality from road and stormwater runoff by June 2011 	80%
2.2.2	Improved water conservation at the household level by trialling the use of pre-paid water meters, including a study of the benefits of post paid versus pre-paid water supply and recommendations regarding possible social and health consequences of a prepaid water system	<ul style="list-style-type: none"> Community participants in trial scheme identified and briefed on trial objectives and operational arrangements by 17 June 2011 Equipment purchased by 17 June 2011 Fitting of equipment at the household level by 15 July 2011 Trial results reported on 30th October 2011 	10%
Sub-Component 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 coconut husk in dry litter waste management at one piggery in Nett Municipality	<ul style="list-style-type: none"> Community training workshop convened by March 2011 Pig farmer using waste and shredded coconut husk to produce compost by June 2011 Method promoted for uptake by other farmers by December 2011 	0%
Component 3: Improving Water Quality and Quantity Monitoring and Planning			
3.1	Compilation of water quality and water treatment data from the Kolonia Water Treatment Plant in a centralised database	<ul style="list-style-type: none"> 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. 	0%
3.2	Operational water quality monitoring program for the Nanpil River and receiving coastal waters	<ul style="list-style-type: none"> 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 	0%
3.3	Operational water quantity monitoring program for the Nett Watershed	<ul style="list-style-type: none"> Water quantity (rainfall) and streamflow data collected monthly 	0%
3.4	Develop water quality and safety baselines and plan for the Nett Watershed Forest Reserve/Nanpil River/Kolonia Harbour	<ul style="list-style-type: none"> Compilation of water quality data and information regarding its variability (e.g. seasonal/annual) by June 2011 Baselines set by December 2011 Plan finalised by June 2012 	0%
Component 4: Policy and Planning for IWRM and Water Use Efficiency in the Federated States of Micronesia			
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	100%
4.2	National Round-Table Consultation(s) of Need for National Water Committee, and Identification of Mandate, Responsibilities, and Membership for such	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	100%

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	a Committee	Agreement on the need for, mandate and responsibilities, Terms of Reference, and Membership of a National Water Committee	
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	100%
4.4	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	100%
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	0%
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	0%