1 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, consistent with GEF International Waters ratings system (Highly Satisfactory; Satisfactory; Moderately Satisfactory; Moderately Unsatisfactory; Unsatisfactory; Highly Unsatisfactory) to reflect the level of reporting required

The GEF IW Task Force has adopted a six point rating system, as follows:

Highly Satisfactory	HS	The outcome is likely to be achieved or exceeded efficiently with no significant shortcomings
Satisfactory	S	The outcome is likely to be achieved efficiently with only minor shortcomings
Moderately Satisfactory	MS	The outcome is likely to be achieved efficiently with moderate shortcomings.
Moderately Unsatisfactory	MU	The outcome has moderate shortcomings that limit or jeopardize its achievement, but resolution is likely.
Unsatisfactory	U	The outcome has significant shortcomings that limit or jeopardize its achievement, and resolution is uncertain.
Highly Unsatisfactory	HU	The outcome has major shortcomings that limit or jeopardize its achievement, and resolution is unlikely.

Note that the GEF International Waters Annual Project Performance Results Template: Guidance Information suggests that "The Ratings should be applied to your Process and Stress Reduction Outcomes and Indicators; we leave use of the ratings for E/WR Status Outcomes and Indicators to your discretion as seen to be applicable."

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 v	will remain constant a	s the project site)

☐ A reduction in sewage pollution and associated target

☐ Reduction in eutrophication for coastal receiving waters

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

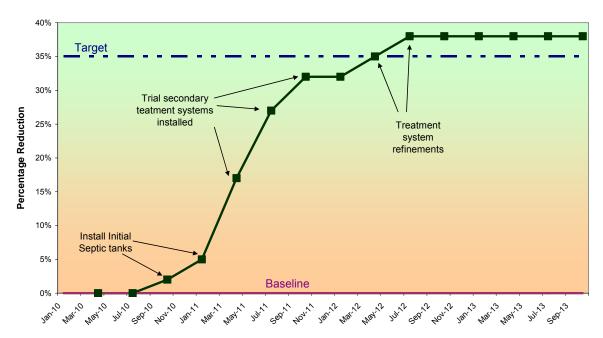
exchanges, sediment and biota nutrient fluxes re-establishing a dynamic equilibrium and natural system variation. Therefore, the capacity to demonstrate eutrophication reduction relies on demonstrating sewage pollution reduction, which in turn relies on estimating reduced loads. This approach is consistent 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: HS Target reduction in sewage pollution and target area

\$ 3/4 of target reduction and area achieved

MS ½ of target reduction and area achieved

MU Significant measurable reduction in sewage pollution

U Strategy and funding in place, but groundworks not completed to deliver reduction in sewage pollution

HU 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:

Scorecard: HS 35% reduction in sewage pollution over 40,000 ha, reducing

eutrophication in 4 coastal waters

S 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

MS At least 20% reduction in sewage pollution over at least 30,000ha,

reducing eutrophication in at least 3 coastal waters

MU At least 20% increase in sewage pollution over at least 20,000ha,

reducing eutrophication in at least 2 coastal waters

U Measurable reductions in sewage pollution reducing impacts in at

least 2 coastal waters

HU 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.

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

Scorecard:	HS S	Strategy endorsed and 20% increase in budget Strategy endorsed, budget allocated to IWRM and WUE, with increase in budget
	MS	Strategy endorsed, budget allocated to IWRM and WUE, but no increase in budget
	MU	Strategy endorsed with reference to IWRM and WUE, with budget lines allocated to IWRM and WUE
	U	Strategy endorsed with reference to IWRM and WUE, but not consistent with best practice; no budget allocation
	HU	No change in national policy or budget

Regional Reporting

HS	Strategy endorsed and 20% increase in budget in 12 countries
S	Strategy endorsed and 20% increase in budget in 10 countries
VIS	Strategy endorsed in 7 countries
ИU	Strategy endorsed in 4 countries
J	Strategy endorsed in up to 2 countries
HU	Strategy not endorsed in any countries
ב י	is MS MU

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

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

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

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:

4. 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 meeting will be audit based, requiring some form of assessment in each country as to the mechanisms for improving and mainstreaming.

5. 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 as been delivered would require some form of audit, either through PCU, peer (another country) or independent consultant

Country Reporting

Scorecard:	HS S	Best Practices mainstreamed into national planning framework Best Practices defined and incorporated into main national plans and policies
	MS	Best practices defined, with references to some in planning framework; or incorporated into Agency strategies, but not mainstreamed
	U	Best practices defined and endorsed by APEX body, but not incorporated into framework
	U	Best practices defined, but not endorsed by APEX body
	HU	Best practices not defined
Regional Repo	orting	
Scorecard:	HS	Best Practices mainstreamed into national planning in 12 countries

F

orecard:	HS	Best Practices mainstreamed into national planning in 12 countries
	S	Best Practices mainstreamed into national planning in 10 countries
	MS	Best Practices mainstreamed into national planning in 7 countries
	MU	Best Practices mainstreamed into national planning in 4 countries
	U	Best Practices mainstreamed into national planning in up to 2 countries
	HU	Best Practices not mainstreamed in any countries

Baseline

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	4 Best IWRM and WUE approaches defined	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks	□ National Strategy incorporates defined approach	Audit by:Independent consultant	☐ None required
	Should be completed as part of national strategy development by mid-2012		Peer review PCU audit	
Fiji	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into	☐ National Strategy incorporates defined	☐ Audit by:	☐ None required
	national and regional planning frameworks	approach	 Independent consultant 	
	Should be completed as part of national strategy development by mid-2012		 Peer review 	
	1110 2012		PCU audit	
FSM	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into	□ National Strategy incorporates defined	☐ Audit by:	☐ None required
	national and regional planning frameworks	approach	 Independent consultant 	
	Should be completed as part of national strategy development by mid-2012		Peer review	
_			PCU audit	
Nauru	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into	□ National Strategy incorporates defined	☐ Audit by:	☐ None required
	national and regional planning frameworks Should be completed as part of national strategy development by mid-2012	approach	 Independent consultant 	
			Peer review	
			PCU audit	

Country	Indicator	Target	Means of Verification	Baseline
Niue	4 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by	□ National Strategy incorporates defined approach	Audit by:Independent consultantPeer review	☐ None required
	mid-2012		PCU audit	
Palau	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks	☐ National Strategy incorporates defined approach	Audit by:Independent consultant	☐ None required
	Should be completed as part of national strategy development by mid-2012		Peer review PCU audit	
PNG	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project	□ National Strategy incorporates defined approach		
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks		Audit by:Independent consultant	□ None required
	Should be completed as part of national strategy development by mid-2012		Peer review PCU audit	
RMI	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks	□ National Strategy incorporates defined approach	☐ Audit by:Independent consultant	☐ None required
	Should be completed as part of national strategy development by mid-2012		Peer reviewPCU audit	
Samoa	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks	□ National Strategy incorporates defined approach	☐ Audit by:Independent consultant	□ None required
	Should be completed as part of national strategy development by mid-2012		Peer review PCU audit	

Country	Indicator	Target	Means of Verification	Baseline
Solomon Islands	4 Best IWRM and WUE approaches defined for each country Developed through EU IWRM project	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks Should be completed as part of national strategy development by	□ National Strategy incorporates defined approach	Audit by:Independent consultantPeer review	☐ None required
	mid-2012		PCU audit	
Tonga	4 Best IWRM and WUE approaches defined for each country	□ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks	□ National Strategy incorporates defined approach	 Audit by: Independent consultant Peer review PCU audit 	☐ None required
	Should be completed as part of national strategy development by mid-2012			
Tuvalu	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks		☐ Audit by:Independent consultant	□ None required
	Should be completed as part of national strategy development by mid-2012		Peer review PCU audit	
Vanuatu	4 Best IWRM and WUE approaches defined for each country	☐ Approach defined	☐ Endorsement by APEX body	☐ None required
	Developed through EU IWRM project			
	5 Best approaches to IWRM and WUE mainstreamed into national and regional planning frameworks	□ National Strategy incorporates defined approach	☐ Audit by:Independent consultant	□ None required
	Should be completed as part of national strategy development by mid-2012		Peer review PCU audit	

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)

6. 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

Scorecard:	HS	Target increase in forested and protected area achieved through formal declaration
	S	3/4 of target increase in forested and protected area achieved through formal declaration
	MS	$\frac{1}{2}$ of target increase in forested and protected area achieved through formal declaration
	MU	At least $\frac{1}{2}$ of target increase in forested and protected area achieved through planning, but no formal declaration
	U	Measurable increases in forested and protected areas, without formal declaration
	HU	No significant increase in forested or protected areas
Regional Repo	rting	
Scorecard:	HS	30% increase in forested and protected area over 8,000 ha of catchments
	S	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
	MS	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

4.000ha of catchment

At least 15% increase in forested and protected area over

Measurable increases in forested and protected areas No significant increase in forested or protected areas

Baseline

MU

HU

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	6 Increase in land protected and/or rehabilitated over the catchment Groundwater and/or surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project		☐ Reserves declared by Cabinet (Cabinet minutes)	☐ Catchment area ☐ Reserves declared by Cabinet / Minister at 1 January 2009 ☐ 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	6 Increase in land protected and/or rehabilitated over the catchment Groundwater and/or surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project	□ 2,000 ha	☐ Reserves declared by Cabinet (Cabinet minutes)	☐ Catchment area ☐ Reserves declared by Cabinet / Minister at 1 January 2009 ☐ 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	6 Increase in land protected and/or rehabilitated over the catchment Surface water catchments may be declared reserves. Some revegetation will occur associated with the project; however unlikely to be on significant scale	□ 1,000 ha	 □ Reserves declared by Cabinet (Cabinet minutes) □ Completion report on riparian zone revegetation endorsed by Steering Committee 	☐ Catchment area ☐ Reserves declared by Cabinet / Minister at 1 January 2009 ☐ Catchment forestry and native vegetation coverage as at 1 January 2009 or as close as practical in time
Samoa	6 Increase in land protected and/or rehabilitated over the catchment Groundwater and/or surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project	□ 2,000 ha	☐ Reserves declared by Cabinet (Cabinet minutes)	☐ Catchment area ☐ Reserves declared by Cabinet / Minister at 1 January 2009 ☐ 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	6 Increase in land protected and/or rehabilitated over the catchment Groundwater and/or surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project	□ 2,000 ha		☐ Catchment area ☐ Reserves declared by Cabinet / Minister at 1 January 2009 ☐ 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	6 Increase in land protected and/or rehabilitated over the catchment Surface water catchments may be declared reserves. Unlikely that significant revegetation will occur associated with the project	□ 1,000 ha		☐ Catchment area ☐ Reserves declared by Cabinet / Minister at 1 January 2009 ☐ 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)

35% reduction in sewage pollution over eq.~40,000 ha area leading to reduction in eutrophication for 4 coastal receiving waters sites

Proposed Indicator

7. 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 Report¹ (as the links were for all coastal systems in other countries).

Country Reporting

Scorecard:	HS	Target reduction in sewage pollution and target area
	S	3/4 of target reduction and area achieved
	MS	½ of target reduction and area achieved
	MU	Significant measurable reduction in sewage pollution
	U	Strategy and funding in place, but groundworks not completed to deliver reduction in sewage pollution
	HU	No significant reduction in sewage pollution

		g
Regional Repo	orting	
Scorecard:	HS	35% reduction in sewage pollution over 40,000 ha, reducing eutrophication in 4 coastal waters
	S	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
	MS	Achieve 2 of 3 of 25% reduction in sewage pollution, over 40,000ha area, reducing eutrophication in 3 coastal waters Or

25% reduction in sewage pollution over 20,000 ha, reducing eutrophication in 3 coastal waters

MU At least 20% increase in forested and protected area over at least 20,000ha, reducing eutrophication in at least 2 coastal waters

 Measurable reductions in sewage pollution reducing sewage pollution in at least 2 coastal waters

No significant reduction in sewage pollution

Baseline

HU

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	7 Reduction in sewage pollution in Muri Community Will need to be assessed at a household level as pilot and partner projects unlikely to deliver sufficient reduction over project lifetime Note that if work undertaken by MoH with hotels in parallel with project, reduction may be achieved	☐ 35% reduction in nutrients and organic loads at a household level from household trials	☐ Monitoring report endorsed by Steering Committee (Steering Committee minutes)	☐ Catchment area ☐ Number of households ☐ Groundwater monitoring adjacent to pilot sites ☐ Study to determine sources of pollutants into Muri Lagoon to apportion sources
FSM	7 Reduction in sewage pollution in Nett Watershed	☐ 35% reduction in nutrients and organic loads from rural catchment households (5,000ha)	☐ Survey Reports endorsed by Steering Committee	☐ Catchment area ☐ Pollution Source survey – number of households and sanitation methods
Nauru	7 Reduction in sewage pollution in Ewa and Anetan Communities 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	☐ 35% reduction in nutrients and organic loads from communities (20 ha)	☐ Study report on demonstrations endorsed by Steering Committee	☐ Catchment area ☐ Existing state of sanitation systems in demonstration site
RMI	7 Reduction in sewage pollution in Laura Community (150 ha) Will need to be assessed at a household level as pilot and partner projects unlikely to deliver sufficient reduction over project lifetime Assume that this in turn leads to reduction in eutrophication of lagoon	☐ 35% reduction in nutrients and organic loads from household trials	☐ Monitoring report endorsed by Steering Committee (Steering Committee minutes)	☐ Catchment area ☐ Number of households ☐ Groundwater monitoring adjacent to pilot sites

Country	Indicator	Target	Means of Verification	Baseline
Tonga	7 Reduction in sewage pollution across Vava'u (10,000 ha) Pump-out of septic tanks should reduce nutrient and organic loads by about 25%	☐ 25% reduction in nutrients across Vava'u Island	☐ Pump-out truck report endorsed by Steering Committee (Steering Committee minutes)	☐ Island area ☐ Number of households
	Assume that this in turn leads to reduction of eutrophication in Refuge Harbour			
Tuvalu	7 Reduction in sewage pollution across Funafuti (180 ha) Composting toilets should reduce nutrients and organic pollution by over 90%	☐ 5% reduction in sewage pollution over Funafuti	☐ Study report endorsed by Steering Committee	☐ Island area ☐ Number of households
Vanuatu	7 Reduction in sewage pollution across Sarakata watershed (30,000 ha)	40% reduction in sewage pollution in Sarakata watershed	☐ Study report endorsed by Steering Committee	☐ Watershed area ☐ Number of households

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

8. 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)²?

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

Caaraard.

Scorecara:	пэ	rarget reduction in water leakage for targeted supply population
S		3/4 of target reduction and area achieved
	MS	½ of target reduction and area achieved

MU Significant measurable reduction in water leakage

U Strategy and funding in place, but groundworks not completed to deliver

Target reduction in water leakage for targeted avants, penulation

reduction in leakage reduction

HU No significant reduction in sewage pollution

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

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

Scorecard:	HS	35% reduction in water leakage for systems supplying 85,000 people, including a 40% reduction in baseline levels in one system
	S	Achieve 35% reduction in water leakage from systems supplying over 40,000 people, including a 40% reduction in at least one system Or
		Achieve 25% reduction in water leakage from systems supplying over 80,000, including a 35% reduction in at least one system
	MS	Achieve 25% reduction in water leakage from systems supplying over 40,000, including a 35% reduction in at least one system
	MU	At least 25% reduction in system water leakage at 2 project sites
	U	Measurable leakage reductions in systems in at least 2 coastal waters
	HU	No significant reductions in system water leakage

Baseline

System populations defined and/or number of connections ate 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	Reduction in water leakage loss for Alofi supplies Largely delivered through tank replacement, although metering of Alofi supplies should provide household level improvements	☐ 40% reduction in water leakage from system supplying 400 people	☐ Monitoring report endorsed by Steering Committee (Steering Committee minutes)	☐ Supply volume ☐ Leakage ☐ Population serviced ☐ Pressures associated with leakage
Samoa	8 Reduction in water leakage loss in Apia Largely requiring work to be co-funded by Samoa Water Authority	☐ 30% reduction in water leakage from system supplying 40,000 people	☐ Implementation report endorsed by Steering Committee (Steering Committee Minutes)	□ Supply volume □ Leakage □ Population serviced □ Pressures associated with leakage
Solomon Islands	Reduction in water leakage losses in Honiara Dependent upon work to be co-funded by	☐ 35% reduction in water leakage from system supplying 80,000 people	☐ Report endorsed by Steering Committee (Steering Committee Minutes)	□ Supply volume □ Leakage □ Population serviced □ Pressures associated with leakage
Tonga	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	☐ 40% reduction in water leakage from system in Vava'u supplying 5,000 people	☐ Leak reduction report endorsed by Steering Committee (Steering Committee Minutes)	□ Supply volume □ Leakage □ Population serviced □ Pressures associated with leakage

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

9. 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)³ 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)⁴.

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

10. 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)⁵.

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.

Examples indicators include:

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

Country Reporting

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

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

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

Scorecard: HS Target increase with access to safe supply / improved sanitation

S ³/₄ of target access achieved

Or

Where WSP is the target, completion of WSP without budget allocation

MS ½ of target reduction and area achieved

MU Significant measurable increase in population with access to improved

sanitation / water supply

Or

Strategy and funding in place, groundworks commenced but not completed to

deliver improvement

U Strategy and funding in place, groundworks not yet commenced

HU 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

Scorecard:	HS S	Average 30% increase in population with access to safe water supply and sanitation for 6 sites Average 20% increase in population with access to safe water supply and sanitation for 6 sites or Average 30% increase in population with access to safe water supply and sanitation for 5 sites or
	MS	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 Average 15% increase in population with access to safe water supply and sanitation for 6 sites or
		Average 30% increase in population with access to safe water supply and sanitation for 3 sites or 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
	МИ	Increase in population with access to safe water and sanitation for at least 3 sites
	U	Increase in population with access to safe water and sanitation at up to 2 sites
	HU	No significant increase in population with access to safe water and sanitation

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	9 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	☐ 90% of Kolonia with safe drinking water (5,000 people)	Audit against baselines by independent auditor	☐ Catchment area ☐ Kolonia population ☐ number of households
Nauru	10 Population with access to improved sanitation Installation of septic tanks and secondary treatment systems in Ewa and Anetan Districts	☐ 10% increase in access to sanitation systems in Ewa and Anetan (1,100 people)	☐ Commissioning report on sanitation systems endorsed by Steering Committee	☐ Number of households ☐ Ewa and Anetan population ☐ Number of houses with improved sanitation
Niue	Population with access to safe water supply WSP developed as part of co-funding. Delivery of WSP dependent upon project activities being delivered	☐ 90% of Alofi population (400 people)	☐ Audit of Niue WSP	☐ Catchment area ☐ Alofi population ☐ number of households
Palau	9 Population with access to safe water supply Delivery of WSP dependent upon project activities being delivered	☐ 90% of Koror with safe drinking water (14,000 people)	☐ Audit of Koror WSP	☐ Catchment area ☐ Koror population ☐ number of households
RMI	 9 Population with access to safe water supply Delivery of WSP dependent upon project activities being delivered 10 Population with access to improved sanitation Rehabilitation of septic systems and sludge disposal systems will ensure that systems meet improved requirements 	□ 90% of Laura Village with safe drinking water (3,000 people) □ 90% of Laura Village with access to sustainable sanitation (3,000 people)	☐ Audit of Majuro WSP ☐ Report on completion of septic system rehabilitation endorsed by Laura Integrated Water and Land Management Advisory Committee	 □ Catchment area □ Number of households □ Laura population □ Number of sanitation systems maintained and satisfying 'improved sanitation' definition

Country		Indicator	Target	Means of Verification	Baseline
Samoa	10	Population with access to improved sanitation Based on commissioning of wastewater treatment plant as co-funded work	☐ 30% increase in Apia residents with access to improved sanitation (11,000 people)	☐ Commissioning of wastewater treatment plant	☐ Number of households☐ Apia population☐ Population serviced by WWTP
Solomon Islands	9	Population with access to safe water supply Development and implementation of WSP for Honiara. Need to ascertain the proportion of Honiara covered by WSP	☐ Increase of 90% of Honiara residents with access to safe water (70,000 people)	☐ WSP endorsed by Minister with budget allocated	☐ Honiara population ☐ Number of households
Tonga	9	Population with access to safe water supply Household level WSP being developed and implemented in 30% of District households Population with access to improved sanitation Rehabilitation of septic systems and sludge disposal systems will ensure that systems meet improved requirements	□ 30% increase in access to safe water supplies in Neiafu (1,500 people) □ 90% increase in Neiafu residents with access to improved sanitation (4,500 people)	☐ Survey by Town Officers endorsed by Steering Committee ☐ Audit on proportion of houses using the pump-out facilities by end of project	☐ Island area ☐ Number of households in Neiafu ☐ Number of households on Vava'u
Tuvalu	10	Population with access to improved sanitation Installation of composting toilets, supported by co-funded toilets	☐ 5% of Funafuti residents with access to improved sanitation (250 people)	☐ Commissioning study endorsed by Steering Committee	☐ Number of households ☐ Funafuti population

Country	Indicator	Target	Means of Verification	Baseline
Vanuatu	 Population with access to safe water supply Delivery of WSP dependent upon project activities being delivered including relocation of intakes Population with access to improved sanitation Rehabilitation of septic systems and slut disposal systems will ensure that system meet improved requirements 	watershed residents with access to improved sanitation (20 people)	 □ Survey by Town Officers endorsed by Steering Committee □ Audit on proportion of houses using the pump-out facilities by end of project 	☐ Watershed area ☐ Number of households

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)⁶] 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)⁷], 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)⁸ 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

11. 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:

- 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

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

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

 $^{^{8}}$ In time for the Flood: A methodological guide to local flood warning systems, ISBN 83-88897-64-0

Scorecard: HS Flood Risk Management Plan with early warning system endorsed by Cabinet with ongoing funding and floodplain incorporated into planning S Flood Risk Management Plan with early warning system endorsed by Cabinet and floodplain incorporated into planning; community response plans developed through consultative process MS Flood Risk Management Plan with early warning system endorsed by Cabinet and floodplain incorporated into planning MU Flood Risk Management Plan or early warning system endorsed by Cabinet Draft Flood Risk Management Plan completed and/or components of early U warning system HU No significant progress on Flood Risk Management Plan or early warning

Regional Reporting

Scorecard: HS 2 flood risk management plans endorsed by the

system

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.

S 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

MS Completion of 1 flood risk management plan. 2 Catchments

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

MU 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

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

HU No significant improvement in flood risk management

Baseline

Catchment area defined.

Country	Indicator	Target	Means of Verification			Baseline
Fiji	11 Nadi Basin Integrated Flood Management Plan (45,000 ha) Plan to incorporate early flood warning system to provide at least one hour warning and process for incorporating floodplains into planning regulations	Plan endorsed by Cabinet		Cabinet minutes	٥	Catchment area
PNG	11 Laloki Catchment Management Plan, incorporating Flood Management Plan Flood management plan including early warning system, floodplain mapping and planning, catchment modelling, response planning and education and awareness integrated within catchment management plan	Plan endorsed by Cabinet		Cabinet Minutes		Catchment area
Vanuatu	11 Sarakata Basin Integrated Flood Management Plan (10,000 ha) Plan to incorporate early flood warning system to provide at least one hour warning and process for incorporating floodplains into planning regulations	Plan endorsed by Cabinet	_	Cabinet minutes		Catchment area

4 SIDS have revised legislation in place to protect surface water quality by end of project Proposed Indicator

12. 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

Scorecard:	HS	Revised legislation enacted and/or regulation gazetted
	S	Bill for revised legislation tabled in parliament/congress or draft regulations presented to Cabinet
	MS	Bill / Draft Regulations developed and consultation undertaken based on review of needs
	MU	Bill / Draft Regulations developed but limited consultation
	U	Study identifying legislation / regulations needs to protect surface water quality
	HU	Legislation review not undertaken
Regional Repo	rting	
Scorecard:	HS	4 SIDS have revised legislation in place to protect surface water quality
	S	3 SIDS have revised legislation in place to protect surface water
	MS	2 SIDS have revised legislation in place to protect surface water quality
	MU	1 SID has revised legislation in place to protect surface water quality
	U	Draft legislation in place in at least 2 SIDS
	HU	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

Project Indicators

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	12 Revised Legislation protecting surface water quality Currently plans include Policy implementation. Need to clarify any legislative reviews/revision	☐ Legislation enacted by Parliament by mid-2013	☐ Parliamentary record	☐ Legislation and Regulations relating to surface water quality
FSM	12 Revised Legislation protecting surface water quality Currently logframe only indicates tabling Bill with Cabinet – need to ensure that target is enactment of legislation	☐ Legislation enacted by Congress by mid-2013	□ Congress record	☐ Legislation and Regulations relating to surface water quality
Palau	12 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	☐ Legislation enacted by Congress by mid-2013	☐ Congress record	☐ Legislation and Regulations relating to surface water quality
PNG	12 Revised Legislation protecting surface water quality Currently logframe only indicates tabling Bill with NEC – need to ensure that target is enactment of legislation	☐ Legislation enacted by NEC by mid-2013	□ NEC record	☐ Legislation and Regulations relating to surface water quality
Samoa	12 Legislation for Water Resource Management Identified in the logframe as part of delivery of plans	Legislation enacted by Parliament by end of 2012	☐ Parliamentary records	☐ Legislation and Regulations relating to surface water quality
Solomon Islands	12 Revised Legislation protecting surface water quality Currently logframe only indicates tabling Bill with Cabinet – need to ensure that target is enactment of legislation	☐ Legislation enacted by Parliament	□ Parliamentary records	☐ Legislation and Regulations relating to surface water quality
Vanuatu	12 Revised Legislation protecting surface water quality Currently logframe only mentions Gazettal of Water Protection Zones	☐ Legislation enacted by Parliament	□ Parliamentary records	☐ Legislation and Regulations relating to surface water quality

30% reduction in use of freshwater for sanitation purposes due to eco-sanitation expansion in 1 demo site

Proposed Indicator

13. 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)⁹. 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)¹⁰. 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.

⁹ 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

¹⁰ 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

Scorecard:	HS	Average 30% reduction in household water use achieved through installation of composting toilets
	S	Average 25% reduction in household water use achieved through installation of composting toilets
	MS	Composting toilets installed in households as the only toilets within the household, but no monitoring undertaken to assess reduction in freshwater use
	MU	Composting toilets installed in houses, but flush toilets continue to be used by some household members
	U	Composting toilets being installed in houses
	HU	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	13 Reduction in use of freshwater for sanitation purposes due to composting toilet installation Assumes that composting toilets will be trialled		30% reduction in household water use	Study endorsed by Steering Committee and RTAG	Average household water use for sanitation prior to installation of composting toilets
RMI	13 Reduction in use of freshwater for sanitation purposes due to composting toilet installation Assumes that composting toilets will be trialled	П	30% reduction in household water use	Study endorsed by Steering Committee and RTAG	Average household water use for sanitation prior to installation of composting toilets
Tuvalu	13 Reduction in use of freshwater for sanitation purposes due to composting toilet expansion Requires study to assess the water savings		30% reduction in household water use	Study endorsed by Steering Committee and RTAG	Average household water use for sanitation prior to installation of composting toilets

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)

14. 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 cofunding; 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

Scorecard:	HS	Technical and water use efficiency lessons replicated nationally and/or on projects
	S	Replication strategy developed; tools developed
	MS	Replication strategy developed; lessons, audiences and tools under development
	MU	Replication strategy developed; lessons, audiences and tools identified
	U	Replication strategy developed, but lessons and audiences not identified
	HU	Replication strategy not developed
Regional Repo	rting	
Scorecard:	HS	Replication demonstrated in 12 countries
	S	Replication demonstrated in 9 countries
	MS	Replication demonstrated in 6 countries
	MU	Replication demonstrated in 4 countries
	U	Replication demonstrated in up to 2 countries
	HU	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	14 Lessons learned incorporated into other project(s) and/or Regulations	Replication demonstrated by end	Technical lesson replication report endorsed		Initial project documents if written prior to GEF IWRM project
	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.	of project	by RTAG or independent auditor		Regulations or Codes prior to project commencement
	Alternatively, outcomes from demonstration pilot may be incorporated into national or island-based regulations or Codes				
Fiji	14 Lessons learned incorporated into other project(s), catchment flood management plans and/or Regulations	Replication demonstrated by end	Technical lesson replication report endorsed		Initial project documents if written prior to GEF IWRM project
	Likely to be delivered through the other catchment flood planning strategies such as the Ba, Sigatoka, Navua and Rewa Rivers.	of project	by RTAG or independent auditor		Regulations or Codes prior to project commencement
	Lessons that may be incorporated include communications, flood modelling and early warning systems.				Status of flood management / EWS approaches in other
	Alternatively, outcomes from demonstration pilot may be incorporated into national or catchment-based regulations or Codes				catchments prior to applying project lessons
FSM	14 Lessons learned incorporated into other States or other catchments on Pohnpei	Replication demonstrated by end	Technical lesson replication report endorsed		Initial project documents if written prior to GEF IWRM project
	Likely to be delivered in Chuuk State through Output 1.5 (Extension of examples of best practice and lessons learned from	of project	by RTAG or independent auditor		Regulations or Codes prior to project commencement
	Nett Watershed in Chuuk State); although application of lessons learned from Component 2 [Protecting Fresh and Marine Water Quality (including grow low sakau demonstration plots; pig waste bio-gas demonstration; and pig waste dry litter demonstration)]				Status of waste and land management approaches in other catchments or States prior to applying project lessons
	Alternatively, outcomes from demonstration pilot may be incorporated into national or catchment-based regulations or Codes				to applying project locoons
Nauru	14 Lessons learned incorporated into other project(s) and/or Regulations	Replication demonstrated by end	Technical lesson replication report endorsed		Initial project documents if written prior to GEF IWRM project
	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.	of project	by RTAG or independent auditor		Regulations or Codes prior to project commencement
	Alternatively, outcomes from demonstration pilot may be incorporated into national or island-based regulations or Codes				

Country	Indicator		Target		Means of Verification	Baseline
Niue	Lessons learned incorporated into other project(s) and/or Regulations Likely to be delivered through the amendments to the Building Code and/or standards for waste, waste oil and/or agrochemicals management.		Replication demonstrated by end of project		Technical lesson replication report endorsed by RTAG or independent auditor	Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement
Palau	14 Lessons learned incorporated into other project(s) and/or Regulations 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. Alternatively, outcomes from demonstration pilot may be incorporated into national or island-based regulations or Codes		Replication demonstrated by end of project	_	Technical lesson replication report endorsed by RTAG or independent auditor	Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement
PNG	14 Lessons learned incorporated into other project(s), catchment flood management plans and/or Regulations May be delivered through the other catchment flood planning strategies. Lessons that may be incorporated include communications, flood modelling and early warning systems. Alternatively, outcomes from demonstration pilot may be incorporated into national or catchment-based regulations or Codes	٥	Replication demonstrated by end of project		Technical lesson replication report endorsed by RTAG or independent auditor	Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement Status of flood management / EWS approaches in other catchments prior to applying project lessons
RMI	Lessons learned incorporated into other project(s) and/or Regulations May be delivered through replication of piggery waste management and composting, or composting toilets. Alternatively, outcomes from demonstration pilot may be incorporated into national or island-based regulations or Codes		Replication demonstrated by end of project	_	Technical lesson replication report endorsed by RTAG or independent auditor	Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement
Samoa	14 Lessons learned incorporated into other project(s) and/or Regulations May be delivered through national Water Safety Plan, or alternatively replication strategy (Output 0.1)		Replication demonstrated by end of project		Technical lesson replication report endorsed by RTAG or independent auditor	Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement

Country	Indicator		Target	Means of Verification		Baseline
Solomon Islands	14 Lessons learned incorporated into other project(s) and/or RegulationsLikely to be delivered through replication strategy (Output 1.5)		Replication demonstrated by end of project	Technical lesson replication report endorsed by RTAG or independent auditor		Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement
Tonga	14 Lessons learned incorporated into other project(s) and/or RegulationsLikely to be delivered through replication strategy		Replication demonstrated by end of project	Technical lesson replication report endorsed by RTAG or independent auditor		Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement
Tuvalu	14 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		Replication demonstrated by end of project	Technical lesson replication report endorsed by RTAG or independent auditor		Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement
Vanuatu	14 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		Replication demonstrated by end of project	Technical lesson replication report endorsed by RTAG or independent auditor		Initial project documents if written prior to GEF IWRM project Regulations or Codes prior to project commencement

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)

15. 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:

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

Country Reporting

Scorecard:	HS	Replication demonstrated by end of project
	S	National lessons learned presentation packages with mainstreaming into national approach
	MS	Replication strategy developed; tools developed
	MU	Replication strategy developed; lessons, audiences and tools identified
	U	Replication strategy developed, but lessons and audiences not identified
	HU	Replication strategy not developed
Regional Repo	orting	

F

Scorecard:	HS	Replication demonstrated in 12 countries
	S	Replication demonstrated in 9 countries
	MS	Replication demonstrated in 6 countries
	MU	Replication demonstrated in 4 countries
	U	Replication demonstrated in up to 2 countries
	HU	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	15 Replication strategy developed and implemented to mainstream lessons learned		Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned				
Fiji	15 Replication strategy developed and implemented to mainstream lessons learned		Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned				
FSM	15 Replication strategy developed and implemented to mainstream lessons learned	О	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned				
Nauru	15 Replication strategy developed and implemented to mainstream lessons learned		Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned				
Niue	15 Replication strategy developed and implemented to mainstream lessons learned		Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned				

Country	Indicator	Target	Means of Verification	Baseline
Palau	15 Replication strategy developed and implemented to mainstream lessons learned	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned			
PNG	15 Replication strategy developed and implemented to mainstream lessons learned	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned			
RMI	15 Replication strategy developed and implemented to mainstream lessons learned	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned			
Samoa	15 Replication strategy developed and implemented to mainstream lessons learned	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned			
Solomon Islands	15 Replication strategy developed and implemented to mainstream lessons learned	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned			

Country	Indicator	Target	Means of Verification	Baseline
Tonga	15 Replication strategy developed and implemented to mainstream lessons learned	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned			
Tuvalu	15 Replication strategy developed and implemented to mainstream lessons learned	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned			
Vanuatu	15 Replication strategy developed and implemented to mainstream lessons learned	Replication demonstrated by end of project	Replication report endorsed by RTAG or independent auditor	Policies, Regulations or Codes prior to project commencement
	Replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned			

Indicator feedback facilitated through IWRM APEX Body provides information for multisectoral 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 APEC 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)

16. 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:

- 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

Scorecard:	HS	National IWRM indicator framework embedded in formal national reporting
	S	National IWRM indicator framework endorsed by Minister/Cabinet; but reporting mechanisms not identified
	MS	National IWRM indicator framework endorsed by APEX body
	MU	Draft National indicator framework developed and consultation undertaken
	U	Draft National indicator framework developed for consultation

Regional Reporting

Scorecard:	HS	National indicator framework endorsed in 12 countries
	S	National indicator framework endorsed in 9 countries
	MS	National indicator framework endorsed in 6 countries
	MU	National indicator framework endorsed in 4 countries
	U	National indicator framework endorsed in up to 3 countries
	HU	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	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	☐ None required
Fiji	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	☐ None required
FSM	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	□ None required
Nauru	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	□ None required
Niue	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	□ None required
Palau	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	□ None required
PNG	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	□ None required
RMI	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	□ None required
Samoa	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	☐ None required
Solomon Islands	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	☐ None required
Tonga	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	☐ None required
Tuvalu	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	☐ None required
Vanuatu	16 National IWRM indicator framework embedded in formal national reporting	Endorsement by Minister	□ None required

Increase in national staff (both men and women) across institutions with IWRM knowledge and experience by end of project

Proposed Indicator(s)

17. 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 asses the baseline as close as possible to the project commencement

Options include:

- 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

Scorecard:	HS	Increased national staff across institutions with IWRM knowledge and experience (both men and women)
	S	Increased national staff across institutions with IWRM knowledge and experience
	MS	Increased national staff across institutions with IWRM knowledge (both men and women)
	MU	Increased national staff across institutions with IWRM knowledge
	U	Training in IWRM for national staff undertaken but no measurable increase in IWRM knowledge
	HU	No significant increase in national staff with IWRM knowledge and experience
Regional Repo	orting	
Scorecard:	HS	Increase in national staff with IWRM knowledge and experience in 12 countries
	S	Increase in national staff with IWRM knowledge and experience in 9 countries
	MS	Increase in national staff with IWRM knowledge and experience in 6 countries
	MU	Increase in national staff with IWRM knowledge and experience in 4 countries
	U	Increase in national staff with IWRM knowledge and experience in up to 3 countries
	HU	No significant increase in national staff with IWRM knowledge and

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).

experience

Country	Indicator	Means of Verification	Baseline
Cook Islands	17 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	□ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements
Fiji	17 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	■ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements
FSM	17 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	☐ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements
Nauru	17 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	□ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements
Niue	17 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	□ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements
Palau	17 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	□ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements
PNG	17 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	□ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements

Country	Indicator	Means of Verification	Baseline
RMI	17 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	☐ National capacity report	 ☐ Survey of staff IWRM knowledge and experience ☐ Review of staff IWRM training and experience records ☐ Training surveys ☐ Review of IWRM training and job requirements at project commencement
Samoa	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	☐ National capacity report	 □ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements at project commencement
Solomon Islands	17 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	☐ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements at project commencement
Tonga	17 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	☐ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements at project commencement
Tuvalu	17 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	□ National capacity report	 ☐ Survey of staff IWRM knowledge and experience ☐ Review of staff IWRM training and experience records ☐ Training surveys ☐ Review of IWRM training and job requirements at project commencement
Vanuatu	17 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	☐ National capacity report	□ Survey of staff IWRM knowledge and experience □ Review of staff IWRM training and experience records □ Training surveys □ Review of IWRM training and job requirements at project commencement

30% increase in gender balanced community and wider stakeholder engagement in water related issues by month 60

Proposed Indicator(s)

18. 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

Scorecard:	HS	30% increase in gender balanced community and wider stakeholder awareness raising and active engagement
	S	30% increase in gender balanced community and wider stakeholder awareness raising or active engagement and at least 15% in the other
	MS	15% increase in gender balanced community and wider stakeholder awareness raising and active engagement
	MU	Measurable increases in community and stakeholder awareness raising and active engagement
	U	Identifiable activities undertaken to raise community and stakeholder awareness and active engagement without measurable increase
	HU	No significant activities undertaken to increase community and stakeholder awareness and active engagement
Regional Repo	orting	
Scorecard:	HS	30% increase achieved in 12 countries
	S	30% increase achieved in 9 countries
	MS	15% increase in gender balanced community and wider stakeholder awareness raising and active engagement achieved in 9 countries
	MU	Measurable increases in community and stakeholder awareness raising and active engagement 6 countries
	U	Measurable increases in community and stakeholder awareness raising and active engagement in up to 3 countries
	HU	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)

Project Indicators

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	□ 30% increases in attendance at awareness raising activities □ 30% increase in active engagement activities	☐ Engagement report endorsed by Steering Committee	☐ Attendance at awareness raising activities and at activities with active engagement
Fiji	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	 30% increases in attendance at awareness raising activities 30% increase in active engagement activities 	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
FSM	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	□ 30% increases in attendance at awareness raising activities □ 30% increase in active engagement activities	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
Nauru	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	□ 30% increases in attendance at awareness raising activities □ 30% increase in active engagement activities	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
Niue	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	□ 30% increases in attendance at awareness raising activities □ 30% increase in active engagement activities	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
Palau	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	□ 30% increases in attendance at awareness raising activities □ 30% increase in active engagement activities	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
PNG	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with	□ 30% increases in attendance at awareness raising activities □ 30% increase in active	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement

Project Indicators

Country	Indicator	Target	Means of Verification	Baseline
	active engagement	engagement activities		
RMI	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	 □ 30% increases in attendance at awareness raising activities □ 30% increase in active engagement activities 	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
Samoa	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	 30% increases in attendance at awareness raising activities 30% increase in active engagement activities 	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
Solomon Islands	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	 30% increases in attendance at awareness raising activities 30% increase in active engagement activities 	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
Tonga	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	 30% increases in attendance at awareness raising activities 30% increase in active engagement activities 	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
Tuvalu	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	□ 30% increases in attendance at awareness raising activities □ 30% increase in active engagement activities	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement
Vanuatu	18 Proportion of community engaged in water related issues Measure attendance at awareness raising activities and at activities with active engagement	□ 30% increases in attendance at awareness raising activities □ 30% increase in active engagement activities	☐ Engagement report endorsed by Steering Committee	Attendance at awareness raising activities and at activities with active engagement

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)

National APEX body

Project Steering Committees

National forums

19. 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 Document¹¹ 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:

,									
☐ Form	al projec	t meetings							
Othe	Other formal national meetings on water issues								
		should include, but not be limited to finance; education; health; sheries; agriculture; utilities and environment							
Country Repo	orting								
Scorecard:	HS	Measurable increased cross-sectoral engagement in formal multi- lateral communication							
	S	Strategy to increase cross-sectoral engagement in formal multi- lateral communication implemented							
	MS	Strategy to increase cross-sectoral engagement in formal multi- lateral communication endorsed by APEX body							
	MU	Consultation undertaken on draft strategy developed to increase cross-sectoral engagement in formal multi-lateral communication							
	U	Draft strategy developed to increase cross-sectoral engagement in formal multi-lateral communication							
	HU	No strategy to increases in formal multi-lateral communication							
Regional Rep	oorting								
Scorecard:	HS	Improved cross-sectoral communication in 12 countries							
	S	Improved cross-sectoral communication in 9 countries							
	MS	Improved cross-sectoral communication in 6 countries							

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.

MU Improved cross-sectoral communication in 4 countries
 U Improved cross-sectoral communication in up to 2 countries
 HU 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	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement
Fiji	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement
FSM	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement
Nauru	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement
Niue	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement
Palau	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement
PNG	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement
RMI	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement
Samoa	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	☐ Sectors represented in formal meetings prior to project commencement

Country	Indicator	Target	Means of Verification	Baseline
Solomon Islands	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	Sectors represented in formal meetings prior to project commencement
Tonga	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	Sectors represented in formal meetings prior to project commencement
Tuvalu	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	Sectors represented in formal meetings prior to project commencement
Vanuatu	19 Sectoral engagement in formal multilateral communication on water issues	☐ Increased engagement	Review of formal meetings endorsed by Steering Committee	Sectors represented in formal meetings prior to project commencement

Water Safety Plans in place and enacted in 3 peri-rural and 2 urban areas

Proposed Indicator(s)

20. 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)

Note that whilst budgets may be in place, it is recognised that it may not be possible to resource all activities in the plan, in which case priorities should be clearly identified.

Country Reporting

Scorecard:	HS	WSP endorsed by Minister with budget allocation	
S WSP endorsed by Minister without budget allocation			
	MS	WSP completed including consultation and endorsed by Steering Committee	
	MU	WSP completed including consultation	
	U	WSP under development	
	HU	Planning process not defined	

Regional Reporting

Scorecard:	HS	Water Safety Plans in place and enacted in 3 peri-rural and 2 urban areas with budgets in place
	S	Water Safety Plans in place and enacted at 4 sites (combination peri- rural and urban areas)
	MS	Water Safety Plans in place and enacted at 3 sites
	MU	Water Safety Plans in place and enacted at 2 sites
	U	Water Safety Plans in place and enacted at one site
	HU	No Water Safety plans enacted

No baseline is required.

Country	Indicator	Target	N	Means of Verification		Baseline
Niue	20 Water Safety Plans for Alofi North and Alofi South (peri-urban)	Plan implemented		Endorsement by Minister		None required
Palau	20 National Water Safety Plan (peri-urban)	Plan implemented		Endorsement by Minister	_	None required
RMI	20 Majuro Water Safety Plan (urban)	Plan implemented		Endorsement by Minister		None required
Samoa	20 Apia Water Safety Plan (urban)	Plan implemented		Endorsement by Minister	П	None required
Solomon Islands	20 Honiara Water Safety Plan (urban)	Plan implemented		Endorsement by Minister		None required

Sustainable forest & land management practices established and trialled with landowners in 2 demo sites

Proposed Indicator(s)

21. 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

Sustainable forest & land management practices established and

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

HS

Scorecard:

		trialled with landowners; with demonstration at site or dissemination of practices
	S	Sustainable forest & land management practices established and trialled with landowners; demonstration aspects identified
	MS	Sustainable forest & land management practices established and trialled with landowners
	MU	Land and practices identified for demonstration site; but on-ground works not completed
	U	Land and practices identified for demonstration site and all agreements signed and budgeted
	HU	No significant progress on sustainable forest and land management practices
Regional Repo	rting	
Scorecard:	HS	Sustainable forest & land management practices established and trialled with landowners in 2 demo sites; with demonstration at site or dissemination of practices
	S	Sustainable forest & land management practices established and trialled with landowners in 2 demo sites; demonstration aspects identified
	MS	Sustainable forest & land management practices established and trialled with landowners at one demo sites; with demonstration at site or dissemination of practices
	MU	Land and practices identified for demonstration site(s); but on-ground works not completed
	U	Land and practices identified for at least one demonstration site and all agreements signed and budgeted
	HU	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	21 Sustainable forest & land management practices established and trialled with landowners	☐ Sustainable forestry site to be established in Nadi Basin upper catchment	 □ Completion report endorsed by Steering Committee □ Development of guidelines; codes; best practice manual; etc □ Review of site practices prior to commissioning trial
FSM	21 Sustainable forest & land management practices established and trialled with landowners	Low grow sakau and pig waste management site to be established in Nanpil river catchment	 □ Completion report endorsed by Steering Committee □ Development of guidelines; codes; best practice manual; etc □ Review of site practices prior to commissioning trial
Palau	21 Sustainable forest & land management practices established and trialled with landowners	One year trial of pollution reduction initiative at one market garden/livestock area	 □ Completion report endorsed by Steering Committee □ Development of guidelines; codes; best practice manual; etc □ Review of site practices prior to commissioning trial
Vanuatu	21 Sustainable forest & land management practices established and trialled with landowners	☐ Establishing 6 demonstration plots in the GTZ Forest Reserve and demonstration plots in 4 communities (Fanafo, Monixhill, Nagar and Mango)	 □ Completion report endorsed by Steering Committee □ Development of guidelines; codes; best practice manual; etc □ Review of site practices prior to commissioning trial

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)

22. 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 groundwater¹². 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

Scorecard:	HS S MS MU U	Target reduction in sewage and/or manure pollution 3/4 of target reduction achieved 1/2 of target reduction achieved Significant measurable reduction in sewage and/or manure pollution Strategy and funding in place, but groundworks not completed to
	ни	deliver reduction in pollution No significant reduction in sewage or manure pollution

Regional Reporting

Scorecard: HS 40% reduction achieved in 2 rural areas and 20% reduction achieved in 2 urban/peri-urban areas
S 3 of 4 sites achieve:

40% reduction in 2 rural areas and 20% reduction in 2 urban/peri-urban areas

MS 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

MU 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

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

U Measurable reduction achieved in at least 2 sites HU 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 me	easuring	reductions	in wa	astewater
volume, ir	ncluding:								

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 ¹³ .

¹³ Ibid.

Country	Indicator		Target	Means of Verification	Baseline
Cook Islands	22 Nitrogen pollution discharged to groundwater and Muri Lagoon 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 Note that if work undertaken by MoH with hotels in parallel with project, reduction may be achieved	_	90% reduction in nitrogen discharged to the lagoon from piggeries 35% reduction in nitrogen loads at a household level from household trials	Monitoring report endorsed by Steering Committee (Steering Committee minutes)	 □ Catchment area □ Number of households □ Groundwater monitoring adjacent to pilot sites □ Study to determine sources of pollutants into Muri Lagoon to apportion sources
FSM	22 Nitrogen pollution from piggeries in Nett Watershed Piggery waste reduction achieved through dry litter waste management uptake and biogas generation		80% reduction in nitrogen pollution from piggery wastes at piggery demonstration sites	Study Reports endorsed by Steering Committee (Steering Committee minutes)	☐ Assessment of piggery waste generation from piggery
Nauru	22 Reduction in sewage pollution in Ewa and Anetan Communities 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		35% reduction in nitrogen pollution from sewage	Study report on demonstrations endorsed by Steering Committee (Steering Committee minutes)	☐ Catchment area ☐ Existing state of sanitation systems in demonstration site
Niue	22 Reduction in nitrogen pollution from piggery and sewage wastes in Niue groundwater catchment Rehabilitation of failing septic systems will provide at least a 25% reduction in nitrogen pollution (significantly more if these are associated with irrigation beds) Piggery waste reduction achieved through piggery effluent collection tanks. Nitrogen reduction through proportion of waste collected in effluent collection tanks		25% reduction in nitrogen due to sewage pollution 80% reduction in nitrogen pollution from piggery waste at piggery demonstration sites	Study Reports endorsed by Steering Committee (Steering Committee minutes)	☐ Household septic tank survey ☐ Assessment of piggery waste generation from piggery

Country	Indicator	Target	Means of Verification	Baseline
RMI	Reduction in sewage pollution in Laura Community Will need to be assessed at a household level as pilot and partner projects unlikely to deliver sufficient reduction over project lifetime	☐ 35% reduction in pollution from household trials	☐ Monitoring report endorsed by Steering Committee (Steering Committee minutes)	□ Catchment area□ Number of households□ Groundwater monitoring adjacent to pilot sites
Tonga	Nitrogen pollution discharged to groundwater in Neiafu Rehabilitation of septic systems and sludge disposal systems will reduce nitrogen discharge at a household level by 25%	□ 20% reduction in nitrogen discharged to groundwater Equates to 80% Neiafu residents with access to septic pump-out (4,500 people)	☐ Survey by Town Officers endorsed by Steering Committee (Steering Committee minutes) ☐ Audit on proportion of houses using the pump-out facilities by end of project	☐ Island area ☐ Number of households in Neiafu ☐ Number of households on Vava'u
Tuvalu	22 Reduction in sewage pollution across Funafuti Composting toilets should reduce nitrogen pollution discharged to groundwater by over 90% in demonstration households	☐ 5% reduction in sewage pollution over Funafuti	☐ Study report endorsed by Steering Committee (Steering Committee minutes)	☐ Island area ☐ Number of households
Vanuatu	22 Reduction in sewage pollution across Sarakata watershed 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	☐ 40% reduction in sewage pollution in Sarakata watershed	Study report endorsed by Steering Committee (Steering Committee minutes)	□ Watershed area□ Number of households□ Survey of existing sanitation systems

30% reduction in drinking water resources pollution discharge for 3 sites (including one country-scale)

Proposed Indicator(s)

23. 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:

- 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

U

pollution reduction

Scorecard:	HS	Target reduction in drinking water source pollution
	S	² ⁄₃ of target reduction achieved
	MS	Stress reduction activities completed and significant measurable reduction in drinking water source pollution
	MU	Stress reduction activities completed, although no measured reduction in drinking water source pollution
	U	Strategy and funding in place, but groundworks not completed to deliver reduction in drinking water source pollution
	HU	No significant reduction in drinking water source pollution
Regional Repo	orting	
Scorecard:	HS	30% reduction for 3 sites (including one country-scale)
	S	30% reduction for 2 sites Or 20% reduction achieved at 3 sites
	MS	30% reduction for one site Or
		Measurable reduction at 3 sites
	MU	Measurable reduction at 2 sites

Stress reduction measures undertaken at 3 sites, but no significant

HU 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	23 Reduction in pollution sources discharging into Nett Watershed Activities to address key pollution sources include improving piggery management, regulation development and a Payment for Ecosystem services (PES) system. 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. Alternatively, the catchment management plan needs to clearly identify how initiatives will lead to this level	□ 30% reduction in sources discharging into Nett Watershed		Report on progress endorsed by Steering Committee (Steering Committee minutes) Nett Watershed Forest Reserve Management Plan endorsed by Minister/Cabinet	☐ Assessment of piggery waste generation from piggery ☐ Survey of catchment pollution sources
Niue	23 Reduction in drinking water resources pollution discharge to drinking water sources at a national scale 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.	☐ 30% reduction Achieved through mitigation of: - waste oil sources - hospital hazardous wastes - piggery waste - agricultural chemicals		Reports endorsed by Steering Committee (Steering Committee minutes)	 ☐ Uncontrolled waste oil disposal sites ☐ Uncontrolled piggery waste sites ☐ Survey of hospital waste practices ☐ Groundwater quality assessment (agricultural chemicals and/or pathogens)
Palau	23 Reduction in pollution sources discharging into Ngerikiil Watershed Activities to address key pollution sources include buffer zones, developing best management practices, managing stormwater drains and a Payment for Ecosystem services (PES) system. 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. Alternatively, the catchment management plan needs to clearly identify how initiatives will lead to this level (or greater) of source reduction	□ 30% reduction in sources discharging into Ngerikiil	0	Report on progress endorsed by Steering Committee (Steering Committee minutes) Ngerikiiil Catchment Water Management Plan endorsed by Minister/Cabinet	□ Survey of catchment pollution sources □ Potentially water quality monitoring for pathogens

Country	Indicator		Means of Verification	Baseline
RMI	23 Reduction in pollution sources discharging into Laura groundwater Activities to address key pollution sources include managing piggery waste, managing septic tanks, installation of composting toilets and managing solid waste. 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. Alternatively, the catchment management plan needs to clearly identify how initiatives will lead to this level (or greater) of source reduction	□ 30% reduction in sources discharging into Laura groundwater	 □ Report on progress endorsed by Steering Committee (Steering Committee minutes) □ Sarakata Watershed Management Plan endorsed by Minister/Cabinet 	 □ Laura groundwater catchment area □ Number of households □ Survey of catchment pollution sources □ Potentially water quality monitoring for pathogens
Vanuatu	23 Reduction in pollution across Sarakata watershed Activities to address key pollution sources include developing best management practices, managing stormwater drains and a Payment for Ecosystem services (PES) system. 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. Alternatively, the Sarakata Watershed Management Plan needs to clearly identify how initiatives will lead to this level (or greater) of source reduction	□ 30% reduction in sources discharging into Sarakata watershed	 □ Report on progress endorsed by Steering Committee (Steering Committee minutes) □ Sarakata Watershed Management Plan endorsed by Minister/Cabinet 	 □ Watershed area □ Number of households □ Survey of existing sanitation systems

A Catchment Council established in 2 SIDS

Proposed Indicator(s)

24. 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 Repor	rting	
Scorecard:	HS	Catchment Council established with financial allocation (such as budget line or levy)
	S	Catchment Council established, funded from government agency budget, without formal budget line
	MS	Catchment Council established with formal delegation but without financial allocation
	MU	Interim Catchment Council operating, but without formal Ministerial or legislative delegation
	U	Catchment meetings occurring between government agencies incorporating civil society and the private sector but no formal arrangements
	HU	No Catchment Council in place
Regional Repo	orting	

	HU	No Catchment Council in place
Regional Repo	orting	
Scorecard:	HS	Catchment Councils established in 2 countries with financial allocation (such as budget line or levy)
	S	Catchment Councils established in 2 countries with financial allocation (such as budget line or levy) in one
	MS	Catchment Councils established in 2 countries without financial allocation or established in one country with financial allocation
	MU	Catchment Council established in on country without financial allocation
	U	Interim Catchment Council operating in at least one country, although no formal delegation
	HU	Catchment Council not established

No baseline is required.

Country	Indicator	Target	Means of Verification	Baseline
Fiji	24 Nadi Basin Catchment Committee Established	☐ Committee Established ☐ Budget allocated	☐ Endorsement by Minister or legislation passed or similar ☐ National Budget	lone required
FSM	24 Nett Catchment Committee Established	☐ Committee Established ☐ Budget allocated	☐ Endorsement by Minister or legislation passed or similar ☐ National Budget	lone required
Palau	24 Ngerikiil Community Catchment Committee Established	☐ Committee Established ☐ Budget allocated	☐ Endorsement by Minister or legislation passed or similar ☐ National Budget	lone required
PNG	24 Laloki Integrated Catchment Management Committee (LICeM) Established	☐ Committee Established ☐ Budget allocated	☐ Endorsement by Minister or legislation passed or similar ☐ National Budget	lone required
RMI	24 Laura Lens Laura Integrated Water and Land Management Advisory Committee	☐ Committee Established ☐ Budget allocated	☐ Endorsement by Minister or legislation passed or similar ☐ National Budget	lone required
Vanuatu	24 Sanma Water Advisory Committee Established	☐ Committee Established ☐ Budget allocated	□ Endorsement by Minister or legislation passed or similar □ National Budget	lone required

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)

25. 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

Scorecard:	HS S MS MU U	Target increase in community engagement 3/3 of target increase achieved 1/2 of target increase achieved Measurable increase in community engagement Engagement strategy endorsed by Steering Committee and implemented
	HU	No significant increase in community engagement
Regional Repo	rting	
Scorecard:	HS S MS MU U HU	50% increase in 3 SIDS 30% increase in 3 SIDS 25% increase in 2 SIDS Measurable increase in at least 2 SIDS Measurable increase in at least one SIDS 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	25 Community engagement with National Government	□ 50% increase	Review of formal national committees and forums endorsed by Project Steering Committee	Community representative membership or formal participation in formal national committees or forums prior to project commencement
RMI	25 Community engagement with National Government	□ 50% increase	Review of formal national committees and forums endorsed by Project Steering Committee	Community representative membership or formal participation in formal national committees or forums prior to project commencement
Tuvalu	25 Community engagement with National Government	□ 50% increase	Review of formal national committees and forums endorsed by Project Steering Committee	Community representative membership or formal participation in formal national committees or forums prior to project commencement

National effluent standards reached for wastewater treatment at 3 sites

Proposed Indicator(s)

26. 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

Scorecard:	HS	National effluent standards reached for wastewater treatment
	S	National effluent standards substantively met wastewater treatment with minor (non-significant) breaches
	MS	National effluent standards substantively met but with restrictive conditions
	MU	National standards defined; works undertaken, but unable to meet standards
	U	National standards defined
	HU	No national standards defined
Regional Repo	orting	
Scorecard:	HS	National effluent standards reached at 3 sites
Scorecard:	HS S	National effluent standards reached at 3 sites National effluent standards substantively reached at 3 sites with minor (non-significant) breaches
Scorecard:		National effluent standards substantively reached at 3 sites with
Scorecard:	S	National effluent standards substantively reached at 3 sites with minor (non-significant) breaches National effluent standards substantively reached at 2 sites with
Scorecard:	s Ms	National effluent standards substantively reached at 3 sites with minor (non-significant) breaches National effluent standards substantively reached at 2 sites with minor (non-significant) breaches National effluent standards substantively reached at 1 site with minor
Scorecard:	s MS MU	National effluent standards substantively reached at 3 sites with minor (non-significant) breaches National effluent standards substantively reached at 2 sites with minor (non-significant) breaches National effluent standards substantively reached at 1 site with minor (non-significant) breaches National standards defined and works undertaken in at least 2 sites,

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

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	26 Wastewater discharge from demonstration sites meet national effluent standards Discharge meets Public Health (Sewage) Regulations 2008 or revised regulations	☐ Regulations met	☐ Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	□ None required
FSM	Wastewater discharge from demonstration sites meet national effluent standards Discharge meets national effluent standards	□ Regulations met	☐ Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	□ None required
Nauru	Wastewater discharge from demonstration sites meet national effluent standards Need to develop national effluent standards	□ Regulations met	☐ Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	□ None required
Niue	Wastewater discharge from demonstration sites meet national effluent standards Need to develop national effluent standards	□ Regulations met	☐ Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	□ None required
RMI	26 Wastewater discharge from demonstration sites meet national effluent standards Discharge meets RMIEPA Toilet Facilities and Sewage Disposal Regulations 1990 or revised regulations	☐ Regulations met	☐ Audit of demonstration system performance against national effluent standards endorsed by Steering Committee	□ None required

20% increase in water storage facilities at 1 demo site

Proposed Indicator(s)

27. Water supply storage

Relies on installation of additional storage in Niue.

Country/ Regional Reporting

Scorecard:	HS	Target increase in water supply storage	
	S	² /₃ of target increase achieved	
	MS	½ of target increase achieved	
	MU	Measurable increase in water storage facility	
	U	Works to improve increase in water storage undertaken but no measurable increase	
	HU	No significant increase in water storage facility	

Baseline of existing storage at the project commencement will required.

Country	Indicator	Tarç	jet	Means of Verification	Baseline
Niue	27 Water supply storage New Storage Tank at Fou, Alofi North	□ 20% increa	ase	Commissioning report endorsed by Steering Committee	Alofi North water storage capacity

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 3rd and 4th 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)

28. 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

Scorecard:	HS S MS MU U HU	National indicator framework endorsed by Minister/Cabinet and reporting mechanisms identified and funded National indicator framework endorsed by Minister/Cabinet; responsible agencies identified, but reporting unfunded National indicator framework endorsed by APEX body Draft national indicator framework complete, including consultation Draft national indicator framework complete, but no consultation No progress
Regional Repor	rting	
Scorecard:	HS	Regional indicator framework endorsed by Steering Committee and national indicator framework endorsed in 12 countries
	S	Regional indicator framework endorsed by Steering Committee and national indicator framework endorsed in 8 countries
	MS	Regional indicator framework endorsed by Steering Committee and national indicator framework endorsed in 5 countries
	MU	Regional indicator framework endorsed by Steering Committee and national indicator framework endorsed in 2 countries
	U HU	Regional indicator framework endorsed by Steering Committee Regional indicator framework not endorsed

Country	Indicator	Target	Means of Verification	Baseline
Regionally	28 Regional Indicator Framework implemented	☐ Endorsed by Regional Steering Committee	☐ RSC Minutes	□ None required
Cook Islands	28 National indicator framework implemented	☐ Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Fiji	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
FSM	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Nauru	28 National indicator framework implemented	 Indicators incorporated into national reporting 	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Niue	28 National indicator framework implemented	☐ Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Palau	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
PNG	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
RMI	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Samoa	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Solomon Islands	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Tonga	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Tuvalu	28 National indicator framework implemented	☐ Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required
Vanuatu	28 National indicator framework implemented	Indicators incorporated into national reporting	☐ Endorsement by Cabinet (Cabinet Minutes)	□ None required

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)

29. 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 Repor	rting	
Scorecard:	HS	Project design and PM&E plan endorsed by PSC with consultation clearly identified
	S	Project design and PM&E plan endorsed by PSC with consultation undertaken, but not clearly identified
	MS	Project design and PM&E plan endorsed by PSC
	MU	Draft project design and PM&E plan complete, but not endorsed by PSC
	U	Project design and PM&E plan under development, including consultation
	HU	No progress on project design and PM&E plan
Regional Repo	orting	
Scorecard:	HS	Project design and PM&E plan endorsed with consultation clearly identified in 12 countries
	S	Project design and PM&E plan endorsed with consultation clearly identified in 9 countries
	MS	Project design and PM&E plan endorsed in 6 countries
	MU	Project design and PM&E plan endorsed in 4 countries
	U	Project design and PM&E plan endorsed in up to 2 countries
	HU	No project designs or PM&E plans

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
Fiji	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
FSM	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
Nauru	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
Niue	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
Palau	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
PNG	29 Project design and PM&E plan implemented	☐ Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
RMI	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	□ None required
		☐ Consultation report		
Samoa	29 Project design and PM&E plan implemented	☐ Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		

Country	Indicator	Target	Means of Verification	Baseline
Solomon Islands	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
Tonga	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
Tuvalu	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		
Vanuatu	29 Project design and PM&E plan implemented	Project and PM&E plan implemented by August 2011	☐ Endorsed by Project Steering Committee	☐ None required
		☐ Consultation report		

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)

30. 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

PM&E approach implemented by APEX body

Country Reporting

Scorecard:

		i mae approach implemented by it extends
	S	PM&E approach endorsed by APEX body with budget allocation
	MS	PM&E approach endorsed by APEX body
	MU	Draft PM&E complete, but not endorsed by APEX body
	U	PM&E approach under development, including consultation
	HU	No Catchment Council in place
Regional Repo	orting	
Scorecard:	HS	PM&E approach implemented by APEX body in 12 countries
	S	PM&E approach implemented by APEX body in 9 countries
	MS	PM&E approach implemented by APEX body in 6 countries
	MU	PM&E approach implemented by APEX body in 4 countries
	U	PM&E approach implemented by APEX body in up to 2 countries
	HU	PM&E approach not implemented by any APEX body

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	30 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required
Fiji	30 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required
FSM	30 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required
Nauru	30 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required
Niue	30 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required
Palau	30 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required
PNG	30 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning techniques	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required
RMI	30 National adoption of PM&E approaches implemented Incorporating MSC and reflection and learning	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required

Country	Indicator	Target	Means of Verification	Baseline
	techniques			
Samoa	30 National adoption of PM&E approaches implemented	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	☐ None required
	Incorporating MSC and reflection and learning techniques			
Solomon Islands	30 National adoption of PM&E approaches implemented	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	□ None required
	Incorporating MSC and reflection and learning techniques			
Tonga	30 National adoption of PM&E approaches implemented	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	□ None required
	Incorporating MSC and reflection and learning techniques			
Tuvalu	30 National adoption of PM&E approaches implemented	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	□ None required
	Incorporating MSC and reflection and learning techniques			
Vanuatu	30 National adoption of PM&E approaches implemented	☐ Implemented by July 2012	☐ Endorsement by APEX body (APEX body minutes)	□ None required
	Incorporating MSC and reflection and learning techniques			

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)

31. 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

Scorecard:	HS	National staff trained in monitoring and PM&E based on needs assessment
	S	Monitoring and PM&E needs assessment completed and training for national staff partially complete
	MS	Monitoring and PM&E needs assessment completed and training for national staff endorsed by APEX body
	MU	Monitoring and PM&E needs assessment completed and training for national staff planned, without APEX body endorsement
	U	Monitoring and PM&E needs assessment completed
	HU	No assessment of PM&E needs
Regional Repo	rting	
Scorecard:	HS	National staff trained in monitoring and PM&E based on needs assessment in 12 countries
	S	National staff trained in monitoring and PM&E based on needs assessment in 8 countries
	MS	National staff trained in monitoring and PM&E based on needs assessment in 6 countries
	MU	National staff trained in monitoring and PM&E based on needs assessment in 4 countries
	U	National staff trained in monitoring and PM&E based on needs assessment in up to 2 countries
	HU	Training needs not assessed

Country	Indicator	Target	Means of Verification	Baseline
Cook Islands	31 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	☐ Training assessment report	☐ Report endorsed by Steering Committee	□ None required
Fiji	31 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
FSM	31 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
Nauru	31 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
Niue	31 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
Palau	31 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs	☐ Training assessment report	☐ Report endorsed by Steering Committee	☐ None required
PNG	31 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies on undertaking a assessment against	☐ Training assessment report	☐ Report endorsed by Steering Committee	□ None required

Country	Indicator	Target	Means of Verification	Baseline
	national monitoring needs			
RMI	31 Country staff trained in monitoring and PM&E Based on a needs assessment. Relies	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
	on undertaking a assessment against national monitoring needs			
Samoa	31 Country staff trained in monitoring and PM&E	☐ Training assessment report	Report endorsed by Steering Committee	☐ None required
	Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs			
Solomon Islands	31 Country staff trained in monitoring and PM&E	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
	Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs			
Tonga	31 Country staff trained in monitoring and PM&E	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
	Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs			
Tuvalu	31 Country staff trained in monitoring and PM&E	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
	Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs			
Vanuatu	31 Country staff trained in monitoring and PM&E	☐ Training assessment report	Report endorsed by Steering Committee	□ None required
	Based on a needs assessment. Relies on undertaking a assessment against national monitoring needs			

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)

32. Regional Communication strategy in place by July 2011

33. 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

- 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

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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

Scorecard:	HS	Strategic IWRM communication plan implementation ongoing
	S	Strategic IWRM communication plan endorsed by Minister with budget or funding allocation
	MS	Strategic IWRM communication plan endorsed by APEX body
	MU	Draft Strategic IWRM communication plan complete, including consultation
	U	Draft Strategic IWRM communication complete, but no consultation
	HU	No significant progress
Regional Repo	orting	
Scorecard:	HS	Regional Communication strategy endorsed by RSC and 12 national communication strategies implemented
	S	Regional Communication strategy endorsed by RSC and 8 national communication strategies implemented
	MC	Designed Communication strategy and aread by DCC and Emptional
	MS	Regional Communication strategy endorsed by RSC and 5 national communication strategies implemented
	MU	0, ,

No national communication strategies in place

No baseline required

HU

Country	Indicator	Target	Means of Verification	Baseline
Regional	32 Regional IWRM communication plan framework implemented	☐ Implemented by July 2011	☐ Endorsed by Regional Steering Committee	□ None required
Cook Islands	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Fiji	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
FSM	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Nauru	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Niue	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Palau	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
PNG	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
RMI	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Samoa	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Solomon Islands	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Tonga	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Tuvalu	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required
Vanuatu	33 National IWRM communication plan framework implemented	☐ Implemented by July 2012	☐ Endorsement by Minister	□ None required

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 that 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)

34. 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

Scorecard:	HS	Multi-sectoral APEX body established and holding regular quarterly meetings for past year
	S	Multi-sector APEX body formally endorsed by Minister/Cabinet (or equivalent) with formal secretariat role and budget allocation
	MS	Multi-sector APEX body formally endorsed, but without all of private sector, education, national finance and economic planning representation
	MU	Multi-sector APEX body formally endorsed, but without any of private sector, education, national finance and economic planning representation
	U	Interim Coordinating body established without formal endorsement
	HU	No APEX body established
Regional Repo	rting	
Scorecard:	HS	Multi-sectoral APEX bodies established in 12 countries
	S	Multi-sectoral APEX bodies established in 9 countries
	MS	Multi-sectoral APEX bodies established in 6 countries
	MU	Multi-sectoral APEX bodies established in 4 countries
	U	Multi-sectoral APEX bodies established in at least one country
	HU	No APEX bodies established

Country	Indicator		Means of Verification	Baseline
Cook Islands	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	☐ None required
Fiji	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	☐ Endorsement by Minister or Cabinet	☐ None required
FSM	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	☐ None required
Nauru	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	□ None required
Niue	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	□ None required
Palau	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	☐ None required
PNG	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	□ None required
RMI	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	□ None required
Samoa	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	□ None required
Solomon Islands	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	□ None required
Tonga	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	□ None required
Tuvalu	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	□ None required
Vanuatu	34 Multi-sectoral APEX body in place	☐ Implemented by July 2010	Endorsement by Minister or Cabinet	☐ None required

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