



**SOPAC**



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Third Meeting of the Regional Technical Advisory Group  
for the SOPAC/UNDP/UNEP/GEF Project:  
*“Implementing Sustainable Water Resource and Wastewater  
Management in Pacific Island Countries”*

Teleconference, 12<sup>th</sup> May 2011

## **PROJECT MONITORING AND EVALUATION FRAMEWORK**

### **1 BACKGROUND**

The logframe of the UNEP and UNDP Project Documents provides a suite of “comprehensive baseline and target indicators and sources of verification for both outcome and output levels during project implementation”. It was anticipated that these would “*form the basis on which the project's Monitoring and Evaluation (M&E) system [would] be built*”.

It was envisaged during the project design phase that Demonstration project level indicators would provide an effective way of monitoring progress. It was planned to aggregate these at each of the Demonstration project group levels to enable projects to learn from each other as part of the project *twinning* approach.

A summary of the project logframe is presented in Table 1 and the full project logframe is contained in Annex 1.

This paper talks to the progress made from the 2<sup>nd</sup> RTAG meeting and presents a draft Project M&E Framework (PMEF) for consideration by the RTAG.

**Table 1 Summary Project Logframe**

Impact [IM]	<i>Project Goal:</i> To contribute to sustainable development in the Pacific Island Region through improvements in natural resource and environmental management				1.
	<i>Overall Objective:</i> To improve water resources management and water use efficiency in Pacific Island Countries in order to balance overuse and conflicting uses of scarce freshwater resources through policy and legislative reform and implementation of applicable and effective Integrated Water Resources Management (IWRM) and Water Use Efficiency (WUE) plans*				2.
	Project Components				
	C1: Demonstration, Capture and Transfer of Best Practices in IWRM and WUE	C2: IWRM and WUE Regional Indicator Framework	C3: Policy, Legislative and Institutional Reform for IWRM and WUE	C4: Regional and National Capacity Building and Sustainability Programme for IWRM and WUE, including Knowledge Exchange and Learning and Replication	
	Component Objectives				
Effectiveness	Practical demonstrations of IWRM and WUE focused on removing barriers to implementation at the community/local level and targeted towards national and regional level learning and application	IWRM and environmental stress indicators developed and monitored through national and regional M&E systems to improve IWRM and WUE planning and programming and provide national and global environmental benefits.	Supporting countries to develop national IWRM policies and water efficiency strategies, endorsed by both government and civil society stakeholders, and integrated into national sustainable development strategies	Sustainable IWRM and WUE capacity development, and global SIDS learning and knowledge exchange approaches in place	3.
	Component Outcomes				
	Lessons learned from demonstrations of IWRM and water use efficiency approaches replicated and mainstreamed into existing cross-sectoral local, national and regional approaches to water management	National and Regional adoption of IWRM and WUE indicator framework based on improved data collection and indicator feedback and action for improved national and regional sustainable development using water as the entry point	Institutional change and realignment to enact National IWRM plans and WUE strategies, including appropriate financing mechanisms identified and necessary political and legal commitments made to endorse IWRM policies and plans to accelerate Pacific Regional Action Plan actions	Improved institutional and community capacity in IWRM at national and regional levels	
Efficiency	Outputs [OP]				4.
	Activities (Inputs [IP])				

NB. Efficiency and Effectiveness are evaluation criteria.

The 2<sup>nd</sup> RTAG session identified three key objectives in progressing the development of the PMEf, namely:

- i. Country project staff should review their project logframes to ensure that project document indicators are reflected in their logframes

This process is ongoing, with many countries having already accommodated the project document indicators. However, the formalisation of the project M&E framework will trigger a final review and incorporation of indicators into logframes.

- ii. *The PCU is to work with country project teams to ensure that all indicators are reflected in the country demonstration project logframe*

This step has also been ongoing, with the PCU working in partnership with country project teams. Again, a final review will be required following the formalisation of the PMEF.

- iii. *The PCU is to work with country project teams to ensure that the Focal Points are engaging the APEX bodies to deliver national outcomes*

The PCU has worked with country project teams to ensure that the need for Focal Points to engage APEX bodies to deliver national outcomes. Focal Points will be asked to talk to this process at the 3<sup>rd</sup> Regional Steering Committee Meeting in Rarotonga in late July.

In addition to addressing the above tasks, the project coordination unit (PCU) has continued with the task of formulating the PMEF guided by advice from the 2<sup>nd</sup> RTAG Meeting.

## **2 GUIDANCE FROM 2<sup>ND</sup> RTAG MEETING ON PMEF**

The guidance provided to the PCU in developing a draft PMEF based on discussions included:

- Targets were found to be confusing and the need for further clarification was identified – many targets incorporated multiple components, making assessment of progress difficult
- Timeframes needed to be reviewed to reflect the delays to the project initiation and changes to delivery modalities
- Monitoring approaches should include both output tracking, such as the nature, complexity and number of consultations and meetings conducted, through to outcome level monitoring of improved sanitation facilities
- Several targets had poor capacity for monitoring progress
- Significant further work that was required to establish national demonstration project baselines and to establish monitoring programs to track progress

The PCU were asked to consider the above comments and to provide a draft version of the PMEF for RTAG review at the 3<sup>rd</sup> RTAG Meeting.

## **3 PRINCIPLES IN DEVELOPING PROJECT M&E FRAMEWORK**

The key principles adopted in developing the PMEF were:

- i. Simple understandable indicators and targets
- ii. Quantitative measures have been adopted where practical

- iii. The use of studies, independent auditors and monitoring for the sole purpose of demonstrating achievement against numerical Project Document targets has been kept to a minimum
- iv. Monitoring aligns as much as practical with project activities
- v. Overall progress is classified into broad categories (Complete; Mostly Complete; Partially Complete; Mostly Incomplete and Incomplete) to reflect the level of reporting required

### Simple understandable indicators and targets

The need to provide simple understandable indicators and targets was considered critical for the PMEF to be a useful tool for tracking project progress and assessing project and national outcomes.

The approach proposed is to break down the Project Document targets into single, simple indicators with associated baselines and targets. An example target is

*“35% reduction in sewage pollution over eq.~40,000 ha area leading to reduction in eutrophication for 4 coastal receiving waters sites”*. At the country level for Nauru, this target can be broken down into:

- An associated area (which generally will remain constant as the project site)
- Reduction in eutrophication for coastal receiving waters
- A reduction in sewage pollution and associated target

As mentioned, the associated area will generally remain constant, but an initial measurement is required.

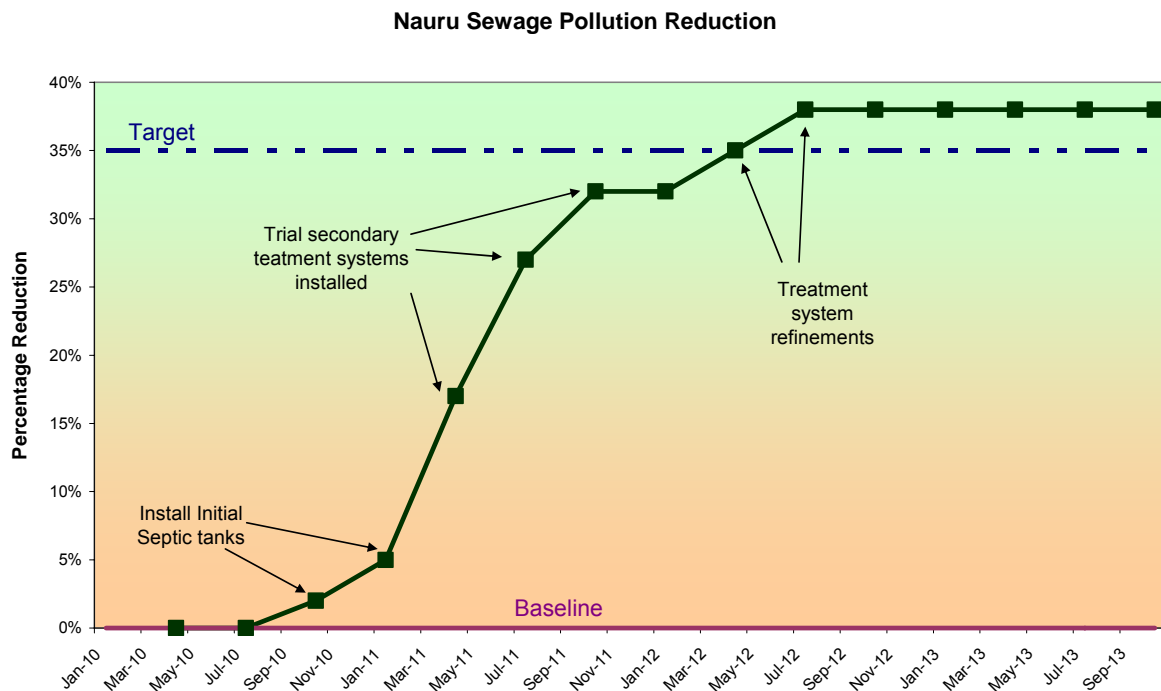
It may be possible to show reduction in coastal water eutrophication arising from project outputs, but this isn't likely in the project timeframes because the nutrient reductions are only likely to be evident towards the end of the project. Changes in nutrient status often take years to respond as nutrients can recycle within coastal systems for many years depending on exchanges, sediment and biota nutrient fluxes re-establishing a dynamic equilibrium and natural system variation. Therefore, the capacity to demonstrate eutrophication reduction relies on demonstrating sewage pollution reduction, which in turn relies on estimating reduced loads. This approach is consistent with the Project Documents, which state that environmental stress reduction should be used as a proxy for environmental state improvement in the PMEF.

Reduction in coastal water eutrophication will therefore be implied from measurable reductions in sewage pollution discharges to groundwater or surface waters ultimately discharging into coastal waters.

The measured indicator is therefore reduced to a simple indicator – the reduction of sewage pollution, with an associated target (35% reduction). An example of the sewage pollution reduction indicator for the Nauru demonstration project is shown in Figure 1. In this example, the reduction in sewage pollution is the indicator (green boxes). The baseline is zero (or no reduction from current levels). The target is a

35% reduction. The annotation provides information on contributing stages of the project over a 2½ year period.

**Figure 1 Example Indicator Plot**



By breaking the Project Documents into simple indicators, tracking can be simplified. Without this sort of indicator, tracking is complex, relying on reporting against a complex target.

The reporting against this indicator is then simplified to:

*Country Reporting:*

Nauru Target: 35% reduction in sewage pollution in Ewa and Anetan Communities (20 ha)

- Scorecard:**
- Complete** Target reduction in sewage pollution and target area
  - Mostly Complete** ¾ of target reduction and area achieved
  - Partially Complete** ½ of target reduction and area achieved
  - Mostly Incomplete** Significant measurable reduction in sewage pollution  
or  
Strategy and funding in place, but groundworks not completed to deliver reduction in sewage pollution
  - Incomplete** No significant reduction in sewage pollution

This can be assessed at a community level – likely to be close to this level of reduction across whole community if 50% achieved for each septic through secondary treatment for demonstration sites. Demonstrated through a study report on demonstrations endorsed by the Steering Committee.

Baseline data: Catchment area  
Existing state of sanitation systems in demonstration site

*Regional Reporting:*

<b>Scorecard: Complete</b>	35% reduction in sewage pollution over 40,000 ha, reducing eutrophication in 4 coastal waters
<b>Mostly Complete</b>	Achieve 2 of 3 of 35% reduction in sewage pollution, over 40,000ha area, reducing eutrophication in 4 coastal waters Or 25% reduction in sewage pollution over 40,000 ha, reducing eutrophication in 4 coastal waters
<b>Partially Complete</b>	At least 20% increase in forested and protected area over at least 20,000ha, reducing eutrophication in at least 2 coastal waters
<b>Mostly Incomplete</b>	Measurable reductions in sewage pollution reducing sewage pollution in at least 2 coastal waters
<b>Incomplete</b>	No significant reduction in sewage pollution

This approach provides tools for tracking progress, assessing overall outcome and contribution to regional outcomes.

The alternatives to this approach are to establish reporting criteria directly against the complex targets, or to develop an alternative set of indicators.

Should this approach be agreed, the draft PMEF can be circulated to countries for comment and details to be reviewed/ amended.

#### **4 RTAG CONSIDERATIONS**

- There is a request for a decision to be made on the approach adopted:

***It is proposed that the approach of establishing simple indicators with tracking against baselines and targets be adopted.***

- A draft PMEF is included in Annex 2. Comments are invited on the PMEF.

## Annex 1: Logical Framework and Objectively Verifiable Impact Indicators

Project Strategy	Objectively verifiable indicators				
<i>Goal</i>	To contribute to sustainable development in the Pacific Islands Region through improvements in water resource and environmental management.				
	Indicator	<u>Baseline</u>	<u>Target</u>	Sources of verification	Risks and Assumptions
<p><i>Objective:</i> Improved water resources management and water use efficiency in Pacific Island Countries in order to balance overuse and conflicting uses of scarce freshwater resources through policy and legislative reform and implementation of applicable and effective Integrated Water Resources Management (IWRM) and Water Use Efficiency (WUE) plans</p>	<p>1.1 Overarching improvement in water resource management, quality and availability through appropriate national Demonstration Project execution and concurrent reforms in policy, legislation and institutional arrangements leading to global environmental benefits [P]</p> <p>1.2 Actual change in institutional and societal behaviour [P]</p>	<p>1.1 Fragmented institutional responsibilities, weak policies, communication &amp; coordination resulting in fragile or non-existent IWRM approaches in place</p> <p>1.2 Poor and inconsistent data collection for monitoring and inadequate action and investment and change based on monitoring information</p>	<p>1.1 14 National IWRM and Water Use Efficiency Strategies in place, with institutional ownership secured with 20% increase in national budget allocations by month 42 [P]</p> <p>1.2 Best IWRM and WUE approaches mainstreamed into national and regional planning frameworks by end of project facilitated by national IWRM APEX bodies, Project Steering Committee, Pacific Partnership, and PCU by month 60 [P]</p> <p>1.3 Environmental stress reduction in 14 Pacific SIDS: 30% increase in forest area for ~8,000 ha of land, 35% reduction in sewage pollution over eq.~40,000 ha area leading to reduction in eutrophication for 4 coastal receiving waters sites, and 35% reduction in water leakage for systems supplying ~85,000 people by end of project, leading to av. 30% increase in population with access to safe water supply and sanitation for 6 sites (based on targets under Component 1) [SR]</p>	<p>Demonstration Project Annual Reporting</p> <p>National IWRM Plans and Water Use Efficiency Strategies with appropriate budget allocations in place</p> <p>Indicator Framework mechanism</p> <p>National Government feedback on institutional changes</p> <p>Pacific Partnership, RAP, NAPA, NAP, NSDSs, and MDG reporting</p>	<p>Strong and high-level government commitment is sustained and willing to make change – adequate understanding and political will</p> <p>Able to monitor and update baseline information and action taken on findings and results</p> <p>Inclusive stakeholder involvement in the IWRM consultation process</p>

<p><b>Component 1:</b>  <b>Demonstration, Capture and Transfer of Best Practices in IWRM and WUE</b></p> <p><b>Component 1 Outcome:</b>  Lessons learned from demonstrations of IWRM and water use efficiency approaches replicated and mainstreamed into existing cross-sectoral local, national and regional approaches to water management</p>	<p>1.1 Step change improvement in baseline situation (based on Diagnostic Analyses) from project start, including adoption of technical and allocative water use efficiency approaches by end of project [SR]</p>	<p>1.1 Fragmented institutional responsibilities, weak policies, communication &amp; coordination resulting in fragile or non-existent IWRM approaches in place</p> <p>1.2 Lessons learned from water management and IWRM type interventions are not shared or acted upon</p> <p>1.3 Water Use Efficiency is poorly understood and often not considered in water management decisions</p> <p>1.4 Pollutants from sanitation systems, industrial and urban discharges and poor land management practices enter fresh surface and groundwater and coastal receiving waters</p>	<p><b><u>i) Watershed Management</u></b>  2 Basin Flood Risk Management Plans resulting in 10% reduction in infrastructure loss due to flooding (on approximately 18,000 ha of land) by end of project [SR]</p> <p>30% increase in forest area at 2 Demonstration Sites covering ~8,000 ha of land [SR]</p> <p><b><u>(ii) Wastewater &amp; Sanitation Management</u></b>  35% reduction in sewage pollution discharge at 8 Demonstration sites (covering eq. 40,000 ha of land) by month 48 [SR]</p> <p><b><u>(iii) Water Resources Assessment &amp; Protection</u></b>  4 SIDS have revised legislation in place to protect surface water quality by end of project [P]</p> <p><b><u>(iv) Water Use Efficiency &amp; Water Safety</u></b>  35% reduction in leakage in 3 national urban water supply systems (serving ~85,000 people) by month 42 and reduction over freshwater usage for sanitation by end of project [SR]</p> <p>Replication of technical and water use efficiency lessons from project applied in future national and project based activities by end of project [P]</p> <p>Technical, management, participatory and advocacy lessons from projects developed into national lessons learned presentation packages with best practices mainstreamed into national and regional approaches by end of project facilitated by national IWRM APEX bodies, Project Steering Committee, Pacific Partnership, and PCU [P]</p>	<p>Demonstration Project Annual Reporting</p> <p>National IWRM Plans and Water Use Efficiency Strategies with appropriate budget allocations in place</p> <p>Pacific Partnership and RAP reporting</p>	<p>Available local capacity to manage and implement national Demonstration projects</p> <p>Inclusive stakeholder involvement in the IWRM consultation process</p> <p>Mechanisms and approaches to capture lessons are appropriate and promote action and replication</p>
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<p><b>Component 2: IWRM and WUE Regional Indicator Framework</b></p> <p>Component 2 Outcome: National and Regional adoption of IWRM and WUE indicator framework based on improved data collection and indicator feedback and action for improved national and regional sustainable development using water as the entry point</p>	<p>1.1 Multi-sectoral approaches to national water and environmental management improved and increased through M&amp;E feedback and action, leading to global environmental benefits by end of project [P]</p>	<p>1.1 Poor and inconsistent data collection for monitoring and inadequate action and investment and change based on monitoring information</p>	<p>1.1 Indicator feedback facilitated through IWRM APEX Body provides information for multi-sectoral action and endorsement of national and indicators for IWRM, NAPA, NAP and sustainable development planning (NSDSs and NEAPs) by end of project [P]</p>	<p>Indicator Framework mechanism in place and active</p> <p>Increase national budget for hot-spot areas identified by Indicator Framework</p>	<p>Strong understanding and willingness to use and act upon the data is present</p>
<p><b>Component 3: Policy, Legislative and Institutional Reform for IWRM and WUE</b></p> <p>Component 3 Outcome: Institutional change and realignment to enact National IWRM plans and WUE strategies, including appropriate financing mechanisms identified and necessary political and legal commitments made to endorse IWRM policies and plans to accelerate Pacific Regional Action Plan actions</p>	<p>1.1 Nationally endorsed IWRM plans and WUE strategies in place and driving sustainable water governance reform in PICS by end of project [P]</p>	<p>1.1 No nationally endorsed IWRM plans or water use efficiency approaches in place</p> <p>1.2 Fragmented national and regional water sector</p>	<p>1.1 14 draft National IWRM and Water Use Efficiency Strategies in place, with institutional ownership secured through the national APEX body and institutional mandates adjusted/confirmed as IWRM implementing agencies with appropriate budget allocations by month 42 [P]</p>	<p>National IWRM Plans and Water Use Efficiency Strategies with appropriate budget allocations in place</p> <p>National budget plans</p>	<p>Strong and high-level government commitment is sustained and willing to make change – adequate understanding and political will</p>
<p><b>Component 4: Regional and National Capacity Building and Sustainability Programme for IWRM and WUE, including Knowledge Exchange and Learning and Replication</b></p> <p>Component 4 Outcome: Improved institutional and community capacity in IWRM at national and regional levels</p>	<p>1.1 Measurable sustained increase in training and awareness campaigns, including appropriate national level financial allocations for capacity development by end of project [P]</p>	<p>1.1 Poor collection and exchange of information within and between countries, often sectorally focused with poor consideration of investment planning required to ensure sustainability and human capacity development needs</p>	<p>1.1 Increase in national staff (both men and women) across institutions with IWRM knowledge and experience by end of project [P]</p> <p>1.2 30% increase in gender balanced community and wider stakeholder engagement in water related issues by month 60, [P]</p> <p>1.3 Improved cross-sectoral communication by end of project [P]</p>	<p>National water management reporting</p> <p>National and regional press</p> <p>National Government feedback on institutional changes</p> <p>Pacific Partnership and RAP reporting</p>	<p>Strong and high-level government commitment is sustained and willing to make change – adequate understanding and political will</p> <p>Stakeholders able to understand, cope and promote IWRM</p>

## Component 1: Demonstration, Capture and Transfer of Best Practices in IWRM and WUE [UNDP]

Project Strategy	<u>Objectively verifiable indicators</u>				
<i>Component 1 Objective:</i>	Practical demonstrations of IWRM and WUE focused on removing barriers to implementation at the community/local level and targeted towards national and regional level learning and application				
	Indicator	<u>Baseline</u>	<u>Target</u>	Sources of verification	Risks and Assumptions
<p><b>Component 1 Outputs:</b></p> <p>1.1 Improved access to safe drinking water supplies</p> <p>1.2 Reduction in sewage release into coastal receiving waters</p> <p>1.3 Reduction in catchment deforestation and sustainable forest and land management practices established</p> <p>1.4 Water Safety Plans developed and adopted</p> <p>1.5 Integrated Flood Risk Management approaches designed and developed</p> <p>1.6 Expansion in eco-sanitation use and reduction in freshwater use for sanitation purposes</p> <p>1.7 Improved community level engagement with national institutions responsible for water management</p> <p>1.8 Increase in water storage facilities</p> <p>1.9 Technical and Allocative Water Use Efficiency approaches designed and adopted</p> <p>1.10 Identification and adoption of appropriate financing approaches for sustainable water management</p>	<p>1.1 Capture of Lessons from Demonstration Projects &amp; other Water Initiatives (CTI/PACC/PAS) shared regionally &amp; with global SIDS [P]</p> <p>1.2 Replication of Demonstration Projects within &amp; between PICS (where support and finances available) [SR]</p> <p>1.3 Successful demonstrations of IWRM approaches mainstreamed into existing local, national, &amp; regional approaches [SR]</p> <p>1.4 PIC understanding &amp; adoption of technical, allocative, and equitable water use efficiency measures [P]</p> <p>1.5 Support for social and economic welfare of island communities through improved water management [P]</p> <p>1.6 Environmental quality and productivity sustained [SR]</p> <p>1.7 Improved public-health across SIDS with improved monitoring [SR]</p> <p>1.8 Increase in groundwater monitoring and regular sampling routines established for SIDS (leading to improvements in groundwater quality) [SR]</p> <p>1.9 Functioning water &amp; environment cost recovery schemes adopted using PIC driven mechanisms to sustain environmental productivity balanced with equitable use of water resources [P]</p>	<p>1.1 Limited water resources susceptible to over-exploitation and pollution</p> <p>1.2 Vulnerability to climate variability</p> <p>1.3 Insufficient political and public awareness of the role water plays in economic development, public health and environmental protection</p> <p>1.4 High urban water losses, poor water conservation &amp; inadequate drinking water treatment</p> <p>1.5 Poor wastewater management resulting in increased land based source pollution into the watershed and coastal environment</p> <p>1.6 Fragmented institutional responsibilities, weak policies, communication &amp; coordination</p> <p>1.7 Conflicts between national versus traditional rights</p> <p>1.8 Inadequate financing due to poor cost-recovery and limited 'economies of scale'</p> <p>1.9 Weak stakeholder linkages both within and outside the water sector</p> <p>1.10 Reduction in ecosystem productivity and biodiversity</p> <p>1.11 Reduction in human health and socio-economic condition due to poor and inadequate access to sanitation and safe water supplies</p>	<p><b><u>i) Watershed Management</u></b></p> <p>(i) 40% increase in population with access to safe drinking water at 1 demo site [SR]</p> <p>(ii) 30% reduction in animal manure and sewage entering marine waters at 1 demo site [SR]</p> <p>(iii) 30% increase in forest area at 2 demo sites [SR]</p> <p>(iv) Water Safety Plans in place and enacted in 3 peri-urban areas [SR]</p> <p>(v) Legislation in place to protect surface water quality in 4 SIDS [P]</p> <p>(vi) 1 basin flood risk management plan in place [P]</p> <p>(vii) Sustainable forest &amp; land mgmt practices established and trialed with landowners in 2 demo sites [SR]</p> <p><b><u>ii) Wastewater &amp; Sanitation Management</u></b></p> <p>(i) 40% reduction in GW and marine pollution discharge at 2 demo sites from sewage and manure [SR]</p> <p>(ii) 30% reduction in drinking water resources pollution discharge for 1 SIDS [SR]</p> <p>(iii) 30% reduction in use of freshwater for sanitation purposes due to eco-sanitation expansion in 1 demo site [SR]</p> <p>(iv) 50% increase in community engagement with National Government in 3 SIDS [P]</p> <p><b><u>iii) Water Resources Assessment &amp; Protection</u></b></p> <p>(i) National effluent standards reached for wastewater treatment at 3 sites [P]</p> <p>(ii) 20% increase in water storage facilities at 1 demo site [SR]</p> <p>(iii) Water leakage reduced by 40% from existing baseline levels in 1 water supply system [SR]</p> <p>(iv) 10% reduction in damage to infrastructure due to flooding in 1 significant catchment [SR]</p> <p>(v) 1 basin flood risk management plan in place and a Catchment Council established in 2 SIDS [SR]</p> <p><b><u>iv) Water Use Efficiency &amp; Water Safety</u></b></p> <p>(i) WUE improved by 30% over baseline in 2 urban water supply systems [SR]</p> <p>(ii) Water Safety Plans in place and enacted in 2 urban areas [P]</p> <p>(iii) 20% reduction in sewage and manure pollution into fresh and marine waters for 2 urban/peri-urban areas [SR]</p> <p>(iv) 30% reduction in groundwater pollution discharge for 2 water supply systems [SR]</p>	<p>Quarterly, bi-annual, and annual National Demonstration Progress Reporting</p> <p>Project Coordination Unit (PCU) Annual Monitoring Reports and missions</p> <p>National and regional statistical reports (SPC MDG and census reporting)</p> <p>Mid-Term Review Reporting and mission</p> <p>PCU general reporting to Project Steering Committee and UNDP/UNEP</p> <p>IWRM Planning and WUE Strategies (available online and via PCU)</p> <p>National IWRM APEX body meeting minutes</p>	<p>Strong and high-level government commitment is not sustained</p> <p>Vulnerability to changing environmental conditions</p> <p>Inclusive stakeholder involvement in the IWRM consultation process</p> <p>Limited influence of national and catchment stakeholders to promote and sustain IWRM</p> <p>Restricted capacity of stakeholders to implement IWRM best practice in countries</p>

## Component 2: IWRM and WUE Regional Indicator Framework [UNEP]

Project Strategy	Objectively verifiable indicators				
<i>Component 2 Objective:</i>	IWRM and environmental stress indicators developed and monitored through national and regional M&E systems to improve IWRM and WUE planning and programming and provide national and global environmental benefits.				
	Indicator	<i>Baseline</i>	<i>Target</i>	Sources of verification	Risks and Assumptions
<p><b>Component 2 Outputs:</b></p> <p>2.1 Process, Stress Reduction, Environmental and Socio-Economic Status, WUE, Catalytic, Governance, Proxy, and X-Cutting Regional Indicator Framework (RIF) established and in use</p> <p>2.2 Participatory M&amp;E adopted within Demonstration Projects [C1] and mainstreamed into national best practice</p> <p>2.3 Improved institutional capacity for monitoring and support for action on findings across the region, including Pacific RAP progress for water investment planning (and International Waters SAP)</p>	<p>1.1 Regional Indicator Framework (RIF) integrated into national sustainable development approaches (NSDSs and NEAPs) and national adaptation programmes for action (NAPAs) and national adaptation plans (NAPs) for disaster risk reduction [P]</p> <p>1.2 Indicator data provides evidence base for action by SIDS National Governments [P]</p> <p>1.3 Communities actively involved in designing, implementing and monitoring water and environment projects [P]</p> <p>1.4 National expert monitoring staff available as a resource to National IWRM APEX bodies and across government using systems thinking approaches [P]</p> <p>1.5 Established national data collection for monitoring and access by all database facilities with appropriate institutional mandates and powers in place for use of and action with the data for national programming, advocacy, learning and accountability [P]</p>	<p>1.1 National approaches do not use appropriate indicators and where they do these are single sectoral in nature</p> <p>1.2 Communities are rarely involved in water and environmental management approaches</p> <p>1.3 Monitoring is not a mainstreamed practice in national institutions responsible for water and environmental management</p> <p>1.4 Inconsistent monitoring data collection and insufficient use of information for intervention improvements and planning</p>	<p>1.1 Aggregation of all final national demonstration project indicators by month 8 of the project [P]</p> <p>1.2 Draft regional Indicator Framework developed for consultation by month 18 of the project [P]</p> <p>1.3 Countries fully utilizing Indicator Framework by month 36 [P]</p> <p>1.4 Stakeholder consultation and approval of project design and PM&amp;E plan for each national demonstration project by month 8 of the project, including separate consultations with women [P]</p> <p>1.5 National promotion and adoption of PM&amp;E approaches by national water APEX body by month 36 of project using Most Significant Change (MSC) and reflection and learning techniques [P]</p> <p>1.6 Relevant national country staff trained in monitoring and PM&amp;E approaches by month 24 of the project based on needs assessment [P]</p> <p>1.7 APEX body leading institutional training in consistent data collection and development of national monitoring rationale by month 36 of project [P]</p> <p>1.8 Regional matrix in place for Pacific RAP monitoring and national investment planning by month 42 of the project [P]</p>	<p>Revised and finally endorsed Demonstration Project Proposals (available month 8)</p> <p>C2 Indicator Framework annual reports</p> <p>Regional Indicator Framework progress reports</p> <p>National Demonstration Project reporting</p> <p>Annual national IWRM reporting by national APEX bodies</p> <p>Training Needs Assessment report and Training of Trainers workshops</p> <p>National Monitoring Plans and relevant data collection records and action recommendations</p> <p>Regional matrix available online and annual investment planning reporting per country</p>	<p>Indicator data is available and/or the means to find/collect the data are available</p> <p>Strong understanding and willingness to use and act upon the data is present</p> <p>Strong willingness to participate by communities involved in Demonstration Projects and wider stakeholders</p> <p>Willingness by national government to learn from and adopt PM&amp;E approaches where applicable</p> <p>Appropriate staff are available to work with project staff and the national IWRM APEX bodies to mainstream monitoring into normal practice</p>

**Component 3: Policy, Legislative and Institutional Reform for IWRM and WUE**  
**[\$3,021,080 – entirely co-financed] [UNEP oversight]**

Project Strategy	Objectively verifiable indicators				
<i>Component 3 Objective:</i>	Supporting countries to develop national IWRM policies and water efficiency strategies, endorsed by both government and civil society stakeholders, and integrated into national sustainable development strategies				
	Indicator	<i>Baseline</i>	<i>Target</i>	Sources of verification	Risks and Assumptions
<p><b>Component 3 Outputs:</b></p> <p>3.1 National IWRM plans and WUE strategies developed and endorsed</p> <p>3.2 Implementation of IWRM approaches agreed across national, community and regional organisations</p> <p>3.3 Strengthened and sustainable APEX water bodies to catalyze implementation of national IWRM and WUE plans, including balanced gender membership</p> <p>3.4 Awareness raised across civil society, governments, education systems and the private sector</p> <p>3.5 Sustainability strategies developed focusing on institutional and technical interventions required for Demonstration scaling-up as part of National IWRM Plan development and implementation</p>	<p>1.1 National IWRM Plans in place and adopted by SIDS National Governments with appropriate resources to implement and monitor &amp; strategic links made to NAPAs and NAPs, NSDSs, and coastal resources management plans [P]</p> <p>1.2 National Water Use Efficiencies in place and adopted by SIDS National Governments with appropriate resources to implement and monitor [P]</p> <p>1.3 Regularly meeting capable IWRM APEX bodies responsible for the coordination of national IWRM activities including sharing experience regionally with other SIDS IWRM APEX bodies [P]</p> <p>1.4 IWRM communicated and mainstreamed into national working practices, including national school curricula [P]</p> <p>1.5 National budgeting and financial planning for x-sectoral IWRM approaches included within Treasuries/Financial Ministries [P]</p>	<p>1.1 No nationally endorsed IWRM plans in place</p> <p>1.2 Water use efficiency measures not considered (or only focusing on technical efficiency)</p> <p>1.3 APEX bodies in place but with weak or no mandates/ToR, budget, or authority</p> <p>1.4 Adhoc awareness campaigns for water management, with little engagement with the private sector, civil society or the education sector</p> <p>1.5 Few operation and maintenance plans for infrastructure in place</p> <p>1.6 Few asset management plans or approaches developed</p> <p>1.7 Unwillingness to change institutional situation to improve water governance</p>	<p>1.1 14 draft National IWRM plans produced by month 18 of the project, with final versions published by month 24 [P]</p> <p>1.2 14 draft Water Use Efficiency Strategy documents produced by month 18 of the project, with final versions published by month 24 [P]</p> <p>1.3 National recruitment of support adviser to national APEX bodies by month 6 of the project [P]</p> <p>1.4 Strategic IWRM communication plan framework for individual national development in place by month 12 of the project (based on Regional Communication Strategy in place by month 6), with national development and implementation by month 24 [P]</p> <p>1.5 Multi-sectoral participation in national APEX bodies by month 12 of the project with 33% female membership (including private and education sector membership and national finance and economic planning units) [P]</p> <p>1.6 Replication Framework in place by month 6, Replication Toolkit in place by month 24, National scaling-up and replication strategies in place based on Demonstration project success and failures for each country by month 54 of the project [P]</p>	<p>National IWRM Plans and Water Use Efficiency Strategies</p> <p>National IWRM Roadmaps</p> <p>Other National Plans (Sanitation action Plans, etc)</p> <p>Contract and annual performance reviews of Advisers to national APEX bodies</p> <p>National IWRM communication plans and materials produced (videos, webshots, websites, articles, press releases, speeches, posters, workshop reports, meetings, community theatre productions, radio stories/interviews, work stories, community meeting notes, APEX body Terms of Reference, membership log, minutes, other national APEX body meeting minutes)</p> <p>National Scaling-Up and Replication recommendation reports</p> <p>Regional Indicator Framework progress reports and National Monitoring Plans</p> <p>National Demonstration Project reporting</p> <p>Regional matrix available online and annual investment planning reporting</p>	<p>Appropriately qualified national staff available</p> <p>Stakeholders willing to participate.</p> <p>Country and catchment priority issues exist</p> <p>Early partnerships continue to exist and function. Partnerships have capacity to use support tools or work with external advisors</p> <p>Partnerships maintain capacity and external examples of good practice exist and can be adapted for SIDS</p>

**Component 4: Regional and National Capacity Building and Sustainability Programme for IWRM and WUE, including Knowledge Exchange and Learning and Replication [UNEP]**

Project Strategy	Objectively verifiable indicators				
<i>Component 4 Objective:</i>	Sustainable IWRM and WUE capacity development, and global SIDS learning and knowledge exchange approaches in place				
	Indicator	<i>Baseline</i>	<i>Target</i>	Sources of verification	Risks and Assumptions
<p><b>Component 4 Outputs:</b></p> <p>4.1 National and regional skills upgraded in project management and monitoring including water champions and APEX bodies for both men and women</p> <p>4.2 Active twinning programmes in place between countries facing similar water and environmental degradation problems</p> <p>4.3 Effective knowledge management networking and information sharing inter and intra-regional</p>	<p>1.1 Water champions identified and active in awareness raising by month 9 of the project [P]</p> <p>1.2 Twinning exchange programmes in place between countries and regions (Caribbean and African SIDS) [P]</p> <p>1.3 Dynamic regional CPD* training workshops and networking through existing CROP agencies and IW:LEARN approaches including strategic links to other GEF initiatives throughout project, reviewed and appraised annually [P]</p> <p>1.4 Comprehensive IWRM and WUE data warehouse facility using appropriate media for PICs (linked to Indicator Framework, Pacific RAP and Caribbean and African SIDS approaches) [P]</p>	<p>1.1 Few twinning opportunities and little information exchange and lesson learning between countries and regions</p> <p>1.2 Training workshops in place but often sectoral and technical in focus</p> <p>1.3 Few opportunities for training on IWRM, sustainability issues, investment planning, and monitoring, within the context of IWRM</p> <p>1.4 No comprehensive IWRM and WUE data store of information available to PICs or other global SIDS</p>	<p>1.1 IWRM awareness programs integrated into normal institutional practices with appropriate budget approved by month 48 of project [P]</p> <p>1.2 Five twinning exchange programs in place between countries by month 42 of the project and at least 1 program with the Caribbean on IWRM planning underway for a similar program with African SIDS [P]</p> <p>1.3 Cross-sectoral regional learning mechanisms (communities of practice) in place including x-project workshop attendance for the GEF funded projects: PACC, SLM, and the ADB CTI project reviewed annually [P]</p> <p>1.4 GEF IW experience with IWRM upgraded for SIDS and highlighted at GEF IWC6, WWF5 Istanbul 2009, and WWF6 TBD 2012, including SIDS experience to support GEF in future IW Focal Area Strategy development and Strategic Programming [P]</p> <p>1.5 Women form at least 2 of the 5 twinning exchange programme members by month 42 of the project [P]</p>	<p>Recruitment feedback via National APEX bodies and IWRM Focal Points through meeting reports and minutes, including Awareness Program Scoping and Implementation Reports</p> <p>Twinning and secondment reports</p> <p>Workshop reports and publications, IW:LEARN outputs</p> <p>Database in place and linked to other resources – available via WWW and other media</p> <p>Pacific Partnership meeting outputs and reports, including Partnership Newsletter</p>	<p>Water champions are present in-countries and willing to take on the role</p> <p>National participation in the twinning approach and lessons learned and feedback</p> <p>Public concerned about water and catchment management issues</p> <p>Countries willing to share information with each other, regionally and inter-regionally</p>

## **Annex 2: Draft PMEF**

**LOGFRAME TARGET 1**

**14 National IWRM and Water Use Efficiency Strategies in place, with institutional ownership secured with 20% increase in national budget allocations by month 42**

and

**Draft National IWRM plans and Water Use Efficiency strategies produced by June 2010, with final versions published by end 2010**

Proposed Target:

*14 National IWRM Strategies in place incorporating Water Use Efficiency, with institutional ownership secured. A 20% increase in national budget allocations by month 54*

Proposed Indicator(s)

Strategies in place:

**1. National strategies in place (in the form of national policy, strategic framework, plan, etc) addressing explicitly both IWRM and water use efficiency**

Increase in National Budget:

**2. 20% increase in national budget attributable to IWRM and WUE**

Relies on capacity to clearly identify budget component attributable to IWRM/WUE which may be challenging

Options include:

- i. Discrete budget line
- ii. Clear ability to break down budget

Comparison required against feedback – suspect that this is currently a baseline of zero in most countries; meaning any allocation will strictly satisfy.

***A secondary approach, where it is not possible to show an increase in budget is to show that institutional ownership is secured through allocation of discrete budget line(s) to IWRM and/or WUE***

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Strategy endorsed and 20% increase in budget
	<b>Mostly Complete</b>	Strategy endorsed, budget allocated to IWRM and WUE, but no increase in budget
	<b>Partially Complete</b>	Strategy endorsed with reference to IWRM and WUE, with budget lines allocated to IWRM and WUE
	<b>Mostly Incomplete</b>	Strategy endorsed with reference to IWRM and WUE, but not consistent with best practice; no budget allocation
	<b>Incomplete</b>	No change in national policy or budget

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	Strategy endorsed and 20% increase in budget in 12 countries
	<b>Mostly Complete</b>	Strategy endorsed and 20% increase in budget in 9 countries
	<b>Partially Complete</b>	Strategy endorsed in 5 countries
	<b>Mostly Incomplete</b>	Strategy endorsed in up to 3 countries
	<b>Incomplete</b>	Strategy not endorsed in any countries

Baseline will need to include any allocation likely to be moved across to IWRM and WUE to enable direct comparison.

Note that a 20% increase may be consistent with CPI increase – although recession may impact on this.



Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	<p>1 National Strategy in Place Developed through EU IWRM contract</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development, due mid-2012</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase in Budget</p>	<p><input type="checkbox"/> Endorsement by Minister</p> <p><input type="checkbox"/> Cook Islands 2013/4 Budget (1 April 2013)</p> <p><input type="checkbox"/> Budgets 2009/10 and 2013/4</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009/10 budget allocated to IWRM and WUE</p>
Fiji	<p>1 National Strategy in Place Developed through Junior Professional</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development, due mid-2012</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by 1 Jan 2013</p> <p><input type="checkbox"/> 20% increase in Budget</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> Fiji Islands 2013 Budget (1 January 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>
FSM	<p>1 National Strategy in Place Developed through process initiated in Summit</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development, due mid-2012</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by Oct 1 2013</p> <p><input type="checkbox"/> 20% increase in Budget</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> FSM 2013 Budget (1 October 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>
Nauru	<p>1 National Strategy in Place Developed through EU IWRM Policy contract</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development, due mid-2012</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase in Budget</p>	<p><input type="checkbox"/> Endorsement by Minister</p> <p><input type="checkbox"/> Nauru 2013/4 Budget (1 July 2013)</p> <p><input type="checkbox"/> Budgets 2009/10 and 2013/4</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009/10 budget allocated to IWRM and WUE</p>

Country	Indicator	Target	Means of Verification	Baseline
Niue	<p>1 National Strategy in Place Developed through EU IWRM Policy contract</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development, due mid-2012</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase in Budget</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> Niue 2013 Budget (1 April 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>
Palau	<p>1 National Strategy in Place Developed through process initiated in Summit</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase in Budget</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> Palau 2013 Budget (1 October 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of current budget allocated to IWRM and WUE</p>
PNG	<p>1 National Strategy in Place Developed through Junior Professional</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Strategy</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase in Budget</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> PNG 2013 Budget (1 January 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>
RMI	<p>1 National Strategy in Place Developed through process initiated in Summit</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> RMI 2013 Budget (1 October 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>

Country	Indicator	Target	Means of Verification	Baseline
Samoa	<p>1 National Strategy in Place</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> Samoa 2013 Budget (1 June 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>
Solomon Islands	<p>1 National Strategy in Place Developed through Junior Professional</p> <p>2 Discrete Budget Line for IWRM Mechanism to be finalised</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> Solomon Islands 2013 Budget (1 January 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>
Tonga	<p>1 National Legislation in Place Developed through EU IWRM project</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through Legislation</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> Tonga Islands 2013 Budget (1 July 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>
Tuvalu	<p>1 National Strategy in place Developed through Junior Professional</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Policy development, due mid-2012</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> Tuvalu 2013 Budget (1 January 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>
Vanuatu	<p>1 National Strategy in Place Developed through Junior Professional</p> <p>2 Discrete Budget Line for IWRM Anticipated to be achieved through National Strategy</p> <p>3 National budget allocated to IWRM and WUE</p>	<p><input type="checkbox"/> Strategy in place by mid 2012</p> <p><input type="checkbox"/> Budget line in place by mid-2013</p> <p><input type="checkbox"/> 20% increase</p>	<p><input type="checkbox"/> Endorsement by Cabinet</p> <p><input type="checkbox"/> Vanuatu 2013 Budget (1 January 2013)</p> <p><input type="checkbox"/> Budgets 2009 and 2013</p>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> Statement of 2009 budget allocated to IWRM and WUE</p>

## LOGFRAME TARGET 2

**Best IWRM and WUE approaches mainstreamed into national and regional planning frameworks by end of project facilitated by national IWRM APEX bodies, Project Steering Committee, Pacific Partnership, and PCU by month 60**

### Proposed Indicator(s)

*Best IWRM and WUE approaches assessed:*

#### **3. Best IWRM and WUE approaches defined for each country**

Relies on capacity to clearly identify best IWRM and WUE approaches at national and regional levels

Options include:

- i. Review of IWRM at a national level undertaken
- ii. Statement of generic IWRM and WUE best practice

All countries (except Fiji and Vanuatu) indicated that reviews of how to mainstream IWRM and WUE into national planning would be done during 2011-2013. It is suggested that if this target is to be met, then these reviews should be undertaken during the first half of 2011. It is likely that evaluation of project performance in meeting this target will be audit based, requiring some form of assessment in each country as to the mechanisms for improving and mainstreaming.

#### **4. Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks**

Relies on capacity to clearly identify whether best approaches have been mainstreamed.

Options include:

- i. Incorporation of recommendations of review of best approaches
- ii. Incorporation of generic IWRM and WUE best practice

Given that most countries will have completed a review of best practice, incorporation of these recommendations is the most obvious and appropriate approach.

The mechanism for ensuring that this has been delivered would require some form of audit, either through PCU, peer (another country) or independent consultant

### Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Best Practices mainstreamed into national planning framework
	<b>Mostly Complete</b>	Best Practices defined and largely incorporated into planning framework
	<b>Partially Complete</b>	Best practices defined, with references to some in planning framework; or incorporated into Agency strategies, but not mainstreamed
	<b>Mostly Incomplete</b>	Best practices defined, but not incorporated into framework
	<b>Incomplete</b>	Best practices not defined

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	Best Practices mainstreamed into national planning framework in 12 countries
	<b>Mostly Complete</b>	Best Practices mainstreamed into national planning framework in 9 countries
	<b>Partially Complete</b>	Best Practices mainstreamed into national planning framework in 5 countries
	<b>Mostly Incomplete</b>	Best Practices mainstreamed into national planning framework in up to 3 countries
	<b>Incomplete</b>	Best Practices not mainstreamed in any countries

Baseline

No Baseline required

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	<p>3 Best IWRM and WUE approaches defined Developed through EU IWRM project</p> <p>4 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>
Fiji	<p>3 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project</p> <p>4 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>
FSM	<p>3 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project</p> <p>4 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>
Nauru	<p>3 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project</p> <p>4 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>

Country	Indicator	Target	Means of Verification	Baseline
Niue	<p>3 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project</p> <p>4 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>
Palau	<p>3 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project</p> <p>4 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>
PNG	<p>3 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project</p> <p>4 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>
RMI	<p>5 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project</p> <p>6 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>
Samoa	<p>5 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project</p> <p>6 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012</p>	<p><input type="checkbox"/> Approach defined</p> <p><input type="checkbox"/> National Strategy incorporates defined approach</p>	<p><input type="checkbox"/> Endorsement by APEX body</p> <p><input type="checkbox"/> Audit by:</p> <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<p><input type="checkbox"/> None required</p> <p><input type="checkbox"/> None required</p>

Country	Indicator	Target	Means of Verification	Baseline
Solomon Islands	5 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project	<input type="checkbox"/> Approach defined	<input type="checkbox"/> Endorsement by APEX body	<input type="checkbox"/> None required
	6 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012	<input type="checkbox"/> National Strategy incorporates defined approach	<input type="checkbox"/> Audit by: <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<input type="checkbox"/> None required
Tonga	5 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project	<input type="checkbox"/> Approach defined	<input type="checkbox"/> Endorsement by APEX body	<input type="checkbox"/> None required
	6 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012	<input type="checkbox"/> National Strategy incorporates defined approach	<input type="checkbox"/> Audit by: <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<input type="checkbox"/> None required
Tuvalu	5 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project	<input type="checkbox"/> Approach defined	<input type="checkbox"/> Endorsement by APEX body	<input type="checkbox"/> None required
	6 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012	<input type="checkbox"/> National Strategy incorporates defined approach	<input type="checkbox"/> Audit by: <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<input type="checkbox"/> None required
Vanuatu	5 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project	<input type="checkbox"/> Approach defined	<input type="checkbox"/> Endorsement by APEX body	<input type="checkbox"/> None required
	6 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by mid-2012	<input type="checkbox"/> National Strategy incorporates defined approach	<input type="checkbox"/> Audit by: <ul style="list-style-type: none"> <li>• Independent consultant</li> <li>• Peer review</li> <li>• PCU audit</li> </ul>	<input type="checkbox"/> None required



**LOGFRAME TARGET 3****Environmental stress reduction in 14 Pacific SIDS: 30% increase in forest area for ~8,000 ha of land**

The interpretation that must be applied to this target for it to be meaningful is “area of land protected and/or rehabilitated”. There will not be a significant degree of reforestation within the project timelines. The “percentage increase” in forest area is interpreted as “coverage over the catchment”.

Proposed Indicator(s)**5. Increase in land protected and/or rehabilitated over catchment**

For land to be declared as ‘protected’ there needs to be a formal statement supported by Legislation (either directly or through Regulations) of the land boundaries and the degree of protection. The types of changes that would be considered appropriate include:

- i. Protection of catchment area from development as some form of reserve (e.g. watershed or conservation) or national park
- ii. Change in land use planning from developed (e.g. pasture or cropping) to forestry or reserve
- iii. Planting or replanting areas to rehabilitate reserve areas or watercourse riparian and catchment areas

The area could simply be determined through GIS mapping.

Note that other partner initiatives that qualify as co-funding (such as forestry initiatives in the catchment) can be counted towards achieving this target.

Country Reporting

<b>Scorecard: Complete</b>	Target increase in forested and protected area achieved through formal declaration
<b>Mostly Complete</b>	¾ of target increase in forested and protected area achieved through formal declaration
<b>Partially Complete</b>	At least ¾ of target increase in forested and protected area achieved through, but no formal declaration
<b>Mostly Incomplete</b>	Measurable increases in forested and protected areas, without formal declaration
<b>Incomplete</b>	No significant increase in forested or protected areas

Regional Reporting

<b>Scorecard: Complete</b>	30% increase in forested and protected area over 8,000 ha of catchments
<b>Mostly Complete</b>	30% increase in forested and protected area over 6,000 ha of catchments; or 20% increase in forested and protected area over 8,000 ha of catchments
<b>Partially Complete</b>	At least 15% increase in forested and protected area over 8,000ha of catchment; or a 30% increase in forested area over at least 4,000ha of catchment
<b>Mostly Incomplete</b>	Measurable increases in forested and protected areas
<b>Incomplete</b>	No significant increase in forested or protected areas

Baseline

Catchment and forested and protected area areas defined as of beginning 2009, or as close as possible in time

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	<p>5 Increase in land protected and/or rehabilitated over the catchment</p> <p>Groundwater and/or surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project</p>	<input type="checkbox"/>	<input type="checkbox"/> Reserves declared by Cabinet (Cabinet minutes)	<input type="checkbox"/> Catchment area <input type="checkbox"/> Reserves declared by Cabinet / Minister at 1 January 2009 <input type="checkbox"/> Catchment forestry and native vegetation coverage as at 1 January 2009 or as close as practical in time (if there is likely to be significant revegetation associated with the project)
FSM	<p>7 Increase in land protected and/or rehabilitated over the catchment</p> <p>Groundwater and/or surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project</p>	<input type="checkbox"/> 2,000 ha	<input type="checkbox"/> Reserves declared by Cabinet (Cabinet minutes)	<input type="checkbox"/> Catchment area <input type="checkbox"/> Reserves declared by Cabinet / Minister at 1 January 2009 <input type="checkbox"/> Catchment forestry and native vegetation coverage as at 1 January 2009 or as close as practical in time (if there is likely to be significant revegetation associated with the project)
Palau	<p>5 Increase in land protected and/or rehabilitated over the catchment</p> <p>Surface water catchments may be declared reserves. Some revegetation will occur associated with the project; however unlikely to be on significant scale</p>	<input type="checkbox"/> 1,000 ha	<input type="checkbox"/> Reserves declared by Cabinet (Cabinet minutes) <input type="checkbox"/> Completion report on riparian zone revegetation endorsed by Steering Committee	<input type="checkbox"/> Catchment area <input type="checkbox"/> Reserves declared by Cabinet / Minister at 1 January 2009 <input type="checkbox"/> Catchment forestry and native vegetation coverage as at 1 January 2009 or as close as practical in time
Samoa	<p>5 Increase in land protected and/or rehabilitated over the catchment</p> <p>Groundwater and/or surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project</p>	<input type="checkbox"/> 2,000 ha	<input type="checkbox"/> Reserves declared by Cabinet (Cabinet minutes)	<input type="checkbox"/> Catchment area <input type="checkbox"/> Reserves declared by Cabinet / Minister at 1 January 2009 <input type="checkbox"/> Catchment forestry and native vegetation coverage as at 1 January 2009 or as close as practical in time (if there is likely to be significant revegetation associated with the project)

Country	Indicator	Target	Means of Verification	Baseline
Solomon Islands	<p>5 Increase in land protected and/or rehabilitated over the catchment</p> <p>Groundwater and/or surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project</p>	<input type="checkbox"/> 2,000 ha	<input type="checkbox"/> Reserves declared by Cabinet (Cabinet minutes)	<input type="checkbox"/> Catchment area <input type="checkbox"/> Reserves declared by Cabinet / Minister at 1 January 2009 <input type="checkbox"/> Catchment forestry and native vegetation coverage as at 1 January 2009 or as close as practical in time (if there is likely to be significant revegetation associated with the project)
Vanuatu	<p>5 Increase in land protected and/or rehabilitated over the catchment</p> <p>Surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project</p>	<input type="checkbox"/> 1,000 ha	<input type="checkbox"/> Reserves declared by Cabinet (Cabinet minutes)	<input type="checkbox"/> Catchment area <input type="checkbox"/> Reserves declared by Cabinet / Minister at 1 January 2009 <input type="checkbox"/> Catchment forestry and native vegetation coverage as at 1 January 2009 or as close as practical in time (if there is likely to be significant revegetation associated with the project)

**LOGFRAME TARGET 4****35% reduction in sewage pollution over eq.~40,000 ha area leading to reduction in eutrophication for 4 coastal receiving waters sites**Proposed Indicator**6. Reduction in sewage pollution**

Sewage pollution reduction occurs through removal or reduction of source (e.g. composting toilets or reuse), reduction in pollution levels discharged (e.g. upgrading a cess pit to a septic, secondary treatment) or by increasing the attenuation in the environment (possibly by relocating the source further from a sensitive receiving environment). Examples include:

- i. Reduction in sewage volume as a proportion of houses/septics/population served, achieved through composting toilets, recycling effluent or another means
- ii. Reduction in pollutants entering environment through improved treatment. Each septic tank achieves about 20-30% reduction from a cesspit in the key nutrient and organic pollutants. A secondary treatment process can improve this a further 20-40%
- iii. Introduction of a sludge pump-out truck; effectively converting cesspits into septics

Area

The second aspect of this target, the area can simply be determined through GIS or another form of mapping. The area reported is the area over which the project will reduce sewage pollution (typically the project site area, but may be larger if the impacts of the project extend beyond the site boundaries).

Reduction in eutrophication for 4 coastal receiving waters

It may be possible to show reduction in coastal water eutrophication arising from project outputs, but this isn't likely in the project timeframes because the nutrient reductions are only likely to be evident towards the end of the project. Changes in nutrient status often take years to respond as nutrients can recycle within coastal systems for many years depending on exchanges, sediment and biota nutrient fluxes re-establishing a dynamic equilibrium and natural system variation. Therefore, the capacity to demonstrate eutrophication reduction relies on demonstrating sewage pollution reduction, which in turn relies on estimating reduced loads. This approach is consistent with the Project Documents, which state that environmental stress reduction should be used as a proxy for environmental state improvement in the project M&E framework.

Reduction in coastal water eutrophication will therefore be implied from measurable reductions in sewage pollution discharges to groundwater or surface waters. In Nauru's case, this link was established in the Diagnostic Report<sup>1</sup> (as the links were for all coastal systems in other countries).

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Target reduction in sewage pollution and target area
	<b>Mostly Complete</b>	¾ of target reduction and area achieved
	<b>Partially Complete</b>	½ of target reduction and area achieved
	<b>Mostly Incomplete</b>	Significant measurable reduction in sewage pollution
		Or
		Strategy and funding in place, but groundworks not completed to deliver reduction in sewage pollution
	<b>Incomplete</b>	No significant reduction in sewage pollution

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Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	35% reduction in sewage pollution over 40,000 ha, reducing eutrophication in 4 coastal waters
	<b>Mostly Complete</b>	Achieve 2 of 3 of 35% reduction in sewage pollution, over 40,000ha area, reducing eutrophication in 4 coastal waters Or 25% reduction in sewage pollution over 40,000 ha, reducing eutrophication in 4 coastal waters
	<b>Partially Complete</b>	At least 20% increase in forested and protected area over at least 20,000ha, reducing eutrophication in at least 2 coastal waters
	<b>Mostly Incomplete</b>	Measurable reductions in sewage pollution reducing sewage pollution in at least 2 coastal waters
	<b>Incomplete</b>	No significant reduction in sewage pollution

Baseline

Catchment area defined. Number of houses in catchment area needs to be defined. If direct measurement of waters quality or pollution loads is to be used, then a baseline is required.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	<p>6 Reduction in sewage pollution in Muri Community</p> <p>Will need to be assessed at a household level as pilot and partner projects unlikely to deliver sufficient reduction over project lifetime</p> <p>Note that if work undertaken by MoH with hotels in parallel with project, reduction may be achieved</p>	<input type="checkbox"/> 35% reduction in nutrients and organic loads at a household level from household trials	<input type="checkbox"/> Monitoring report endorsed by Steering Committee (Steering Committee minutes)	<input type="checkbox"/> Catchment area <input type="checkbox"/> Number of households <input type="checkbox"/> Groundwater monitoring adjacent to pilot sites <input type="checkbox"/> Study to determine sources of pollutants into Muri Lagoon to apportion sources
FSM	<p>6 Reduction in sewage pollution in Nett Watershed</p>	<input type="checkbox"/> 35% reduction in nutrients and organic loads from rural catchment households (5,000ha)	<input type="checkbox"/> Survey Reports endorsed by Steering Committee	<input type="checkbox"/> Catchment area <input type="checkbox"/> Pollution Source survey – number of households and sanitation methods
Nauru	<p>6 Reduction in sewage pollution in Ewa and Anetan Communities</p> <p>Can be assessed at a community level – likely to be close to this level of reduction across whole community if 50% achieved for each septic through secondary treatment</p>	<input type="checkbox"/> 35% reduction in nutrients and organic loads from communities (20 ha)	<input type="checkbox"/> Study report on demonstrations endorsed by Steering Committee	<input type="checkbox"/> Catchment area <input type="checkbox"/> Existing state of sanitation systems in demonstration site
RMI	<p>6 Reduction in sewage pollution in Laura Community (150 ha)</p> <p>Will need to be assessed at a household level as pilot and partner projects unlikely to deliver sufficient reduction over project lifetime</p> <p>Assume that this in turn leads to reduction in eutrophication of lagoon</p>	<input type="checkbox"/> 35% reduction in nutrients and organic loads from household trials	<input type="checkbox"/> Monitoring report endorsed by Steering Committee (Steering Committee minutes)	<input type="checkbox"/> Catchment area <input type="checkbox"/> Number of households <input type="checkbox"/> Groundwater monitoring adjacent to pilot sites

Country	Indicator	Target	Means of Verification	Baseline
Tonga	<p>6 Reduction in sewage pollution across Vava'u (10,000 ha)</p> <p>Pump-out of septic tanks should reduce nutrient and organic loads by about 25%</p> <p>Assume that this in turn leads to reduction of eutrophication in Refuge Harbour</p>	<input type="checkbox"/> 25% reduction in nutrients across Vava'u Island	<input type="checkbox"/> Pump-out truck report endorsed by Steering Committee (Steering Committee minutes)	<input type="checkbox"/> Island area <input type="checkbox"/> Number of households
Tuvalu	<p>6 Reduction in sewage pollution across Funafuti (180 ha)</p> <p>Composting toilets should reduce nutrients and organic pollution by over 90%</p>	<input type="checkbox"/> 5% reduction in sewage pollution over Funafuti	<input type="checkbox"/> Study report endorsed by Steering Committee	<input type="checkbox"/> Island area <input type="checkbox"/> Number of households
Vanuatu	<p>6 Reduction in sewage pollution across Sarakata watershed (30,000 ha)</p>	<input type="checkbox"/> 40% reduction in sewage pollution in Sarakata watershed	<input type="checkbox"/> Study report endorsed by Steering Committee	<input type="checkbox"/> Watershed area <input type="checkbox"/> Number of households

**LOGFRAME TARGET 5**

**35% reduction in water leakage for systems supplying ~85,000 people by month 42 including a 40% reduction from existing baseline levels in 1 water supply system**

Proposed Indicator**7. Reduction in water leakage**

Water leakage reduction can be undertaken at household and/or system level. Household level leakage reduction assessment for large catchment relies on either extrapolation of single household savings or distribution reduction. System wide reduction leakage reduction is easier to assess, where meters are available.

One challenge associated with this indicator is to determine what aspects are due to system leakage, compared with factors such as unaccounted usage, apparent losses (such as meter errors) and theft. Additionally, any measurements at a household level may be complicated by significant changes in water use patterns and water use efficiency (which may be likely given associated awareness raising campaigns). Finally, there are factors such as system pressure, that dramatically affect system losses (without altering the number or size of leaks) as leakage is directly proportional to pressure.

Clarification is also required on percentage of reduction – is this a percentage reduction in total leakage volume (which may be affected by interruption of supply) or a reduction in proportion of supply, which may be affected by supply volume and reliability. The latter is the proposed approach, reflecting a more reliable assessment of achievement in systems with variable supply and demand. Alternatively, is this a reduction in another more reliable indicator of performance, such as the Infrastructure leakage index (ILI), which recognises that there is a minimum (unavoidable) level of leakage, such as that commonly used by the International Water Association (IWA)<sup>2</sup>?

In order to simplify the process, it is proposed that simple indicators be used for this assessment; examples indicators include:

- i. Reduction in system losses measured through comparison of meters
- ii. Reduction in overall system use during off-peak (early morning hours)

In order to make losses comparable, system pressures would need to be recorded and losses modified accordingly. There is a necessary implicit assumption in this approach that all losses are leak-driven; disregarding theft, unmetered use, etc.

Population

The second aspect of this target, the population will need to be assessed, either through an average per connection estimate, census or DHS results if available.

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Target reduction in water leakage for targeted supply population
	<b>Mostly Complete</b>	¾ of target reduction and area achieved
	<b>Partially Complete</b>	½ of target reduction and area achieved
	<b>Mostly Incomplete</b>	Significant measurable reduction in water leakage Or Strategy and funding in place, but groundworks not completed to deliver reduction in leakage reduction
	<b>Incomplete</b>	No significant reduction in sewage pollution

<sup>2</sup> The issues and challenges of reducing non-revenue water (ADB, 2010), ISBN 978-92-9092-193-6



Reduction of 35% of systems supplying ~85,000 people

The achievement of this target is also highly reliant on the Samoa and Solomon Island projects, as the collective populations serviced by the Niue and Tonga projects is about 7,000 people (Niue and Neiafu). The population of Apia is only about 40,000, so collectively these projects won't meet the target. Solomon Islands has identified a demand management plan and leak identification programme, but does not currently have leak reduction flagged. Leak reduction may flow from the Solomon Island's project, and with a Honiara population of close to 80,000, this target may possibly be achieved.

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	35% reduction in water leakage for systems supplying 85,000 people, including a 40% reduction in baseline levels in one system
	<b>Mostly Complete</b>	Achieve 35% reduction in water leakage from systems supplying over 40,000 people, including a 40% reduction in at least one system
	<b>Partially Complete</b>	At least 35% reduction in system water leakage at 2 project sites
	<b>Mostly Incomplete</b>	Measurable leakage reductions in systems in at least 2 coastal waters
	<b>Incomplete</b>	No significant reductions in system water leakage

Baseline

System populations defined and/or number of connections at project commencement; or as close as possible in time. System water use and leakage needs to be defined, including note of relevant target pressures.

Country	Indicator	Target	Means of Verification	Baseline
Niue	7 Reduction in water leakage loss for Alofi supplies Largely delivered through tank replacement, although metering of Alofi supplies should provide household level improvements	<input type="checkbox"/> 40% reduction in water leakage from system supplying 400 people	<input type="checkbox"/> Monitoring report endorsed by Steering Committee (Steering Committee minutes)	<input type="checkbox"/> Supply volume <input type="checkbox"/> Leakage <input type="checkbox"/> Population serviced <input type="checkbox"/> Pressures associated with leakage
Samoa	7 Reduction in water leakage loss in Apia Largely requiring work to be co-funded by Samoa Water Authority	<input type="checkbox"/> 30% reduction in water leakage from system supplying 40,000 people	<input type="checkbox"/> Implementation report endorsed by Steering Committee (Steering Committee Minutes)	<input type="checkbox"/> Supply volume <input type="checkbox"/> Leakage <input type="checkbox"/> Population serviced <input type="checkbox"/> Pressures associated with leakage
Solomon Islands	7 Reduction in water leakage losses in Honiara Dependent upon work to be co-funded by	<input type="checkbox"/> 35% reduction in water leakage from system supplying 80,000 people	<input type="checkbox"/> Report endorsed by Steering Committee (Steering Committee Minutes)	<input type="checkbox"/> Supply volume <input type="checkbox"/> Leakage <input type="checkbox"/> Population serviced <input type="checkbox"/> Pressures associated with leakage
Tonga	7 Reduction in water leakage losses in Vava'u Systematic leak identification program in partnership with Tonga Water Board. No funding allocated for infrastructure work – dependent upon co-funding by Tonga Water Board	<input type="checkbox"/> 40% reduction in water leakage from system in Vava'u supplying 5,000 people	<input type="checkbox"/> Leak reduction report endorsed by Steering Committee (Steering Committee Minutes)	<input type="checkbox"/> Supply volume <input type="checkbox"/> Leakage <input type="checkbox"/> Population serviced <input type="checkbox"/> Pressures associated with leakage

## **LOGFRAME TARGET 6**

### **Average 30% increase in population with access to safe water supply and sanitation for 6 sites**

#### Proposed Target:

*6 sites with an average 30% increase in population with access to safe water supply and 6 sites with an average 30% increase in population with access to improved sanitation*

There are few demonstration projects that are targeting significant improvements in access to both drinking water supply and sanitation. It is therefore considered that this target relates to a collective achievement of up to 12 project sites, rather than achievement of both targets at 6 sites

#### Proposed Indicators

##### **8. Population with access to safe water supply**

The definition of 'safe' drinking water requires clear definition. The World Health Organization Drinking Water Guidelines (WHO 2008)<sup>3</sup> relates safe drinking water to risk management, recognising that the term 'safe' is relative rather than absolute. Accordingly, the WHO guidelines advocate a risk management process for drinking water protection, delivered through water safety plans (Bartram 2009)<sup>4</sup>.

Developing and implementing a water safety plan is one of the key recognised routes for increasing delivery of 'safe' drinking water. Other mechanisms include the expansion of existing 'safe' supplies, generally through access to existing networks or supplies and implementing existing water safety plans.

Defining the population with access would typically be achieved through utility connection estimates and/or census figures (or other survey techniques).

Examples indicators include:

- i. Population with access to a water supply with an active water safety plan
- ii. Population with access to reticulated centralised treated supply meeting regulated drinking water criteria

##### **9. Population with access to sanitation**

The term 'access to sanitation' implies consistency with the Millennium Development Goal (MDG) definition of access to improved sanitation including flush/pour flush to piped sewer system, septic tank or pit latrine; ventilated improved pit (VIP) latrine; pit latrine with slab or composting toilets (JMP 2010)<sup>5</sup>.

Increasing access to sanitation can be achieved through a combination of mechanisms, including installation of new sanitation systems or rehabilitation of failed systems. The GEF IWRM projects are reliant on both of these approaches. New demonstration composting toilets are being installed in Tuvalu and potentially RMI and Nauru. Demonstration secondary treatment systems are being installed in Tonga, Cook Islands and Nauru. Existing systems are being rehabilitated in Tonga through the re-establishment of a septic pump-out system and facilitation of septic system rehabilitation.

<sup>3</sup> World Health Organization (2008). Guidelines for Drinking Water Quality. Geneva, WHO Press.

<sup>4</sup> Bartram, J., L. Corrales, et al. (2009). Water safety plan manual: step-by-step risk management for drinking-water suppliers. Geneva, WHO Press.

<sup>5</sup> WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (2010). Progress on Sanitation and Drinking-water: 2010 Update. Geneva, WHO Press.

Examples indicators include:

- i. Population with access to a improved sanitation
- ii. Population with septic tanks serviced by sludge pump-out trucks

### Country Reporting

<b>Scorecard: Complete</b>	Target increase with access to safe supply / improved sanitation
<b>Mostly Complete</b>	<p>¾ of target access achieved</p> <p>Or</p> <p>Where WSP is the target, completion of WSP without budget allocation</p>
<b>Partially Complete</b>	<p>½ of target reduction and area achieved</p> <p>Or</p> <p>Strategy and funding in place, groundworks commenced but not completed to deliver improvement</p>
<b>Mostly Incomplete</b>	<p>Significant measurable increase in population with access to improved sanitation / water supply</p> <p>Or</p> <p>Strategy and funding in place, groundworks not yet commenced</p>
<b>Incomplete</b>	No significant measurable increase in population with access to improved sanitation / water supply

### 30% increase in population with access to improved sanitation

The numbers of sanitation systems being installed under the GEF IWRM project are generally small. Tuvalu has the greatest number of toilets (40) being installed and these only represent about 5% of the Funafuti site houses.

Only two demonstration sites have identified significant rehabilitation of septic systems as part of their projects (Tonga and Nauru) and only Samoa has identified significant expansion of an existing system. Notably the wastewater treatment system in Samoa is dependent upon co-funding and largely beyond the control of the project.

As the number of toilets to be installed at other sites (RMI and Vanuatu) is limited, achieving the target of an average of 30% increase in population with access to improved sanitation will be strongly reliant on achieving this target at these sites.

### Regional Reporting

<b>Scorecard: Complete</b>	Average 30% increase in population with access to safe water supply and sanitation for 6 sites
<b>Mostly Complete</b>	<p>Average 20% increase in population with access to safe water supply and sanitation for 6 sites <u>or</u></p> <p>Average 30% increase in population with access to safe water supply and sanitation for 5 sites <u>or</u></p> <p>Average 30% increase in population with access to safe water supply (or sanitation) for 6 sites and a 15% increase in sanitation (or water supply) to a minimum of 4 sites</p>
<b>Partially Complete</b>	Average 15% increase in population with access to safe water supply and sanitation for 6 sites <u>or</u>

	Average 30% increase in population with access to safe water supply and sanitation for 3 sites <u>or</u> Average 30% increase in population with access to safe water supply (or sanitation) for 4 sites and a 20% increase in sanitation (or water supply) to a minimum of 2 sites
<b><i>Mostly Incomplete</i></b>	Increase in population with access to safe water and sanitation for at least 3 sites
<b><i>Incomplete</i></b>	No significant increase in forested or protected areas

Baseline

Site population defined at project commencement; or as close as possible in time.  
Population with access to safe water supply. Population with access to improves sanitation

Country	Indicator	Target	Means of Verification	Baseline
FSM	8 Population with access to safe water supply Trigger is the setting (and meeting) of water quality and safety baselines for the Nett Watershed Forest Reserve/Nanpil River	<input type="checkbox"/> 90% of Kolonia with safe drinking water (5,000 people)	<input type="checkbox"/> Audit against baselines by independent auditor	<input type="checkbox"/> Catchment area <input type="checkbox"/> Kolonia population <input type="checkbox"/> number of households
Nauru	9 Population with access to improved sanitation Installation of septic tanks and secondary treatment systems in Ewa and Anetan Districts	<input type="checkbox"/> 10% increase in access to sanitation systems in Ewa and Anetan (1,100 people)	<input type="checkbox"/> Commissioning report on sanitation systems endorsed by Steering Committee	<input type="checkbox"/> Number of households <input type="checkbox"/> Ewa and Anetan population <input type="checkbox"/> Number of houses with improved sanitation
Niue	8 Population with access to safe water supply WSP developed as part of co-funding. Delivery of WSP dependent upon project activities being delivered	<input type="checkbox"/> 90% of Alofi population (400 people)	<input type="checkbox"/> Audit of Niue WSP	<input type="checkbox"/> Catchment area <input type="checkbox"/> Alofi population <input type="checkbox"/> number of households
Palau	8 Population with access to safe water supply Delivery of WSP dependent upon project activities being delivered	<input type="checkbox"/> 90% of Koror with safe drinking water (14,000 people)	<input type="checkbox"/> Audit of Koror WSP	<input type="checkbox"/> Catchment area <input type="checkbox"/> Koror population <input type="checkbox"/> number of households
RMI	8 Population with access to safe water supply Delivery of WSP dependent upon project activities being delivered 9 Population with access to improved sanitation Rehabilitation of septic systems and sludge disposal systems will ensure that systems meet improved requirements	<input type="checkbox"/> 90% of Laura Village with safe drinking water (3,000 people) <input type="checkbox"/> 90% of Laura Village with access to sustainable sanitation (3,000 people)	<input type="checkbox"/> Audit of Majuro WSP <input type="checkbox"/> Report on completion of septic system rehabilitation endorsed by Laura Integrated Water and Land Management Advisory Committee	<input type="checkbox"/> Catchment area <input type="checkbox"/> Number of households <input type="checkbox"/> Laura population <input type="checkbox"/> Number of sanitation systems maintained and satisfying 'improved sanitation' definition
Samoa	9 Population with access to improved sanitation Based on commissioning of wastewater treatment plant as co-funded work	<input type="checkbox"/> 30% increase in Apia residents with access to improved sanitation (11,000 people)	<input type="checkbox"/> Commissioning of wastewater treatment plant	<input type="checkbox"/> Number of households <input type="checkbox"/> Apia population <input type="checkbox"/> Population serviced by WWTP
Solomon Islands	8 Population with access to safe water supply Development and implementation of WSP for Honiara. Need to ascertain the proportion of Honiara covered by WSP	<input type="checkbox"/> Increase of 90% of Honiara residents with access to safe water (70,000 people)	<input type="checkbox"/> WSP endorsed by Minister with budget allocated	<input type="checkbox"/> Honiara population <input type="checkbox"/> Number of households

Country	Indicator	Target	Means of Verification	Baseline
Tonga	<p>8 Population with access to safe water supply Household level WSP being developed and implemented in 30% of District households</p> <p>9 Population with access to improved sanitation Rehabilitation of septic systems and sludge disposal systems will ensure that systems meet improved requirements</p>	<p><input type="checkbox"/> 30% increase in access to safe water supplies in Neiafu (1,500 people)</p> <p><input type="checkbox"/> 90% increase in Neiafu residents with access to improved sanitation (4,500 people)</p>	<p><input type="checkbox"/> Survey by Town Officers endorsed by Steering Committee</p> <p><input type="checkbox"/> Audit on proportion of houses using the pump-out facilities by end of project</p>	<p><input type="checkbox"/> Island area</p> <p><input type="checkbox"/> Number of households in Neiafu</p> <p><input type="checkbox"/> Number of households on Vava'u</p>
Tuvalu	<p>9 Population with access to improved sanitation Installation of composting toilets, supported by co-funded toilets</p>	<p><input type="checkbox"/> 5% of Funafuti residents with access to improved sanitation (250 people)</p>	<p><input type="checkbox"/> Commissioning study endorsed by Steering Committee</p>	<p><input type="checkbox"/> Number of households</p> <p><input type="checkbox"/> Funafuti population</p>
Vanuatu	<p>8 Population with access to safe water supply Delivery of WSP dependent upon project activities being delivered including relocation of intakes</p> <p>9 Population with access to improved sanitation Rehabilitation of septic systems and sludge disposal systems will ensure that systems meet improved requirements</p>	<p><input type="checkbox"/> 90% increase in access to safe water supplies in Luganville (13,000 people)</p> <p><input type="checkbox"/> 2% increase in Sarakata watershed residents with access to improved sanitation (20 people)</p>	<p><input type="checkbox"/> Survey by Town Officers endorsed by Steering Committee</p> <p><input type="checkbox"/> Audit on proportion of houses using the pump-out facilities by end of project</p>	<p><input type="checkbox"/> Watershed area</p> <p><input type="checkbox"/> Number of households</p>

## **LOGFRAME TARGET 7**

### **2 Basin Flood Risk Management Plans resulting in 10% reduction in infrastructure loss due to flooding (on approximately 18,000 ha of land) by end of project**

#### Proposed Indicator

The delivery of a flood risk management plan is a relatively straightforward outcome, incorporating flood planning and early warning and response components.

Clarification is however required on the 10% reduction in infrastructure loss due to flooding by the end of the project. Infrastructure loss is typically mitigated through changes to long-term planning and development strategies, rather than rapid fixes. Within the lifetime of the project the measures that reasonably could be taken to address infrastructure loss are limited to instigating a flood early warning system and incorporating floodplain management strategies into urban planning policies. However, flood early warning systems for flash floods typically provide only minimal mitigation of infrastructure loss [Scawthorn et al (2006)<sup>6</sup>] and floodplain planning strategies are unlikely to significantly influence on-ground construction significantly during the project life.

Given that there is a large uncertainty in estimating flood losses [Merz et al (2004)<sup>7</sup>], demonstration of a 10% reduction in infrastructure damage would be a highly theoretical and pointless exercise. Flood plain management strategies are likely to require many years to enable planning tools (such as regulations and town plans) to guide development. However, in real terms, incorporating flood mitigation strategies into planning strategies will certainly lead to significant reductions in infrastructure damage.

In terms of an early warning system, Barszczyńska et al (2006)<sup>8</sup> stated that a minimum early warning lead time of 30 minutes was required to save human life; with a threshold of one to two hours identified as the target, refined to reflect the local capacity to respond.

Based on the above, it is proposed instead that the target for this indicator be:

- 2 Basin flood risk management plans incorporating changes to land use planning to reflect floodplains and an early flood warning system providing a minimum of one hour lead time (on approximately 18,000 ha of land) by end of project

#### **10. Flood Risk Management Plan**

*Examples indicators include:*

- i. Flood Risk Management Plan endorsed by Cabinet/Minister*

#### Area

The second aspect of this target, the area can simply be determined through GIS or another form of mapping for the catchment area covered by the flood risk management plan. In order for the target area to be met, it is critical that the Nadi Basin flood risk management plan be completed.

#### An early warning system with minimum of one hour lead time

Assessing the lead time is based on the time available to community members to respond following them actually receiving the warning. There are numerous ways of delivering a warning at the community level, including sirens, loudspeakers; telephone messages and door-to-door responses. Examples of ways in which this criterion could be satisfied include:

<sup>6</sup> HAZUS-MH Flood Loss Estimation Methodology. II. Damage and Loss Assessment, Natural Hazards Review, Vol. 7, No. 2, May 1, 2006

<sup>7</sup> Estimation uncertainty of direct monetary flood damage to buildings, Natural Hazards and Earth System Sciences (2004) 4: 153–163

<sup>8</sup> In time for the Flood: A methodological guide to local flood warning systems, ISBN 83-88897-64-0



- i. Completion of a flood warning system providing at least one hours warning to all sectors (community, commerce and agriculture) – demonstrable through trials and application
- ii. Embedding the target within the flood risk management plan

### Country Reporting

<b>Scorecard: Complete</b>	Flood Risk Management Plan with early warning system endorsed by Cabinet with ongoing funding and floodplain incorporated into planning
<b>Mostly Complete</b>	Flood Risk Management Plan with early warning system endorsed by Cabinet and floodplain incorporated into planning
<b>Partially Complete</b>	Flood Risk Management Plan or early warning system endorsed by Cabinet
<b>Mostly Incomplete</b>	Draft Flood Risk Management Plan completed and/or components of early warning system
<b>Incomplete</b>	No significant progress on Flood Risk Management Plan or early warning system

### Regional Reporting

<b>Scorecard: Complete</b>	2 flood risk management plans endorsed by the Cabinet/Minister including changes to land use planning to reflect floodplains and an early flood warning system providing a minimum of one hour lead time covering an area of 18,000 ha.
<b>Mostly Complete</b>	Completion of 2 flood risk management plans with changes to land use planning changes to land use planning to reflect floodplains and an early flood warning system providing a minimum of one hour lead time
<b>Partially Complete</b>	Changes to land use planning to reflect floodplains and/or an early flood warning system providing a minimum of one hour lead time in 2 catchments
<b>Mostly Incomplete</b>	Changes to land use planning to reflect floodplains and/or an early flood warning system providing a minimum of one hour lead time in at least one catchment
<b>Incomplete</b>	No significant improvement in flood risk management

### Baseline

Catchment area defined.

Country	Indicator	Target	Means of Verification	Baseline
Fiji	<p>10 Nadi Basin Integrated Flood Management Plan (45,000 ha)</p> <p>Plan to incorporate early flood warning system to provide at least one hour warning and process for incorporating floodplains into planning regulations</p>	<input type="checkbox"/> Plan endorsed by Cabinet	<input type="checkbox"/> Cabinet minutes	<input type="checkbox"/> Catchment area
Vanuatu	<p>10 Sarakata Basin Integrated Flood Management Plan (10,000 ha)</p> <p>Plan to incorporate early flood warning system to provide at least one hour warning and process for incorporating floodplains into planning regulations</p>	<input type="checkbox"/> Plan endorsed by Cabinet	<input type="checkbox"/> Cabinet minutes	<input type="checkbox"/> Catchment area

**LOGFRAME TARGET 8****4 SIDS have revised legislation in place to protect surface water quality by end of project**Proposed Indicator**11. Revised legislation protecting water quality**

In order to satisfy this target, it is necessary for legislation to be revised and enacted. Some clarification is required on the protection of water quality. This could either be interpreted explicitly – i.e. that legislation explicitly refers to protection of water quality; or implicitly, through the protection of a catchment, potentially for biodiversity or forestry reasons, which may in turn have direct water quality protection outcomes.

No indication is provided of the water quality outcomes (environmental or protection of human health). However, generally protection for one purpose will have beneficial impacts on the other, therefore legislated protection for the purpose of drinking water or ecological protection is considered as meeting this target.

Examples indicators include:

- i. Declaration of water protection zones through legislation and/or regulation
- ii. Declaration of parks or reserves with limited development through legislation and/or regulation
- iii. New or revised water resources or water quality legislation

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Revised legislation enacted and/or regulation gazetted
	<b>Mostly Complete</b>	Bill for revised legislation tabled in parliament/congress or draft regulations presented to Cabinet
	<b>Partially Complete</b>	Bill / Draft Regulations developed and consultation undertaken based on review of needs
	<b>Mostly Incomplete</b>	Study identifying legislation / regulations needs to protect surface water quality
	<b>Incomplete</b>	Legislation review not undertaken

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	4 SIDS have revised legislation in place to protect surface water quality
	<b>Mostly Complete</b>	3 SIDS have revised legislation in place to protect surface water
	<b>Partially Complete</b>	2 SIDS have revised legislation in place to protect surface water quality
	<b>Mostly Incomplete</b>	1 SID has revised legislation in place to protect surface water quality
	<b>Incomplete</b>	No SIDS have revised legislation in place to protect surface water quality

Baseline

Existing legislation and regulations at start of project, identifying links to protection of water quality

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	11 Revised Legislation protecting surface water quality Currently plans include Policy implementation. Need to clarify any legislative reviews/revision	<input type="checkbox"/> Legislation enacted by Parliament by mid-2013	<input type="checkbox"/> Parliamentary record	<input type="checkbox"/> Legislation and Regulations relating to surface water quality
FSM	11 Revised Legislation protecting surface water quality Currently logframe only indicates tabling Bill with Cabinet – need to ensure that target is enactment of legislation	<input type="checkbox"/> Legislation enacted by Congress by mid-2013	<input type="checkbox"/> Congress record	<input type="checkbox"/> Legislation and Regulations relating to surface water quality
Palau	11 Ngerikiil Watershed is legislated/regulated as protected area Currently legislative changes for PES include in Logframe, but not for protection of water quality or legislative link for declaration of Ngerikiil Watershed	<input type="checkbox"/> Legislation enacted by Congress by mid-2013	<input type="checkbox"/> Congress record	<input type="checkbox"/> Legislation and Regulations relating to surface water quality
PNG	11 Revised Legislation protecting surface water quality Currently logframe only indicates tabling Bill with NEC – need to ensure that target is enactment of legislation	<input type="checkbox"/> Legislation enacted by NEC by mid-2013	<input type="checkbox"/> NEC record	<input type="checkbox"/> Legislation and Regulations relating to surface water quality
Samoa	11 Legislation for Water Resource Management Identified in the logframe as part of delivery of plans	<input type="checkbox"/> Legislation enacted by Parliament by end of 2012	<input type="checkbox"/> Parliamentary records	<input type="checkbox"/> Legislation and Regulations relating to surface water quality
Solomon Islands	11 Revised Legislation protecting surface water quality Currently logframe only indicates tabling Bill with Cabinet – need to ensure that target is enactment of legislation	<input type="checkbox"/> Legislation enacted by Parliament	<input type="checkbox"/> Parliamentary records	<input type="checkbox"/> Legislation and Regulations relating to surface water quality
Vanuatu	11 Revised Legislation protecting surface water quality Currently logframe only mentions Gazettal of Water Protection Zones	<input type="checkbox"/> Legislation enacted by Parliament	<input type="checkbox"/> Parliamentary records	<input type="checkbox"/> Legislation and Regulations relating to surface water quality

**LOGFRAME TARGET 9****30% reduction in use of freshwater for sanitation purposes due to eco-sanitation expansion in 1 demo site**Proposed Indicator**12. Reduction in use of freshwater for sanitation purposes due to ecosanitation expansion**

Clarification is required on the interpretation of a 30% reduction in freshwater use. The demonstration projects are based on demonstrating approaches as a catalyst for change, rather than funding wholesale infrastructure changes. It is therefore considered that it is appropriate to interpret the 30% reduction in freshwater use to be at a household level, rather than across the whole community (something that would be ultimately realised should the approach be replicated). Notably at a household level, the reduction in water use for sanitation following the installation of a composting toilet is close to 100% (minor volumes will be used for hand-washing and toilet cleaning)

Whilst composting toilets may be trialled in three or more countries (Tuvalu, Nauru and Marshall Islands) it is Tuvalu where they form the core of the demonstration project. However, in Tuvalu, even at the household level, clarification is required on a 30% reduction in freshwater use. Average household water use during non-drought periods may be as high as 101 L/person/day (Dawe 2001)<sup>9</sup>. However, during a recent drought in Tuvalu, it is understood that many people with flush toilets simply stopped using them. With virtually no rain for several months during droughts, there is simply no water for flushing toilets and most people resort to open defecation (Lal et al 2006)<sup>10</sup>. Against this baseline a 30% reduction is not possible to demonstrate. Even long-term where composting toilets are installed in houses with no existing toilets, there is no baseline use. However, the value of eco-sanitation was evident – provision of improved sanitation where there would have been none.

The most appropriate means of confirming a 30% reduction in freshwater for sanitation purposes would be through a comparative survey of toilet use; either before and after installation of a composting toilet within the same household, or between houses with and without composting toilets.

Examples indicators include:

- i. Comparison of water use for sanitation in house before and after installation of composting toilet under non-drought conditions
- ii. Comparison of water use for sanitation between similar households with and without composting toilets under non-drought conditions

The above indicators could be measured through surveys or use of diaries. The sensitive nature of the topic suggests that comparison of use within the same household before and after installation may be easier to accommodate.

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<sup>9</sup> Ed Burke (2001) *An integrated approach to rainwater harvesting analysis using GIS and recommendations for roof-catchment legislation in Tuvalu*, SOPAC Technical Report 290, Suva

<sup>10</sup> Padma Lal, Kalesoma Saloa and Falealili Uila (2006) *Economics of liquid waste management in Funafuti, Tuvalu*, IWP-Pacific Technical Report (International Waters Project) no. 36. SPREP, Apia 31 p. ISBN: 978-982-04-0356-7

Country / Regional Reporting

<b>Scorecard: Complete</b>	Average 30% reduction in household water use achieved through installation of composting toilets
<b>Mostly Complete</b>	Average 25% reduction in household water use achieved through installation of composting toilets
<b>Partially Complete</b>	Composting toilets installed in households as the only toilets within the household, but no monitoring undertaken to assess reduction in freshwater use
<b>Mostly Incomplete</b>	Composting toilets installed in houses, but flush toilets continue to be used by some household members
<b>Incomplete</b>	No composting toilets installed

Baseline

Average household water use for sanitation prior to installation of composting toilets

Country	Indicator	Target	Means of Verification	Baseline
Nauru	12 Reduction in use of freshwater for sanitation purposes due to composting toilet installation Assumes that composting toilets will be trialled	<input type="checkbox"/> 30% reduction in household water use	<input type="checkbox"/> Study endorsed by Steering Committee and RTAG	<input type="checkbox"/> Average household water use for sanitation prior to installation of composting toilets
RMI	12 Reduction in use of freshwater for sanitation purposes due to composting toilet installation Assumes that composting toilets will be trialled	<input type="checkbox"/> 30% reduction in household water use	<input type="checkbox"/> Study endorsed by Steering Committee and RTAG	<input type="checkbox"/> Average household water use for sanitation prior to installation of composting toilets
Tuvalu	12 Reduction in use of freshwater for sanitation purposes due to composting toilet expansion Requires study to assess the water savings	<input type="checkbox"/> 30% reduction in household water use	<input type="checkbox"/> Study endorsed by Steering Committee and RTAG	<input type="checkbox"/> Average household water use for sanitation prior to installation of composting toilets

**LOGFRAME TARGET 10****Replication of technical and water use efficiency lessons from project applied in future national and project based activities by end of project**Proposed Indicator(s)**13. Technical and water use efficiency lessons from project applied in future national and project based activities by end of project**

Replication of technical and water use efficiency lessons can be driven by formal processes, such as development of Codes of Practice, or facilitated using informal processes, including guideline development and information transfer. The approach adopted for replication, development of a replication strategy and subsequent implementation, lends itself well to assessing this indicator against the replication strategy.

Other clear means of identifying replication is the expansion of existing projects through co-funding; reference to the project learnings in development of other projects/ national initiatives and replication of technical learnings on other islands from the demonstration project.

Options include:

- i. Development of Code of Practice or Regulations incorporating technical lessons
- ii. Co-funding to expand the project
- iii. Clear references to lessons learned in framing the strategy of other projects
- iv. Replication of technology in other parts of the demonstration country

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Technical and water use efficiency lessons replicated nationally and/or on projects
	<b>Mostly Complete</b>	Replication strategy developed; lessons, audiences and tools under development
	<b>Partially Complete</b>	Replication strategy developed; lessons, audiences and tools identified
	<b>Mostly Incomplete</b>	Replication strategy developed, but lessons and audiences not identified
	<b>Incomplete</b>	Best practices not defined

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	Replication demonstrated in 12 countries
	<b>Mostly Complete</b>	Replication demonstrated in 9 countries
	<b>Partially Complete</b>	Replication demonstrated in 5 countries
	<b>Mostly Incomplete</b>	Replication demonstrated in up to 3 countries
	<b>Incomplete</b>	Replication not demonstrated in any countries

The baseline of this indicator may need to be established late in the project as application of lessons learned will often depend on the nature and applicability of the lessons. Baselines will relate directly to the replication and provide status of activities prior to replication (e.g. no composting toilets on Outer Islands of Tuvalu prior to the demonstration project or Code of Practice does not incorporate composting toilets).

Nb. The uncertain nature of the types of replication lessons in many countries means that demonstration of this target using the suggested approach will require review. It is proposed that this be undertaken through a process of one or more technical lesson replication reports, identifying the lessons and the means of replication. Review/ audit can then be provided by the RTAG or an independent auditor.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	<p>13 Lessons learned incorporated into other project(s) and/or Regulations</p> <p>Likely to be delivered through the NZAid and/or EU Muri projects with uptake of the learnings from the household sanitation. Links need to be clearly identified to support audit.</p> <p>Alternatively, outcomes from demonstration pilot may be incorporated into national or island-based regulations or Codes</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement
Fiji	<p>13 Lessons learned incorporated into other project(s), catchment flood management plans and/or Regulations</p> <p>Likely to be delivered through the other catchment flood planning strategies such as the Ba, Sigatoka, Navua and Rewa Rivers. Lessons that may be incorporated include communications, flood modelling and early warning systems.</p> <p>Alternatively, outcomes from demonstration pilot may be incorporated into national or catchment-based regulations or Codes</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement <input type="checkbox"/> Status of flood management / EWS approaches in other catchments prior to applying project lessons
FSM	<p>13 Lessons learned incorporated into other States or other catchments on Pohnpei</p> <p>Likely to be delivered in Chuuk State through Output 1.5 (<i>Extension of examples of best practice and lessons learned from Nett Watershed in Chuuk State</i>); although application of lessons learned from Component 2 [<i>Protecting Fresh and Marine Water Quality (including grow low sakau demonstration plots; pig waste bio-gas demonstration; and pig waste dry litter demonstration)</i>]</p> <p>Alternatively, outcomes from demonstration pilot may be incorporated into national or catchment-based regulations or Codes</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement <input type="checkbox"/> Status of waste and land management approaches in other catchments or States prior to applying project lessons
Nauru	<p>13 Lessons learned incorporated into other project(s) and/or Regulations</p> <p>Likely to be delivered through the AusAid and/or other projects with uptake of the learnings from the household sanitation. Links need to be clearly identified to support audit.</p> <p>Alternatively, outcomes from demonstration pilot may be incorporated into national or island-based regulations or Codes</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement



Country	Indicator	Target	Means of Verification	Baseline
Niue	<p>13 Lessons learned incorporated into other project(s) and/or Regulations</p> <p>Likely to be delivered through the amendments to the Building Code and/or standards for waste, waste oil and/or agrochemicals management.</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement
Palau	<p>13 Lessons learned incorporated into other project(s) and/or Regulations</p> <p>May be delivered through replication of the Payment for Ecosystem Services (PES) the AusAid and/or other projects with uptake of the learnings from the household sanitation. Links need to be clearly identified to support audit.</p> <p>Alternatively, outcomes from demonstration pilot may be incorporated into national or island-based regulations or Codes</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement
PNG	<p>13 Lessons learned incorporated into other project(s), catchment flood management plans and/or Regulations</p> <p>May be delivered through the other catchment flood planning strategies. Lessons that may be incorporated include communications, flood modelling and early warning systems.</p> <p>Alternatively, outcomes from demonstration pilot may be incorporated into national or catchment-based regulations or Codes</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement <input type="checkbox"/> Status of flood management / EWS approaches in other catchments prior to applying project lessons
RMI	<p>13 Lessons learned incorporated into other project(s) and/or Regulations</p> <p>May be delivered through replication of piggery waste management and composting, or composting toilets.</p> <p>Alternatively, outcomes from demonstration pilot may be incorporated into national or island-based regulations or Codes</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement
Samoa	<p>13 Lessons learned incorporated into other project(s) and/or Regulations</p> <p>May be delivered through national Water Safety Plan, or alternatively replication strategy (Output 0.1)</p>	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement

Country	Indicator	Target	Means of Verification	Baseline
Solomon Islands	13 Lessons learned incorporated into other project(s) and/or Regulations Likely to be delivered through replication strategy (Output 1.5)	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement
Tonga	13 Lessons learned incorporated into other project(s) and/or Regulations Likely to be delivered through replication strategy	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement
Tuvalu	13 Lessons learned incorporated into other project(s) and/or Regulations Likely to be delivered through changes to Building Code of Practice and through replication strategy. Options likely to include replication of composting toilets on Outer Islands and incorporation into national Code	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement
Vanuatu	13 Lessons learned incorporated into other project(s) and/or Regulations Likely to be delivered through implementation of best practice manuals (Output 3.4). Alternatively may also be delivered through replication of technology transfer to other catchments or development of regulations	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Technical lesson replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Initial project documents if written prior to GEF IWRM project <input type="checkbox"/> Regulations or Codes prior to project commencement

**LOGFRAME TARGET 11**

**Technical, management, participatory and advocacy lessons from projects developed into national lessons learned presentation packages with mainstreaming into national and regional approaches by end of project facilitated by national IWRM APEX bodies, Project Steering Committee, Pacific Partnership, and PCU**

Also

**Replication Framework in place by June 2009, Replication Toolkit in place by end 2010, National scaling-up and replication strategies in place based on Demonstration project success and failures for each country by June 2013**

**Proposed Target:**

Technical, management, participatory and advocacy lessons from projects developed into national lessons learned presentation packages with mainstreaming into national and regional approaches by end of project.

Delays in the initiation of many projects, including recruitment of project managers, have meant that the interim timeframes were not achievable. The target has been reworded to reflect the outcome of the targets, rather than the details.

**Proposed Indicator(s)****14. National lessons learned presentation packages with mainstreaming into national and regional approaches by end of project**

The mechanisms for delivering this may vary from country to country; however they will be strategically similar in terms of developing and implementing a replication strategy. It is important that the replication strategy address the facilitation roles and responsibilities of the IWRM APEX bodies, Project Steering Committee, Pacific Partnership and PCU.

Options include:

- i. Changes to legislation or regulation to incorporate project lessons – this may be hard to demonstrate as a stand-alone indicator
- ii. Replication strategy developed and implemented to mainstream lessons learned

**Country Reporting**

<b>Scorecard:</b>	<b>Complete</b>	Replication demonstrated by end of project
	<b>Mostly Complete</b>	National lessons learned presentation packages with mainstreaming into national approach
	<b>Partially Complete</b>	Replication strategy developed; lessons, audiences and tools identified
	<b>Mostly Incomplete</b>	Replication strategy developed, but lessons and audiences not identified
	<b>Incomplete</b>	Best practices not defined

**Regional Reporting**

<b>Scorecard:</b>	<b>Complete</b>	Replication demonstrated in 12 countries
	<b>Mostly Complete</b>	Replication demonstrated in 9 countries
	<b>Partially Complete</b>	Replication demonstrated in 5 countries
	<b>Mostly Incomplete</b>	Replication demonstrated in up to 3 countries
	<b>Incomplete</b>	Replication not demonstrated in any countries

The baseline of this indicator may need to be established late in the project as application of lessons learned will often depend on the nature and applicability of the lessons. Baselines will relate directly to the replication and provide status of activities prior to replication (e.g. separate steering committees for each international project in Cook Islands prior to the GEF IWRM project).

Nb. The uncertain nature of the types of replication lessons in many countries means that demonstration of this target using the suggested approach will require review. It is proposed that this be undertaken through a process of one or more technical lesson replication reports, identifying the lessons and the means of replication. Review/ audit can then be provided by the RTAG or an independent auditor.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
Fiji	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
FSM	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
Nauru	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
Niue	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement

Country	Indicator	Target	Means of Verification	Baseline
Palau	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
PNG	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
RMI	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
Samoa	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
Solomon Islands	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement

Country	Indicator	Target	Means of Verification	Baseline
Tonga	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
Tuvalu	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement
Vanuatu	14 Replication strategy developed and implemented to mainstream lessons learned  Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned	<input type="checkbox"/> Replication demonstrated by end of project	<input type="checkbox"/> Replication report endorsed by RTAG or independent auditor	<input type="checkbox"/> Policies, Regulations or Codes prior to project commencement

## LOGFRAME TARGET 12

**Indicator feedback facilitated through IWRM APEX Body provides information for multi-sectoral action and endorsement of national indicators for IWRM, NAPA, NAP and sustainable development planning (NSDSs and NEAPs) by end of project**

Also

**APEX body leading institutional training in consistent data collection and development of national monitoring rationale by end 2011 and national recruitment of support adviser to national APEX bodies by 2009**

### Proposed Target:

*National IWRM indicator framework established with formal reporting at a national level, facilitated by APEX body*

The above target reflects the need to ensure that national indicators are embedded within core government reporting functions, reflected multi-sectorally. The role of the APEX body is highlighted in this process. Delivery of support to the APEX bodies has evolved from the initial project planning, and countries have typically linked this back to the project management unit, rather than engaging someone directly to the APEX body.

Delays in the initiation of many projects, including recruitment of project managers, have meant that the interim timeframes were not achievable. The target has been reworded to reflect the outcome of the targets, rather than the details.

### Proposed Indicator(s)

#### **15. National IWRM indicator framework embedded in formal national reporting**

The mechanisms for formally embedding the national IWRM indicator framework into national reporting are varied, including through national strategies such as the National Sustainable Development Strategy (NSDS); National Environmental Action Plan (NEAP); National Adaptation Programme of Action (NAPA) and National Action Plan (NAP) or reporting through national censuses and demographic health surveys.

The indicator framework should be developed through a consultative process, with clear indicators and targets, with reporting tools, timeframes and responsibilities clearly identified.

Options include:

- i. Report outlining national indicator framework, with indicators, targets, reporting mechanisms, timeframes and responsibilities
- ii. Another mechanism for formally defining and endorsing a national indicator framework

*The timing cycles of several reporting tools (such as the NAPAs and NSDSs) may mean that it is not logistically possible to incorporate all indicators within the project cycle (some reporting reviews are on three to five year cycles). Whilst it may not be possible to incorporate the indicators into these reports within the demonstration project cycle, endorsement of the report and framework (including reporting) at a Ministerial or Cabinet level would satisfy this requirement.*



Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	National IWRM indicator framework embedded in formal national reporting
	<b>Mostly Complete</b>	National IWRM indicator framework endorsed by Minister/Cabinet; but reporting mechanisms not identified
	<b>Partially Complete</b>	National IWRM indicator framework endorsed by APEX body
	<b>Mostly Incomplete</b>	Draft National indicator framework developed for consultation
	<b>Incomplete</b>	No significant progress on national indicator framework

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	National indicator framework endorsed in 12 countries
	<b>Mostly Complete</b>	National indicator framework endorsed in 9 countries
	<b>Partially Complete</b>	National indicator framework endorsed in 5 countries
	<b>Mostly Incomplete</b>	National indicator framework endorsed in up to 3 countries
	<b>Incomplete</b>	National indicator framework not endorsed in any countries

No baseline is required; although project review and reporting cycles should be determined.

Country	Indicator	Means of Verification	Baseline
Cook Islands	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Fiji	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
FSM	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Nauru	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Niue	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Palau	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
PNG	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
RMI	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Samoa	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Solomon	15 National IWRM indicator framework	<input type="checkbox"/> Endorsement by	<input type="checkbox"/> None required

Country	Indicator	Means of Verification	Baseline
Islands	embedded in formal national reporting	Minister	
Tonga	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Tuvalu	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Vanuatu	15 National IWRM indicator framework embedded in formal national reporting	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required

**LOGFRAME TARGET 13****Increase in national staff (both men and women) across institutions with IWRM knowledge and experience by end of project****Proposed Indicator(s)****16. National staff across institutions with IWRM knowledge and experience**

Several options are available for assessing the progress against this target; however, it is critically important to assess the baseline as close as possible to the project commencement

Options include:

- i. Survey of relevant staff – not that this could be a particularly onerous approach and may be met with resistance by agencies not recognising the relevance. Note that this could be a targeted review, with only agencies and staff with likely experience and awareness targeted
- ii. Review of training records and staff records – intensive for one or two staff members and potentially government human resources staff, although less disruptive across government
- iii. Targeted training combined with targeted surveys – probably the most efficient mechanism for assessing government baseline knowledge and experience. The approach is that targeted training is associated with (short) surveys to both attendees and their managers – the attendees to identify baseline knowledge and experience; the managers to identify other capacity within government

***A secondary approach, where it is not possible to show a direct increase in national staff with IWRM knowledge and experience is to show a significant increase in formal and informal training in IWRM and direct work experience (through job descriptions) where there previously was none. Whilst this doesn't allow a numerical assessment against the proposed indicator, it is considered an acceptable proxy for this target.***

**Country Reporting**

<b>Scorecard: Complete</b>	Increased national staff across institutions with IWRM knowledge and experience
<b>Partially Complete</b>	Increased national staff across institutions with IWRM knowledge
<b>Incomplete</b>	No significant increases in national staff with IWRM knowledge and experience

**Regional Reporting**

<b>Scorecard: Complete</b>	Increase in national staff with IWRM knowledge and experience in 12 countries
<b>Mostly Complete</b>	Increase in national staff with IWRM knowledge and experience in 9 countries
<b>Partially Complete</b>	Increase in national staff with IWRM knowledge and experience in 5 countries
<b>Mostly Incomplete</b>	Increase in national staff with IWRM knowledge and experience in up to 3 countries
<b>Incomplete</b>	No significant increases in national staff with IWRM knowledge and experience

It is important that the baseline is established as near as possible to the project commencement. The baseline will be established through the same mechanism as the indicator (i.e. through survey, review of training staff records, targeted training combined with surveys or a review of training courses and job descriptions).

Country	Indicator	Means of Verification	Baseline
Cook Islands	16 National staff across institutions with IWRM knowledge and experience Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements
Fiji	16 National staff across institutions with IWRM knowledge and experience Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements
FSM	16 National staff across institutions with IWRM knowledge and experience Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements
Nauru	16 National staff across institutions with IWRM knowledge and experience Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements
Niue	16 National staff across institutions with IWRM knowledge and experience Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements
Palau	16 National staff across institutions with IWRM knowledge and experience Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements
PNG	16 National staff across institutions with IWRM knowledge and experience Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements

Country	Indicator	Means of Verification	Baseline
RMI	<p>16 National staff across institutions with IWRM knowledge and experience</p> <p>Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles</p>	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements at project commencement
Samoa	<p>16 National staff across institutions with IWRM knowledge and experience</p> <p>Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles</p>	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements at project commencement
Solomon Islands	<p>16 National staff across institutions with IWRM knowledge and experience</p> <p>Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles</p>	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements at project commencement
Tonga	<p>16 National staff across institutions with IWRM knowledge and experience</p> <p>Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles</p>	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements at project commencement
Tuvalu	<p>16 National staff across institutions with IWRM knowledge and experience</p> <p>Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles</p>	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements at project commencement
Vanuatu	<p>16 National staff across institutions with IWRM knowledge and experience</p> <p>Target is to show an increase in staff knowledge and experience, or by proxy through training and work roles</p>	<input type="checkbox"/> National capacity report	<input type="checkbox"/> Survey of staff IWRM knowledge and experience <input type="checkbox"/> Review of staff IWRM training and experience records <input type="checkbox"/> Training surveys <input type="checkbox"/> Review of IWRM training and job requirements at project commencement

**LOGFRAME TARGET 14****30% increase in gender balanced community and wider stakeholder engagement in water related issues by month 60**Proposed Indicator(s)**17. Proportion of community engaged in water related issues**

Engagement in water related issues cuts across a range of activities from the more passive forms such as information exchange to the more active such as collaborating or empowering. Whilst it is not practical to fully capture the complexity of these interactions, measuring increases in both passive and active engagement provides a general indication of the change in engagement.

The types of passive engagement that could be considered include meetings with information exchange such as community meetings with information exchange, demonstration sites, television shows, radio shows, school visits, etc. Types of meetings with active engagement would include community workshops where decisions are made, participatory projects, governance meetings, school tree plantings, etc.

Country Reporting

<b>Scorecard: Complete</b>	30% increase in gender balanced community and wider stakeholder awareness raising and active engagement
<b>Mostly Complete</b>	30% increase in gender balanced community and wider stakeholder awareness raising or active engagement and at least 15% in the other
<b>Partially Complete</b>	15% increase in gender balanced community and wider stakeholder awareness raising and active engagement
<b>Mostly Incomplete</b>	Measurable increases in community and stakeholder awareness raising and active engagement
<b>Incomplete</b>	No significant increases in community and stakeholder awareness raising and active engagement

Regional Reporting

<b>Scorecard: Complete</b>	30% increase achieved in 12 countries
<b>Mostly Complete</b>	30% increase achieved in 9 countries
<b>Partially Complete</b>	15% increase in gender balanced community and wider stakeholder awareness raising and active engagement achieved in 9 countries
<b>Mostly Incomplete</b>	Measurable increases in community and stakeholder awareness raising and active engagement in up to 3 countries
<b>Incomplete</b>	No significant increases in community and stakeholder awareness raising and active engagement

The key aspect of establishing a baseline is the identification of the types of passive and active engagement to be considered for monitoring, based on key media. These indicators should then be incorporated into the project engagement strategy, so that data can be collected and reported.

An example might include:

*Passive:*

- Number of attendees at community meetings with a focus on water issues (combination of number of attendees and meetings)
- Television coverage dedicated to water issues

*Active:*

- Proportion of civil society and commerce represented on official government meetings
- Number of attendees at community workshops making decisions on water issues (combination of number of attendees and meetings)

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Fiji	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
FSM	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Nauru	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Niue	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Palau	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
PNG	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement



Country	Indicator	Target	Means of Verification	Baseline
	active engagement	engagement activities		
RMI	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Samoa	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Solomon Islands	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Tonga	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Tuvalu	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement
Vanuatu	17 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	<input type="checkbox"/> 30% increases in attendance at awareness raising activities <input type="checkbox"/> 30% increase in active engagement activities	<input type="checkbox"/> Engagement report endorsed by Steering Committee	<input type="checkbox"/> Attendance at awareness raising activities and at activities with active engagement

**LOGFRAME TARGET 15****Improved cross-sectoral communication by end of project**Proposed Target:

*Improved cross-sectoral communication on water issues by end of project*

The above target reflects the focus and scope of the GEF IWRM project.

Proposed Indicator(s)**18. Sectors actively engaged in formal multilateral communication on water issues**

Cross-sectoral communication consists of both formal and informal mechanisms and both are important to delivering IWRM outcomes. Informal communications (such as telephone conversations, informal meetings and discussions that occur outside of formal meetings) provide the context and detail around water issues, as well as developing working relationships. Formal communication provides a mechanism for decision-making and defining roles and responsibilities.

Whilst informal communication is important to mainstreaming IWRM, the Project Document<sup>11</sup> identified that currently countries are struggling with formal cross-sectoral communication. It is also recognised that bringing other sectors into the formal discussions should initiate broader informal discussions.

It is important to recognise that there are multiple levels at which communication occurs across sectors. Accordingly, the proposed indicator reflects the involvement of different sectors engaged on water issues at formal meetings at the national level and other formal multi-lateral meetings at senior government level. The meetings to be considered include:

- National APEX body
- National forums
- Project Steering Committees
- Formal project meetings
- Other formal national meetings on water issues

Sectors to be involved should include, but not be limited to finance; education; health; commerce; tourism; fisheries; agriculture; utilities and environment

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Increased cross-sectoral engagement in formal multi-lateral communication
	<b>Mostly Incomplete</b>	Strategy developed to increase cross-sectoral engagement in formal multi-lateral communication
	<b>Incomplete</b>	No significant increases in formal multi-lateral communication

<sup>11</sup> United Nations Development Programme (2004). UNDP Project Document - Implementing Sustainable Water Resources and Wastewater Management in Pacific Island Countries. Bangkok, United Nations Development Programme: 216, *ibid*.

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	Improved cross-sectoral communication in 13 countries
	<b>Mostly Complete</b>	Improved cross-sectoral communication in 9 countries
	<b>Partially Complete</b>	Improved cross-sectoral communication in 5 countries
	<b>Mostly Incomplete</b>	Improved cross-sectoral communication in up to 3 countries
	<b>Incomplete</b>	Improved cross-sectoral communication in not demonstrated in any countries

Baseline will need to be established as early as possible in the project, identifying the engagement of different sectors in formal meetings on water.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
Fiji	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
FSM	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
Nauru	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
Niue	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
Palau	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
PNG	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
RMI	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
Samoa	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement

Country	Indicator	Target	Means of Verification	Baseline
Solomon Islands	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
Tonga	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
Tuvalu	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement
Vanuatu	17 Sectoral engagement in formal multilateral communication on water issues	<input type="checkbox"/> Increased engagement	<input type="checkbox"/> Review of formal meetings endorsed by Steering Committee	<input type="checkbox"/> Sectors represented in formal meetings prior to project commencement

**LOGFRAME TARGET 16****Water Safety Plans in place and enacted in 3 peri-rural and 2 urban areas**Proposed Indicator(s)**19. Water Safety Plans in place and enacted**

In order for the Water Safety Plan (WSP) to be effective it needs formal endorsement as government policy and budget to be implemented. Endorsement can typically be achieved by Ministerial endorsement; however, several options are available for identifying a budget allocation, including:

- i. Discrete budget line
- ii. Clear ability to break down budget and identify allocation
- iii. Legal mechanism to draw funds directly from another source (e.g. levy payments)

Country Reporting

<b>Scorecard: Complete</b>	WSP endorsed by Minister with budget allocation
<b>Mostly Complete</b>	WSP endorsed by Minister without budget allocation
<b>Partially Complete</b>	WSP completed including consultation and endorsed by Steering Committee
<b>Mostly Incomplete</b>	WSP under development
<b>Incomplete</b>	Planning process not defined

Regional Reporting

<b>Scorecard: Complete</b>	Water Safety Plans in place and enacted in 3 peri-rural and 2 urban areas
<b>Mostly Complete</b>	Water Safety Plans in place and enacted at 4 sites (combination peri-rural and urban areas)
<b>Partially Complete</b>	Water Safety Plans in place and enacted at 3 sites
<b>Mostly Incomplete</b>	Water Safety Plans in place and enacted at one or two sites
<b>Incomplete</b>	No Water Safety plans enacted

No baseline is required.

Country	Indicator	Target	Means of Verification	Baseline
Niue	18 Water Safety Plans for Alofi North and Alofi South (peri-urban)	<input type="checkbox"/> Plan implemented	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Palau	18 National Water Safety Plan (peri-urban)	<input type="checkbox"/> Plan implemented	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
RMI	18 Majuro Water Safety Plan (urban)	<input type="checkbox"/> Plan implemented	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Samoa	18 Apia Water Safety Plan (urban)	<input type="checkbox"/> Plan implemented	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Solomon Islands	18 Honiara Water Safety Plan (urban)	<input type="checkbox"/> Plan implemented	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required

**LOGFRAME TARGET 17****Sustainable forest & land management practices established and trialled with landowners in 2 demo sites**Proposed Indicator(s)**20. Sustainable forest & land management practices established and trialled with landowners**

Relies on capacity to clearly identify that site is established and practices being trialled and then subsequently demonstrated or disseminated through publications or other education and training material.

Options include:

- i. Establishment of demonstration site; confirmed by visits from people outside the project
- ii. Establishment and trial of approaches on a study sites; confirmed by publishing guidelines, codes, regulations, education and training material or similar based on site studies

Country Reporting

<b>Scorecard: Complete</b>	Sustainable forest & land management practices established and trialled with landowners; with demonstration at site or dissemination of practices
<b>Mostly Complete</b>	Sustainable forest & land management practices established and trialled with landowners; demonstration aspects identified
<b>Partially Complete</b>	Sustainable forest & land management practices established and trialled with landowners
<b>Mostly Incomplete</b>	Land and practices identified for demonstration site; but on-ground works not completed
<b>Incomplete</b>	No significant progress on sustainable forest and land management practices

Regional Reporting

<b>Scorecard: Complete</b>	Sustainable forest & land management practices established and trialled with landowners in 2 demo sites
<b>Partially Complete</b>	Sustainable forest & land management practices established and trialed with landowners at one demo site
<b>Incomplete</b>	No demonstration sites established

Baseline to be established is that the demonstration site was not established prior to the project; or the site was established, but not operating as a demonstration site for the practices under review.

Country	Indicator	Target	Means of Verification	Baseline
Fiji	20 Sustainable forest & land management practices established and trialled with landowners	<input type="checkbox"/> Sustainable forestry site to be established in Nadi Basin upper catchment	<input type="checkbox"/> Completion report endorsed by Steering Committee <input type="checkbox"/> Development of guidelines; codes; best practice manual; etc	<input type="checkbox"/> Review of site practices prior to commissioning trial
FSM	20 Sustainable forest & land management practices established and trialled with landowners	<input type="checkbox"/> Low grow sakau and pig waste management site to be established in Nanpil river catchment	<input type="checkbox"/> Completion report endorsed by Steering Committee <input type="checkbox"/> Development of guidelines; codes; best practice manual; etc	<input type="checkbox"/> Review of site practices prior to commissioning trial
Palau	20 Sustainable forest & land management practices established and trialled with landowners	<input type="checkbox"/> One year trial of pollution reduction initiative at one market garden/livestock area	<input type="checkbox"/> Completion report endorsed by Steering Committee <input type="checkbox"/> Development of guidelines; codes; best practice manual; etc	<input type="checkbox"/> Review of site practices prior to commissioning trial
Vanuatu	20 Sustainable forest & land management practices established and trialled with landowners	<input type="checkbox"/> Establishing 6 demonstration plots in the GTZ Forest Reserve and demonstration plots in 4 communities (Fanafo, Monixhill, Nagar and Mango)	<input type="checkbox"/> Completion report endorsed by Steering Committee <input type="checkbox"/> Development of guidelines; codes; best practice manual; etc	<input type="checkbox"/> Review of site practices prior to commissioning trial



**LOGFRAME TARGET 18**

**40% reduction in GW and marine pollution discharge at 2 demo sites from sewage and manure and a 20% reduction in 2 urban/peri-urban areas**

Proposed Indicator(s)**21. Nitrogen pollution load discharged to groundwater and/or coastal waters from sewage and/or manure**

Pollution reduction can be achieved through reducing the volume of wastewater discharge or improving the quality of the discharge. Assessing volume reduction against the target is relatively simple (assuming no significant change in wastewater quality); however treating wastewater often addresses different components of the waste. For example many nutrient reduction processes do not significantly reduce pathogens; whereas disinfection processes targeting pathogens generally do not reduce nutrients.

The primary pollutants to groundwater and coastal waters from sewage and manure tend to be organic matter, phosphorus, nitrogen and pathogens. Of these pollutants, nitrogen is commonly the most conservative and mobile pollutant in groundwater<sup>12</sup>. Phosphorus is commonly attenuated in organic soils, organic matter is often also captured close to the source and pathogens die relatively rapidly in groundwater. Accordingly, nitrogen reduction is potentially the best indicator of significant reduction in pollution discharged to groundwater. Given that organic matter and phosphorus are typically reduced with most processes that also remove nitrogen (usually through bacterial breakdown), nitrogen is considered a reasonable marker for this target.

Options for demonstrating nitrogen reductions in discharges include:

- i. Reduction in wastewater discharge volume
- ii. Reduction in nitrogen content of wastewater

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Target reduction in sewage and/or manure pollution
	<b>Mostly Complete</b>	¾ of target reduction achieved
	<b>Partially Complete</b>	½ of target reduction achieved
	<b>Mostly Incomplete</b>	Significant measurable reduction in sewage and/or manure pollution
		Or
		Strategy and funding in place, but groundworks not completed to deliver reduction in pollution
	<b>Incomplete</b>	No significant reduction in sewage or manure pollution

<sup>12</sup> United States Environmental Protection Agency (1993). Guidance Specifying Management Measures For Sources of Nonpoint Pollution in Coastal Waters Washington, DC, United States Environmental Protection Agency.

Regional Reporting

<b>Scorecard: Complete</b>	40% reduction achieved in 2 rural areas and 20% reduction achieved in 2 urban/peri-urban areas
<b>Mostly Complete</b>	3 of 4 sites achieve: 40% reduction in 2 rural areas and 20% reduction in 2 urban/peri-urban areas
<b>Partially Complete</b>	2 of 4 sites achieve: 40% reduction in rural areas and 20% reduction in urban/peri-urban areas Or 20% reduction achieved in 2 rural areas and 10% reduction achieved in 2 urban/peri-urban areas
<b>Mostly Incomplete</b>	40% reduction achieved in a rural area or 20% reduction achieved in an urban/peri-urban area Or Measurable reduction in at least 3 sites
<b>Incomplete</b>	No significant reduction in wastewater discharges

Baseline information will be required for wastewater volume and current treatment processes.

Assessing reduction

There are several reasonable estimation techniques for measuring reductions in wastewater volume, including:

- Source removal would eliminate 100% of wastewater discharges – this could be achieved through establishing centralised systems together with reuse or alternative disposal (there is obviously a need to ensure that the problem is not just shifted), water-free systems (such as composting toilets) or reuse
- Metering discharge – typically would use one or several representative systems as potentially expensive

Mechanisms for estimating pollution load reduction include:

- Direct measurement – ideal for assessing reduction; however likely to be expensive to collect and analyse adequate representative data
- Using estimates of pollution reduction from reliable sources. For example, rehabilitating a septic tank and implementing a sludge pump-out service would effectively improve the wastewater management from a cesspit style arrangement to a septic, effectively delivering a 20-30% reduction in pollution<sup>13</sup>.

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<sup>13</sup> Ibid.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	<p>21 Nitrogen pollution discharged to groundwater and Muri Lagoon</p> <p>Piggery waste pollution to lagoon should be eliminated in catchment through initiatives to move piggeries from adjacent to creeks and install bunding. Reduction in sewage pollution is likely to be limited to a household level as pilot and partner projects unlikely to deliver sufficient reduction whole site during project lifetime</p> <p>Note that if work undertaken by MoH with hotels in parallel with project, reduction may be achieved</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 90% reduction in nitrogen discharged to the lagoon from piggeries</li> <li><input type="checkbox"/> 35% reduction in nitrogen loads at a household level from household trials</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Monitoring report endorsed by Steering Committee (Steering Committee minutes)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Catchment area</li> <li><input type="checkbox"/> Number of households</li> <li><input type="checkbox"/> Groundwater monitoring adjacent to pilot sites</li> <li><input type="checkbox"/> Study to determine sources of pollutants into Muri Lagoon to apportion sources</li> </ul>
FSM	<p>21 Nitrogen pollution from piggeries in Nett Watershed</p> <p>Piggery waste reduction achieved through dry litter waste management uptake and biogas generation</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 80% reduction in nitrogen pollution from piggery wastes at piggery demonstration sites</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Study Reports endorsed by Steering Committee (Steering Committee minutes)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Assessment of piggery waste generation from piggery</li> </ul>
Nauru	<p>21 Reduction in sewage pollution in Ewa and Anetan Communities</p> <p>Can be assessed at a community level – likely to be close to this level of reduction across whole community if 50% achieved for each septic through secondary treatment</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 35% reduction in nitrogen pollution from sewage</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Study report on demonstrations endorsed by Steering Committee (Steering Committee minutes)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Catchment area</li> <li><input type="checkbox"/> Existing state of sanitation systems in demonstration site</li> </ul>
Niue	<p>21 Reduction in nitrogen pollution from piggery and sewage wastes in Niue groundwater catchment</p> <p>Rehabilitation of failing septic systems will provide at least a 25% reduction in nitrogen pollution (significantly more if these are associated with irrigation beds)</p> <p>Piggery waste reduction achieved through piggery effluent collection tanks. Nitrogen reduction through proportion of waste collected in effluent collection tanks</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 25% reduction in nitrogen due to sewage pollution</li> <li><input type="checkbox"/> 80% reduction in nitrogen pollution from piggery waste at piggery demonstration sites</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Study Reports endorsed by Steering Committee (Steering Committee minutes)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Household septic tank survey</li> <li><input type="checkbox"/> Assessment of piggery waste generation from piggery</li> </ul>

Country	Indicator	Target	Means of Verification	Baseline
RMI	<p>21 Reduction in sewage pollution in Laura Community</p> <p>Will need to be assessed at a household level as pilot and partner projects unlikely to deliver sufficient reduction over project lifetime</p>	<p><input type="checkbox"/> 35% reduction in pollution from household trials</p>	<p><input type="checkbox"/> Monitoring report endorsed by Steering Committee (Steering Committee minutes)</p>	<p><input type="checkbox"/> Catchment area</p> <p><input type="checkbox"/> Number of households</p> <p><input type="checkbox"/> Groundwater monitoring adjacent to pilot sites</p>
Tonga	<p>21 Nitrogen pollution discharged to groundwater in Neiafu</p> <p>Rehabilitation of septic systems and sludge disposal systems will reduce nitrogen discharge at a household level by 25%</p>	<p><input type="checkbox"/> 20% reduction in nitrogen discharged to groundwater</p> <p>Equates to 80% Neiafu residents with access to septic pump-out (4,500 people)</p>	<p><input type="checkbox"/> Survey by Town Officers endorsed by Steering Committee (Steering Committee minutes)</p> <p><input type="checkbox"/> Audit on proportion of houses using the pump-out facilities by end of project</p>	<p><input type="checkbox"/> Island area</p> <p><input type="checkbox"/> Number of households in Neiafu</p> <p><input type="checkbox"/> Number of households on Vava'u</p>
Tuvalu	<p>21 Reduction in sewage pollution across Funafuti</p> <p>Composting toilets should reduce nitrogen pollution discharged to groundwater by over 90% in demonstration households</p>	<p><input type="checkbox"/> 5% reduction in sewage pollution over Funafuti</p>	<p><input type="checkbox"/> Study report endorsed by Steering Committee (Steering Committee minutes)</p>	<p><input type="checkbox"/> Island area</p> <p><input type="checkbox"/> Number of households</p>
Vanuatu	<p>21 Reduction in sewage pollution across Sarakata watershed</p> <p>Installation of composting toilets or other improved sanitation options, either directly through the project, or through associated works will cause a direct reduction in the nitrogen pollution into the surface waters</p>	<p><input type="checkbox"/> 40% reduction in sewage pollution in Sarakata watershed</p>	<p><input type="checkbox"/> Study report endorsed by Steering Committee (Steering Committee minutes)</p>	<p><input type="checkbox"/> Watershed area</p> <p><input type="checkbox"/> Number of households</p> <p><input type="checkbox"/> Survey of existing sanitation systems</p>

**LOGFRAME TARGET 19****30% reduction in drinking water resources pollution discharge for 3 sites  
(including one country-scale)****Proposed Indicator(s)****22. Reduction in drinking water source pollution**

The sources of pollution to drinking water are many and varied across the demonstration sites, including piggeries, septics, solid waste, agricultural chemicals, waste oil and hazardous medical waste. Against this background, assessing a 30% reduction in pollution discharge is considered virtually impossible. However, at the sites listed in the following table, significant pollution reduction measures are to be implemented that would in many cases result in significant reductions in pollution discharges. It is considered reasonable to assume that if these are implemented, they would result in reductions in pollution discharges typically greater than 30% - in most cases, significantly more than 30%.

Notably, for any of these sites where pathogens are identified as the primary pollution source of concern to drinking water (likely in RMI, Palau and Niue), the proposed strategies to manage piggeries and/or sewage pollution will certainly guarantee a 30% reduction in pollution (typically measured in orders of magnitude). At sites where pathogens are the primary drinking water risk, direct measurements of pathogen concentrations (*E. coli* would provide an adequate indicator) may be one option for demonstrating pollution reduction. Due to their relatively short survival rates in the environment, pathogens are one of the few forms of direct condition monitoring that may demonstrate positive changes within the project timeframes. However caution should be exercised interpreting results given the highly variable nature of microbiological sampling, the strong influence of external drivers that affect concentrations (such as rainfall) and the significant number of environmental sources (birds in particular) in surface water catchments.

Accordingly, it is proposed that the indicator be a reduction in drinking water source pollution, with targets based on site specific stressors. Measuring the success against this target could be achieved through:

- i. Achievement of the proposed activities – given that these activities will collectively provide the 30% reductions required
- ii. Independent review of the reductions in drinking water source pollution, either as a separate report, or as part of the development of a watershed management plan
- iii. Direct measurement of *E. coli* concentrations

**Country Reporting**

<b>Scorecard: Complete</b>	Target reduction in drinking water source pollution
<b>Mostly Complete</b>	2/3 of target reduction achieved
<b>Partially Complete</b>	Stress reduction activities completed and significant measurable reduction in drinking water source pollution
<b>Mostly Incomplete</b>	Strategy and funding in place, but groundworks not completed to deliver reduction in drinking water source pollution
<b>Incomplete</b>	No significant reduction in drinking water source pollution

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	30% reduction for 3 sites (including one country-scale)
	<b>Mostly Complete</b>	30% reduction for 3 sites
	<b>Partially Complete</b>	30% reduction for 2 sites
	<b>Mostly Incomplete</b>	30% reduction for one site
	<b>Incomplete</b>	Significant reductions not achieved at any sites

Baselines will need to be collected early into all projects, particularly those identifying surveys or water quality monitoring as the primary means of demonstrating reduction.

Country	Indicator		Means of Verification	Baseline
FSM	<p><b>22 Reduction in pollution sources discharging into Nett Watershed</b></p> <p>Activities to address key pollution sources include improving piggery management, regulation development and a Payment for Ecosystem services (PES) system.</p> <p>Additionally, the source mapping will provide both a baseline and a lever for regulators and operators to improve practices.</p> <p>It may be possible to determine source reduction simply from the original baseline mapping and the subsequent works in the catchment to report on progress.</p> <p>Alternatively, the catchment management plan needs to clearly identify how initiatives will lead to this level</p>	<input type="checkbox"/> 30% reduction in sources discharging into Nett Watershed	<input type="checkbox"/> Report on progress endorsed by Steering Committee (Steering Committee minutes)  <input type="checkbox"/> Nett Watershed Forest Reserve Management Plan endorsed by Minister/Cabinet	<input type="checkbox"/> Assessment of piggery waste generation from piggery <input type="checkbox"/> Survey of catchment pollution sources
Niue	<p><b>22 Reduction in drinking water resources pollution discharge to drinking water sources at a national scale</b></p> <p>Addressing the key risks identified in the project document removes most of the key risks to drinking water supplies; leaving only minor risks. As the nature of these risks varies, a direct 30% is not readily quantifiable; however, addressing risks from waste oil, hospital hazardous wastes, piggeries and agricultural chemicals as outlined in the logframe will almost entirely mitigate risks to drinking water sources. As such it is considered that it would have more than satisfied a 30% reduction criteria.</p>	<input type="checkbox"/> 30% reduction Achieved through mitigation of: <ul style="list-style-type: none"> <li>- waste oil sources</li> <li>- hospital hazardous wastes</li> <li>- piggery waste</li> <li>- agricultural chemicals</li> </ul>	<input type="checkbox"/> Reports endorsed by Steering Committee (Steering Committee minutes)	<input type="checkbox"/> Uncontrolled waste oil disposal sites <input type="checkbox"/> Uncontrolled piggery waste sites <input type="checkbox"/> Survey of hospital waste practices <input type="checkbox"/> Groundwater quality assessment (agricultural chemicals and/or pathogens)
Palau	<p><b>22 Reduction in pollution sources discharging into Ngerikiil Watershed</b></p> <p>Activities to address key pollution sources include buffer zones, developing best management practices, managing stormwater drains and a Payment for Ecosystem services (PES) system.</p> <p>Additionally, the source mapping will provide both a baseline and a lever for regulators and operators to improve practices.</p> <p>It may be possible to determine source reduction simply from the original baseline mapping and the subsequent works in the catchment to report on progress.</p> <p>Alternatively, the catchment management plan needs to clearly identify how initiatives will lead to this level (or greater) of source reduction</p>	<input type="checkbox"/> 30% reduction in sources discharging into Ngerikiil	<input type="checkbox"/> Report on progress endorsed by Steering Committee (Steering Committee minutes)  <input type="checkbox"/> Ngerikiil Catchment Water Management Plan endorsed by Minister/Cabinet	<input type="checkbox"/> Survey of catchment pollution sources <input type="checkbox"/> Potentially water quality monitoring for pathogens

Country	Indicator		Means of Verification	Baseline
RMI	<p><b>22 Reduction in pollution sources discharging into Laura groundwater</b></p> <p>Activities to address key pollution sources include managing piggery waste, managing septic tanks, installation of composting toilets and managing solid waste.</p> <p>Additionally, the source mapping will provide both a baseline and a lever for regulators and operators to improve practices. It may be possible to determine source reduction simply from the original baseline mapping and the subsequent works in the catchment to report on progress.</p> <p>Alternatively, the catchment management plan needs to clearly identify how initiatives will lead to this level (or greater) of source reduction</p>	<input type="checkbox"/> 30% reduction in sources discharging into Laura groundwater	<input type="checkbox"/> Report on progress endorsed by Steering Committee (Steering Committee minutes)  <input type="checkbox"/> Sarakata Watershed Management Plan endorsed by Minister/Cabinet	<input type="checkbox"/> Laura groundwater catchment area <input type="checkbox"/> Number of households <input type="checkbox"/> Survey of catchment pollution sources <input type="checkbox"/> Potentially water quality monitoring for pathogens
Vanuatu	<p><b>22 Reduction in pollution across Sarakata watershed</b></p> <p>Activities to address key pollution sources include developing best management practices, managing stormwater drains and a Payment for Ecosystem services (PES) system.</p> <p>Additionally, the household survey will provide both a baseline and a lever for regulators and operators to improve practices. It may be possible to determine source reduction simply from the original baseline mapping and the subsequent works in the catchment to report on progress.</p> <p>Alternatively, the Sarakata Watershed Management Plan needs to clearly identify how initiatives will lead to this level (or greater) of source reduction</p>	<input type="checkbox"/> 30% reduction in sources discharging into Sarakata watershed	<input type="checkbox"/> Report on progress endorsed by Steering Committee (Steering Committee minutes)  <input type="checkbox"/> Sarakata Watershed Management Plan endorsed by Minister/Cabinet	<input type="checkbox"/> Watershed area <input type="checkbox"/> Number of households <input type="checkbox"/> Survey of existing sanitation systems



**LOGFRAME TARGET 20**  
**A Catchment Council established in 2 SIDS**

Proposed Indicator(s)

**23. Catchment Council established**

Relies on endorsement at the relevant level, such as Ministerial decree or similar. A council without this level of endorsement is unlikely to have sufficient authority to guide water governance. Similarly, a delegated financial allocation is required to enable the Council to function.

The definition of 'Council' may vary significantly, but needs to reflect governance at the catchment level. Accordingly, it would be necessary for there to be local community, government and commerce representation on the Council for this criterion to be satisfied.

Options for the financial allocation include:

- i. Discrete budget line
- ii. Levy collection and allocation

Note that funding from government agency budget funding, without a discrete budget line is considered less stable than a directly funded council as it relies on ongoing agency priorities, rather than a transparent budget allocation.

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Catchment Council established with financial allocation (such as budget line or levy)
	<b>Mostly Complete</b>	Catchment Council established, funded from government agency budget
	<b>Partially Complete</b>	Catchment Council established with formal delegation but without financial allocation
	<b>Mostly Incomplete</b>	Catchment Council operating, but without formal Ministerial or legislative delegation
	<b>Incomplete</b>	No Catchment Council in place

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	Catchment Councils established in 2 countries with financial allocation (such as budget line or levy)
	<b>Mostly Complete</b>	Catchment Councils established in 2 countries with financial allocation in one (such as budget line or levy)
	<b>Partially Complete</b>	Catchment Councils established in 2 countries without financial allocation or established in one country with financial allocation
	<b>Mostly Incomplete</b>	Catchment Council established in one country without financial allocation
	<b>Incomplete</b>	Catchment Council not established

No baseline is required.

Country	Indicator	Target	Means of Verification	Baseline
Fiji	23 Nadi Basin Catchment Committee Established	<input type="checkbox"/> Committee Established <input type="checkbox"/> Budget allocated	<input type="checkbox"/> Endorsement by Minister or legislation passed or similar <input type="checkbox"/> National Budget	<input type="checkbox"/> None required
FSM	23 Nett Catchment Committee Established	<input type="checkbox"/> Committee Established <input type="checkbox"/> Budget allocated	<input type="checkbox"/> Endorsement by Minister or legislation passed or similar <input type="checkbox"/> National Budget	<input type="checkbox"/> None required
Palau	23 Ngerikiil Community Catchment Committee Established	<input type="checkbox"/> Committee Established <input type="checkbox"/> Budget allocated	<input type="checkbox"/> Endorsement by Minister or legislation passed or similar <input type="checkbox"/> National Budget	<input type="checkbox"/> None required
RMI	23 Laura Lens Laura Integrated Water and Land Management Advisory Committee	<input type="checkbox"/> Committee Established <input type="checkbox"/> Budget allocated	<input type="checkbox"/> Endorsement by Minister or legislation passed or similar <input type="checkbox"/> National Budget	<input type="checkbox"/> None required
Vanuatu	23 Sanma Water Advisory Committee Established	<input type="checkbox"/> Committee Established <input type="checkbox"/> Budget allocated	<input type="checkbox"/> Endorsement by Minister or legislation passed or similar <input type="checkbox"/> National Budget	<input type="checkbox"/> None required

**LOGFRAME TARGET 21****50% increase in community engagement with National Government in 3 SIDS**Proposed Target:

*50% increase in community engagement with National Government on water issues in 3 SIDS*

Proposed Indicator(s)**24. Increase in community engagement with National Government on water issues**

Community engagement occurs across multiple levels, from awareness raising through to direct involvement in decision-making. In order for this indicator to be meaningful, it needs to relate to engagement that influences governance. The opportunities for the community to engage directly with national government include national committees, national forums and representation on governance committees.

Measuring achievement against this indicator can be relatively straightforward, with the number of community representatives on formal national committees and forums, governance bodies with direct engagement of national government and community representatives and advisory bodies that formally report to Ministers or Cabinet engagement with national government on water issues limited.

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Target increase in community engagement
	<b>Mostly Complete</b>	2/3 of target increase achieved
	<b>Partially Complete</b>	1/2 of target increase achieved
	<b>Mostly Incomplete</b>	Measurable increase in community engagement
	<b>Incomplete</b>	No significant increase in community engagement

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	50% increase in 3 SIDS
	<b>Mostly Complete</b>	30% increase in 3 SIDS
	<b>Partially Complete</b>	2% increase in 2 SIDS
	<b>Mostly Incomplete</b>	25% increase in one SIDS
	<b>Incomplete</b>	No significant increase

Baseline will need to identify existing national committees and forums, governance bodies with direct engagement of national government and community representatives and advisory bodies that formally report to Ministers or Cabinet. The need to establish baselines early is critical.

Country	Indicator	Target	Means of Verification	Baseline
Nauru	24 Community engagement with National Government	<input type="checkbox"/> 50% increase	<input type="checkbox"/> Review of formal national committees and forums endorsed by Project Steering Committee	<input type="checkbox"/> Community representative membership or formal participation in formal national committees or forums prior to project commencement
RMI	24 Community engagement with National Government	<input type="checkbox"/> 50% increase	<input type="checkbox"/> Review of formal national committees and forums endorsed by Project Steering Committee	<input type="checkbox"/> Community representative membership or formal participation in formal national committees or forums prior to project commencement
Tuvalu	24 Community engagement with National Government	<input type="checkbox"/> 50% increase	<input type="checkbox"/> Review of formal national committees and forums endorsed by Project Steering Committee	<input type="checkbox"/> Community representative membership or formal participation in formal national committees or forums prior to project commencement

**LOGFRAME TARGET 22****National effluent standards reached for wastewater treatment at 3 sites**Proposed Indicator(s)**25. National effluent standards reached for wastewater treatment**

There are generally four ways in which national effluent standards are applied, namely by:

- i. Setting numeric criteria for discharge
- ii. Setting treatment criteria based on processes
- iii. Setting discharge criteria through permits/licenses, typically with conditions relating to treatment, numeric criteria, location and/or timing
- iv. A combination of any of the above

Given the potentially broad range of effluent standards and permit conditions, there is no single fit to meeting criteria, but rather the need to review performance against the relevant criteria. This can be done by the relevant regulatory body, or where appropriate, through an independent auditor.

Country Reporting

<b>Scorecard: Complete</b>	National effluent standards reached for wastewater treatment
<b>Mostly Complete</b>	National effluent standards substantively met wastewater treatment with minor (non-significant) breaches
<b>Partially Complete</b>	National effluent standards substantively met but with restrictive conditions
<b>Mostly Incomplete</b>	National standards defined; works undertaken, but unable to meet standards
<b>Incomplete</b>	No national standards defined

Regional Reporting

<b>Scorecard: Complete</b>	National effluent standards reached at 3 sites
<b>Partially Complete</b>	National effluent standards reached at 2 sites
<b>Mostly Incomplete</b>	National effluent standards reached at 1 site
<b>Incomplete</b>	National effluent standards not reached at any site

No Baseline is required; however national effluent standards need to be clearly identified.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	25 Wastewater discharge from demonstration sites meet national effluent standards <i>Discharge meets Public Health (Sewage) Regulations 2008 or revised regulations</i>	<input type="checkbox"/> Regulations met	<input type="checkbox"/> Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	<input type="checkbox"/> None required
FSM	25 Wastewater discharge from demonstration sites meet national effluent standards <i>Discharge meets national effluent standards</i>	<input type="checkbox"/> Regulations met	<input type="checkbox"/> Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	<input type="checkbox"/> None required
Nauru	25 Wastewater discharge from demonstration sites meet national effluent standards <i>Need to develop national effluent standards</i>	<input type="checkbox"/> Regulations met	<input type="checkbox"/> Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	<input type="checkbox"/> None required
Niue	25 Wastewater discharge from demonstration sites meet national effluent standards <i>Need to develop national effluent standards</i>	<input type="checkbox"/> Regulations met	<input type="checkbox"/> Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	<input type="checkbox"/> None required
RMI	25 Wastewater discharge from demonstration sites meet national effluent standards <i>Discharge meets RMIEPA Toilet Facilities and Sewage Disposal Regulations 1990 or revised regulations</i>	<input type="checkbox"/> Regulations met	<input type="checkbox"/> Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	<input type="checkbox"/> None required

**LOGFRAME TARGET 23****20% increase in water storage facilities at 1 demo site**Proposed Indicator(s)**26. Water supply storage**

*Relies on installation of additional storage in Niue.*

Country Reporting

<b>Scorecard: Complete</b>	Target increase in water supply storage
<b>Mostly Complete</b>	2/3 of target increase achieved
<b>Partially Complete</b>	1/2 of target increase achieved
<b>Mostly Incomplete</b>	Measurable increase in water storage facility
<b>Incomplete</b>	No significant increase in water storage facility

Regional Reporting

<b>Scorecard: Complete</b>	20% increase in water storage facilities at 1 demo site
<b>Partially Complete</b>	Significant increase in water storage facilities at 1 demo site
<b>Incomplete</b>	No increase in water storage

Baseline of existing storage at the project commencement will required.

Country	Indicator	Target	Means of Verification	Baseline
Niue	26 Water supply storage New Storage Tank at Fou, Alofi North	<input type="checkbox"/> 20% increase	<input type="checkbox"/> Commissioning report endorsed by Steering Committee	<input type="checkbox"/> Alofi North water storage capacity

**LOGFRAME TARGET 24****Draft regional Indicator Framework developed for consultation by June 2010  
and countries fully utilizing Indicator Framework by December 2011****Proposed Target:**

*Draft regional Indicator framework developed and fully utilizing Indicator Framework by December 2012*

The change in timeframe reflects the delays to start-up in many projects, with many projects not recruiting project managers until the 3<sup>rd</sup> and 4<sup>th</sup> quarters of Year 1; followed by changes to logframes to reflect the changed environment during the lag between project scoping and implementation.

The focus solely on the implementation of the framework (rather than the timing of the draft for consultation) reflects a focus on getting the framework implemented and mainstreamed into countries.

**Proposed Indicator(s)****27. *Regional indicator framework endorsed by Regional Steering Committee and national indicator frameworks endorsed by relevant Cabinets or Ministers***

*Endorsement of the regional indicator framework and national indicator frameworks is fairly straightforward to assess. Whilst it is preferable that the framework is endorsed as a single approach, due to the combination of reporting strategies that may be adopted (such as Demographic Health Survey, Census and National Sustainable Development Plans), it may be practical at a national level for the components to be endorsed separately.*

**Country Reporting**

<b>Scorecard: Complete</b>	National indicator framework endorsed by Minister/Cabinet and reporting mechanisms identified and funded
<b>Mostly Complete</b>	National indicator framework endorsed by Minister/Cabinet; responsible agencies identified, but reporting unfunded
<b>Partially Complete</b>	National indicator framework endorsed by APEX body
<b>Mostly Incomplete</b>	National indicator framework under development, including consultation
<b>Incomplete</b>	No Catchment Council in place

**Regional Reporting**

<b>Scorecard: Complete</b>	Indicator framework endorsed by Steering Committee and national indicator framework endorsed in 13 countries
<b>Mostly Complete</b>	Indicator framework endorsed by Steering Committee and national indicator framework endorsed in 9 countries



<b><i>Partially Complete</i></b>	Indicator framework endorsed by Steering Committee and national indicator framework endorsed in 7 countries
<b><i>Mostly Incomplete</i></b>	Indicator framework endorsed by Steering Committee and national indicator framework endorsed in 3 countries
<b><i>Incomplete</i></b>	Regional indicator framework not endorsed

No baseline is required.

Country	Indicator	Target	Means of Verification	Baseline
Regionally	27 Regional Indicator Framework implemented	<input type="checkbox"/> Endorsed by Regional Steering Committee	<input type="checkbox"/> RSC Minutes	<input type="checkbox"/> None required
Cook Islands	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Fiji	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
FSM	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Nauru	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Niue	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Palau	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
PNG	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
RMI	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Samoa	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Solomon Islands	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Tonga	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Tuvalu	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required
Vanuatu	27 National indicator framework implemented	<input type="checkbox"/> Indicators incorporated into national reporting	<input type="checkbox"/> Endorsement by Cabinet (Cabinet Minutes)	<input type="checkbox"/> None required

**LOGFRAME TARGET 25****Stakeholder consultation and approval of project design and PM&E plan for each national demonstration project by August 2009, including separate consultations with women**Proposed Indicator(s)**28. Project design and PM&E plan endorsed by Project Steering Committee**

Relatively straightforward to confirm through Project Steering Committee (PSC) minutes, although requires stakeholder consultation and, in particular, consultations with women. Options for demonstrating the consideration of stakeholder consultation include:

- i. Consultation report outlining consultation process and participants, including separate consultations with women
- ii. Identification of stakeholder consultations as part of PM&E plan, including separate consultations with women

Ideally, the issues raised as part of the consultation process and the response to it should be identified in the consultation report.

Country Reporting

<b>Scorecard: Complete</b>	Project design and PM&E plan endorsed by PSC with consultation clearly identified
<b>Mostly Complete</b>	Project design and PM&E plan endorsed by PSC with consultation undertaken, but not clearly identified
<b>Partially Complete</b>	Project design and PM&E plan endorsed by PSC
<b>Mostly Incomplete</b>	Project design and PM&E plan under development, including consultation
<b>Incomplete</b>	No progress on project design and PM&E plan

Regional Reporting

<b>Scorecard: Complete</b>	Project design and PM&E plan endorsed with consultation clearly identified in 13 countries
<b>Mostly Complete</b>	Project design and PM&E plan endorsed with consultation clearly identified in 9 countries
<b>Partially Complete</b>	Project design and PM&E plan endorsed in 7 countries
<b>Mostly Incomplete</b>	Project design and PM&E plan endorsed in up to 4 countries
<b>Incomplete</b>	No project designs or PM&E plans

No baseline required.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
Fiji	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
FSM	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
Nauru	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
Niue	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
Palau	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
PNG	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
RMI	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
Samoa	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required

Country	Indicator	Target	Means of Verification	Baseline
Solomon Islands	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
Tonga	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
Tuvalu	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required
Vanuatu	28 Project design and PM&E plan implemented	<input type="checkbox"/> Project and PM&E plan implemented by August 2011 <input type="checkbox"/> Consultation report	<input type="checkbox"/> Endorsed by Project Steering Committee	<input type="checkbox"/> None required

**LOGFRAME TARGET 26****National promotion and adoption of PM&E approaches by national water APEX body by end 2011 using Most Significant Change (MSC) and reflection and learning techniques****Proposed Target:**

*National promotion and adoption of PM&E approaches by national water APEX body by July 2012 using Most Significant Change (MSC) and reflection and learning techniques*

The timeframes between the original planning and the project implementation has meant that projects needed to be re-scoped, delaying this process. It is suggested that the RTAG consider revising the date for delivery.

**Proposed Indicator(s)****29. National adoption of PM&E approaches implemented**

*It is implied within this target that MSC and reflection and learning techniques will form a central role in the national PM&E approaches.*

*The achievement of this target could be demonstrated by:*

- i. Incorporation of PM&E, MSC and reflection and learning into national monitoring programmes for national indicators*
- ii. Running national PM&E workshops to facilitate PM&E uptake*
- iii. Incorporating MSC and reflection and learning techniques into periodic APEX reviews*

**Country Reporting**

<b>Scorecard:</b>	<b>Complete</b>	PM&E approach implemented by APEX body
	<b>Mostly Complete</b>	PM&E approach endorsed by APEX body with budget allocation
	<b>Partially Complete</b>	PM&E approach endorsed by APEX body
	<b>Mostly Incomplete</b>	PM&E approach under development, including consultation
	<b>Incomplete</b>	No Catchment Council in place

**Regional Reporting**

<b>Scorecard:</b>	<b>Complete</b>	PM&E approach implemented by APEX body in 13 countries
	<b>Mostly Complete</b>	PM&E approach implemented by APEX body in 9 countries
	<b>Partially Complete</b>	PM&E approach implemented by APEX body in 7 countries
	<b>Mostly Incomplete</b>	PM&E approach implemented by APEX body in up to 3 countries
	<b>Incomplete</b>	PM&E approach not implemented by any APEX body

No baseline required.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
Fiji	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
FSM	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
Nauru	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
Niue	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
Palau	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
PNG	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
RMI	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required

Country	Indicator	Target	Means of Verification	Baseline
	techniques			
Samoa	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
Solomon Islands	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
Tonga	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
Tuvalu	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required
Vanuatu	29 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by APEX body (APEX body minutes)	<input type="checkbox"/> None required



**LOGFRAME TARGET 27****Relevant national country staff trained in monitoring and PM&E approaches by end 2010 based on needs assessment**Proposed Target:

*Relevant national country staff trained in monitoring and PM&E approaches by end 2011 based on needs assessment*

The timeframes between the original planning and the project implementation has meant that projects needed to be re-scoped, delaying this process. It is suggested that the RTAG consider revising the date for delivery. This could be achieved by planning and incorporating training into RSC 3, with targeted follow-up.

Proposed Indicator(s)**30. National staff trained in monitoring and PM&E**

*Relies on undertaking a needs assessment for national staff, either at a regional level or in each country. Once this has been undertaken, the training needs should be clearly identified, and assessment of the achievement of this target relatively straightforward. The training could be undertaken at a regional level, sub-regionally or in-country.*

Country Reporting

<b>Scorecard: Complete</b>	National staff trained in monitoring and PM&E based on needs assessment
<b>Mostly Complete</b>	Monitoring and PM&E needs assessment completed and training for national staff partially complete
<b>Partially Complete</b>	Monitoring and PM&E needs assessment completed and training planned for national staff
<b>Mostly Incomplete</b>	Monitoring and PM&E needs assessment completed
<b>Incomplete</b>	No Catchment Council in place

Regional Reporting

<b>Scorecard: Complete</b>	National staff trained in monitoring and PM&E based on needs assessment in 13 countries
<b>Mostly Complete</b>	National staff trained in monitoring and PM&E based on needs assessment in 9 countries
<b>Partially Complete</b>	National staff trained in monitoring and PM&E based on needs assessment in 7 countries
<b>Mostly Incomplete</b>	National staff trained in monitoring and PM&E based on needs assessment in up to 3 countries
<b>Incomplete</b>	Training needs not assessed

No baseline required.

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Fiji	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
FSM	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Nauru	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Niue	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Palau	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
PNG	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required

Country	Indicator	Target	Means of Verification	Baseline
	national monitoring needs			
RMI	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Samoa	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Solomon Islands	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Tonga	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Tuvalu	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required
Vanuatu	30 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	<input type="checkbox"/> Training assessment report	<input type="checkbox"/> Report endorsed by Steering Committee	<input type="checkbox"/> None required

**LOGFRAME TARGET 31**

**Strategic IWRM communication plan framework for individual national development in place by end 2009 (based on Regional Communication Strategy in place by June 2009), with national development and implementation by end 2010**

**Proposed Target:**

*Strategic IWRM communication plan framework for individual national development in place by end 2011 (based on Regional Communication Strategy in place by July 2011), with national development implementation by July 2012*

The timeframes between the original planning and the project implementation has meant that projects needed to be re-scoped, delaying this process. It is suggested that the RTAG consider revising the date for delivery to reflect initial delays and the change in modality adopted to deliver the regional communication strategy. Rather than the national communication strategies being developed based on the regional strategy, national communication strategies are being developed on individual country needs, which are then distilled into a regional communication strategy.

**Proposed Indicator(s)**

**31. *Regional Communication strategy in place by July 2011***

**32. *National Communication strategies implemented by July 2012***

Implementation of the National Communication strategies involves implementing actions in the strategy. Options for demonstrating that the strategy has been implemented include a

- i. Periodic review or commissioned review of the strategy, endorsed by APEX body, indicating that the strategy is being implemented
- ii. Allocation of a budget line for implementation of the strategy

In most countries it is anticipated that the approach adopted will be a review; however the allocation of budget for implementation provides confidence that the strategy would be implemented.

**Country Reporting**

<b>Scorecard: Complete</b>	Strategic IWRM communication plan implemented
<b>Mostly Complete</b>	Strategic IWRM communication plan endorsed by Minister with budget or funding allocation
<b>Partially Complete</b>	Strategic IWRM communication plan endorsed by APEX body
<b>Mostly Incomplete</b>	Draft Strategic IWRM communication plan
<b>Incomplete</b>	No Catchment Council in place

**Regional Reporting**

<b>Scorecard: Complete</b>	Regional Communication strategy in place and 13 national communication strategies implemented
<b>Mostly Complete</b>	Regional Communication strategy in place and 9 national communication strategies implemented
<b>Partially Complete</b>	Regional Communication strategy in place and 7 national communication strategies implemented
<b>Mostly Incomplete</b>	Up to 4 national communication strategies in place
<b>Incomplete</b>	No national communication strategies in place

No baseline required

Country	Indicator	Target	Means of Verification	Baseline
Regional	31 Regional IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2011	<input type="checkbox"/> Endorsed by Regional Steering Committee	<input type="checkbox"/> None required
Cook Islands	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Fiji	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
FSM	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Nauru	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Niue	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Palau	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
PNG	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
RMI	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Samoa	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Solomon Islands	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Tonga	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Tuvalu	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required
Vanuatu	32 National IWRM communication plan framework implemented	<input type="checkbox"/> Implemented by July 2012	<input type="checkbox"/> Endorsement by Minister	<input type="checkbox"/> None required

**LOGFRAME TARGET 32**

**Multi-sectoral participation in national APEX bodies by end of 2009 with at least 33% female membership (including private and education sector membership and national finance and economic planning units)**

Proposed Target:

*Multi-sectoral participation in national APEX bodies by end of June 2011 with at least 33% female membership (including private and education sector membership and national finance and economic planning units)*

Consideration needs to be given to the importance of achieving the 33% female membership against that of getting high level engagement from countries. With membership ideally targeted at Permanent Secretary/ Secretary level and the need to engage key agencies, there may not be females in senior positions. Requiring females to be members of the committee may then be perceived as devaluing the participation of the agencies required to nominate a female representative, who would then be potentially be at a lower level than representatives of other agencies. This is possibly reflected in only Niue and RMI reporting current APEX female membership at or above 33%.

The alternative option, that representatives from the community and/or commerce be restricted to females is not a realistic option. Accordingly, this component of the target is viewed as aspirational.

The timeframes between the original planning and the project implementation has meant that projects needed to be re-scoped, delaying this process. It is suggested that the RTAG consider revising the date for delivery to reflect initial delays and the change in modality adopted to deliver the national APEX bodies. For example, this is being accomplished in Palau through a process initiated with sub-regional summits, which have taken considerable time to initiate.

Proposed Indicator(s)**33. Multi-sectoral APEX bodies established**

Relies on engaging the key sectors to be engaged in water governance. These would typically include utilities, education, finance, economic planning, environment, health, infrastructure, fisheries and agriculture, as well as commerce and civil society.

Country Reporting

<b>Scorecard:</b>	<b>Complete</b>	Multi-sectoral APEX body established
	<b>Mostly Complete</b>	APEX style body convened, with formal endorsement and broad sectoral representation, community and commerce representation, but proxy representation is greater than 25%
	<b>Partially Complete</b>	APEX style body convened, with formal endorsement of role or membership by Minister, but without broad sectoral representation and/or community and commerce representation
	<b>Mostly Incomplete</b>	APEX style body convened, but without formal endorsement of role or membership
	<b>Incomplete</b>	No APEX body established

Regional Reporting

<b>Scorecard:</b>	<b>Complete</b>	Multi-sectoral APEX bodies established in 13 countries
	<b>Mostly Complete</b>	Multi-sectoral APEX bodies established in 9 countries
	<b>Partially Complete</b>	Multi-sectoral APEX bodies established in 7 countries
	<b>Mostly Incomplete</b>	Multi-sectoral APEX bodies established in up to 4 countries
	<b>Incomplete</b>	No APEX bodies established

No baseline required.

Country	Indicator		Means of Verification	Baseline
Cook Islands	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Fiji	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
FSM	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Nauru	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Niue	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Palau	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
PNG	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
RMI	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Samoa	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Solomon Islands	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Tonga	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Tuvalu	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required
Vanuatu	32 Multi-sectoral APEX body in place	<input type="checkbox"/> Implemented by July 2010	<input type="checkbox"/> Endorsement by Minister or Cabinet	<input type="checkbox"/> None required



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