









Sustainable Integrated Water Resources and Wastewater Management Project in Pacific Island Countries

National Stakeholder Consultation Process

in

Solomon Islands

Table of Contents

Introduction	5
National consultation process	5
a)Details of the consultation process	<u>5</u>
b)IWRM Working Group	<u> 6</u>
c)Work Plan.	<u>6</u>
d)Stakeholder Seminar/Workshop	8
1.IDENTIFICATION SHEET: HOT SPOT AND SENSITIVE AREAS FOR SOLOMON ISLANDS	10
A.Title: Urban Coastal Waters	10
B.Location: Honiara and Noro	10
C.Surface Area: 1-5 km2	10
D.Context of the site:	10
E.Main human activity(ies) related to the site:	10
F.Natural conditions/phenomenon related to the site:	10
G.Nature of threats and extent of threats (human and natural):	10
H.If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):	10
0.MAJOR CONCERNS AND ISSUES	11
3.Hot-Spot 1:Urban Coastal Waters	12
4.IDENTIFICATION SHEET: HOT SPOT AND SENSITIVE AREAS FOR SOLOMON ISLANDS	14
I.Title: Matepona River	14
J.Location: Guadalcanal Island	14
K.Surface Area: 1-5 km2	14
L.Context of the site:	14
M.Natural conditions/phenomenon related to the site:	14
N.Nature of threats and extent of threats (human and natural):	14
O.If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):	14
0.MAJOR CONCERNS AND ISSUES	15
6.Hot-Spot 2: _Matepona River	16
DIDENTIFICATION SHEET: HOT SPOT AND SENSITIVE AREAS FOR SOLOMON ISLANDS	18

P.Title: Honiara water resources	18
Q.Location: Honiara	18
R.Surface Area: 25-30 km2	18
S.Context of the site:	18
T.Main human activity(ies) related to the site:	18
U.Natural conditions/phenomenon related to the site:	18
V.Nature of threats and extent of threats (human and natural):	18
W.If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):	18
MAJOR CONCERNS AND ISSUES	19
.Hot-Spot 3:Honiara Water Resources	20
DIDENTIFICATION SHEET: HOT SPOT AND SENSITIVE AREAS FOR SOLOMON ISLANDS	2 2
X.Title: Guadalcanal Plains water resource	22
Y.Location: Guadalcanal	22
Z.Surface Area: 1,200 km2	22
AA.Context of the site:	22
BB.Main human activity(ies) related to the site:	22
CC.Natural conditions/phenomenon related to the site:	22
DD.Nature of threats and extent of threats (human and natural):	
EE.If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):	
.MAJOR CONCERNS AND ISSUES	22
D.Sensitive Area 1: _Guadalcanal Plains water resources	
3.IDENTIFICATION SHEET: HOT SPOT AND SENSITIVE AREAS FOR SOLOMON ISLANDS	
FF.Title: Auluta Basin	26
GG.Location: Malaita	26
HH.Surface Area: 50-100 km2	26
II.Context of the site:	26
JJ.Main human activity(ies) related to the site:	26
KK.Natural conditions/phenomenon related to the site:	
LL.Nature of threats and extent of threats (human and natural):	
MM.If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):	et .
MAJOR CONCERNS AND ISSUES	2.6

15.Sensitive Area 2:Auluta Basin	28
16.IDENTIFICATION SHEET: HOT SPOT AND SENSITIVE AREAS FOR SOLOMON ISLANDS	30
NN.Title: Water shortages in low lying Atolls	30
OO.Location: Solomon Islands	30
PP.Surface Area: 100-200 km2	30
QQ.Context of the site:	30
RR.Main human activity(ies) related to the site:	30
SS.Natural conditions/phenomenon related to the site:	30
TT.Nature of threats and extent of threats (human and natural):	30
UU.If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):	
0.MAJOR CONCERNS AND ISSUES	31
18.Sensitive Area 3:Water shortage in low lying Atolls	32
19.Aggregated Table for Hot-Spot	34
Aggregated Table for Sensitive Area	34
Summary Table of Prioritised Hot-Spots and Sensitive Areas	35
VV.Major Integrated Water Resource and Wastewater Management Issues	35

Introduction

In 2004, UNDP GEF signed an agreement with the South Pacific Applied Geoscience Commission (SOPAC) to develop an innovative program on Sustainable Integrated Water Resources and Wastewater Management (IWRM) for the Pacific Island countries. This program will support Pacific Small Islands Developing States in the implementation of the Pacific Regional Action Plan that addresses sustainable water management. This plan aims to improve the assessment and monitoring of water resources, reduce water pollution, improve access to technologies, strengthen institutional arrangements, and leverage additional financial resources in support of IWRM.

As a requirement for the project design phase, each country is required to produce national analyses of its water resources through financial support from SOPAC. The national analyses include Diagnostic Report, Hot Spot Analysis and Demonstration Concepts. The diagnostic report, the hot spot analysis (HSA) and the demonstration project concepts are all part of a logical process, which commences with a review of national water management and its linkages to other sectors (the diagnostic report) and identifies barriers to preventing IWRM and how to overcome them. This reporting and analysis then provides the background information for the HSA.

National consultation process

a) Details of the consultation process

The Ministry of Mines and Energy and the IWRM focal point has decided that the IWRM Project National Analyses in Solomon Islands will be prepared through a national consultation process. The consultation process is expected to involve the following.

IWRM Core Working Group comprising 5-8	Weekly meetings with advisory and		
members	endorsement functions		
Seminar/workshops	10-15 sector experts to participate in series of		
	seminars/workshops		
Sector experts	At least 5 sector experts to prepare sector		
	analysis and reports; timeframe 2 weeks		
IWRM focal point	Coordinate national analyses activities with		
	assistance of local expert for at least 2/3		
	weeks		
Report compilation - Diagnostic Report, Hot	IWRM focal point assisted by a local expert;		
Spot Analyses and Demonstration Concepts	timeframe 2/3 weeks		

b) IWRM Working Group

Delay in securing fund and time constraints do not allow for wider consultation to all sectors, however, a working group was formed involving the major stakeholders of the water resources in the country. These include:

- 1. Ministry of Mines and Energy
- 2. Ministry of Agriculture and Livestock
- 3. Ministry of Forest, Environment and Conservation
- 4. Ministry of Health and Medical Services
- 5. Solomon Islands Water Authority
- 6. NGO, Live and Learn
- 7. IWP

The main objective of the IWRM Working Group is to oversee the preparation of the IWRM National Analyses in Solomon Islands for submission to SOPAC according to agreed datelines. The specific functions of the IWRM working group are as follows:

- a. To hold weekly meetings to assess activities undertaken for the preparation of the national analyses
- To take part in seminars/workshops for preparation of the National Analyses Diagnostic Report,
 HSA and Demonstration Concepts
- c. To endorse sector experts to undertake sector analyses and reporting for the National Analyses
- d. To review outcome of seminars/workshops for HSA and demonstration concepts
- e. To review and endorse the National Analyses before submission to SOPAC
- f. To review comments/amendments from SOPAC for agreement and endorsement

c) Work Plan

Due to the delay in securing necessary fund from the National Government despite the transfer of fund by SOPAC into SIG Account implementation of activities for the national analyses preparation has been delayed for one month; i.e. the new dateline has been delayed to April 2007 instead of March 2007.

Major activities involved allocation of tasks according to the work plan submitted to SOPAC for the release of funding. The sector analysis and reporting was the main tasks necessary for compilation of draft diagnostic report. The draft diagnostic report would be used during the stakeholder seminar/workshop for

hot spot analysis and demonstration project concept design. The IWRM focal point had initially conducted consultation for general information necessary for compilation of the diagnostic report. The main sector analysis and reporting have been undertaken according to the table presented below.

Sector Analyses	Responsible Organisations
Water Resources Management	Ministry of Mines and Energy
	Environmental Health
	SIWA
Disaster and Island Vulnerability	Ministry of Mines and Energy
	Disaster Management Office
	SI Meteorological Services
Landuse and Agriculture	Ministry of Agriculture & Livestock
Habitats and Ecosystems	Ministry of Forest, Environment & Conservation
Health and Hygiene	Environmental Health
Technology	SIWA
Watershed and Coastal Management	Ministry of Mines & Energy
	IWP
	Ministry of Fisheries & Resource Management
Awareness	Ministry of Mines & Energy
	Environmental Health
	SIWA
	Ngo
Institutional Arrangements	Ministry of Mines & Energy
	Environmental Health
	SIWA
Financing	Ministry of Mines & Energy
	Environmental Health
	SIWA

d) Stakeholder Seminar/Workshop

Upon compilation of draft diagnostic report a one day seminar was conducted at the end of March 2007. Time constraints do not allow series of seminars or workshops as initially planned as part of the initial work plan. Participants were invited from wide cross section of the Government Ministries and Ngos according to the list below.

- o Ministry of Mines and Energy
- o Disaster Management Office, Ministry of Home Affairs
- Ministry of Agriculture & Livestock
- o Ministry of Forest, Environment and Conservation
- Ministry of National Development Planning
- Ministry of Health and Medical Services
- Solomon Islands Water Authority
- Solomon Islands Meteorological Services
- o NGO, Live & Learn
- Ministry of Fisheries and Marine Resources
- National Council of Women
- International Waters Program

The seminar was important for the hot spot analysis (HSA) and demonstration concept paper (DCP) preparation. The HSA and DCP were prepared during the workshop and endorsed by the IWRM working group for submission to SOPAC as part of the national analyses preparation. The HSA and DCP discussed below was the product of the seminar consultation.

Unfortunately, a water sector related workshop (climate change) was also conducted during the same week thus affected participation to the seminar. However, the main stakeholders involved in the national analyses preparation managed to send participants to the seminar which resulted in the HSA and DCP preparation. The organizations participated in the seminar include Ministry of Mines and Energy (3); Disaster Management Office, Ministry of Home Affairs (1); Ministry of Agriculture and Livestock (2); Ministry of Forest, Environment and Conservation (1); Ministry of Health and Medical Services (1); Solomon Islands Water Authority (4).

Deliverables

- 1. Diagnostic Report for Solomon Islands
- 2. Hot Spot Analysis
- 3. Demonstration Concept Paper

Outstanding

Full Demonstration Project Design – pending original input (feedback/comments) from GEF.

HOT SPOT ANALYSES

A. Title: Urban Coastal Waters

B. Location: Honiara and Noro

C. Surface Area: 1-5 km²

D. Context of the site:

E. Main human activity(ies) related to the site:

Recreational water and fishing.

F. Natural conditions/phenomenon related to the site:

Natural water with possible pollution from land base pollutants

G. Nature of threats and extent of threats (human and natural):

Sewage pollution, chemical pollution, land base developments compromised natural quality of recreational water

H. If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):

Most likely heavy pollution from sewage outfall and drainage from Honiara City residents

Value of the site:	Local	National	Regional/global
Environmental	High	High	Low
significance			
Socio-economic	High	High	Low
significance			

List of available data sets:

0. MAJOR CONCERNS AND ISSUES

Major Concerns	Issues
1. Freshwater shortage	
11. Pollution	1. Microbiological
	2. Chemical
	3. Suspended solids
	4. Solid wastes
	5. Oil spills
111. Habitat and community modification	6. Loss of ecosystems or ecotones
	Type: reef and marine
1V. Unsustainable exploitation of living	7. Over-exploitation
resources (e.g. forestry, fishing, commercial agriculture)	8. Impact on biological and genetic diversity
V. Global change	
VI. Other (please specify e.g public health,	9. Public health
economic productivity)	10. Economic productivity
	11. Recreational
	12. Social

3. Hot-Spot 1: ____Urban Coastal Waters_____

#	Name of the criteria	Weigh(1-4)	Rating
1	Size of affected area (as percentage of	1	1- less than 1%
	total national land area)		2- 1 to 5%
			3- 5 to 10%
			4- 10-50%
			5- over 50%
2	Affected population (as percentage of	3	1- less than 1%
	national population)		2- 1 to 5%
			3- 5 to 10%
			4- 10 to 50%
			5- over 50%
3	Extent to which the natural watershed,	4	5- very important (>80%)
	or aquifer and any associated receiving		4- important (50-80%)
	coastal and marine waters support the livelihood of local communities (e.g		3- average importance (30-50%)
	subsistence or commercial farming,		2- low importance (10-30%)
	forestry, mining, tourism, fisheries);		1- very low importance (<10%)
4	Extent to which the natural watershed,	2	5- very important (>80%)
	or aquifer and any associated receiving		4- important (50-80%)
	coastal and marine waters support the national development (e.g. commercial		3- average importance (30-50%)
	farming, forestry, mining, tourism,		2- low importance (10-30%)
	fisheries);		1- very low importance (<10%)
5	Extent to which the site is a recognized	3	5 – yes, very high priority
	government priority (refer to National		4- yes, high priority
	Sustainable Development Strategy, or other strategic action plans e.g. NEAP)		3- yes, medium priority
			2 – yes, low priority
			1 – no, not a priority

6	Extent to which the site is of regional and/or global significance and priority (see WWF ecoregions, IUCN categories, UNESCO world heritage sites etc.).	2	5 – yes, very high priority 4- yes, high priority 3- yes, medium priority 2 – yes, low priority 1 – no, not a priority
7	Degree of Degradation at the site (e.g. type of degradation)	3	5 – extremely high 4 – high 3 – average 2 – low 1 – very low
8	Extent of degradation on watershed/aquifer and any receiving coastal and marine resources and systems	2	5 – extremely high 4 – high 3 – average 2 – low 1 – very low

HOT SPOT ANALYSES

I. Title: Matepona River

J. Location: Guadalcanal Island

K. Surface Area: 1-5 km²

L. Context of the site:

Main human activity(ies) related to the site: **Recreational**, **domestic and fishing**.

M. Natural conditions/phenomenon related to the site:

Natural river water with pollution from mining operation

N. Nature of threats and extent of threats (human and natural):

Chemical pollution, sediment, sewage, land base developments compromised natural quality of river water

O. If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):

Heavy pollution mining operation and drainage from catchment

Value of the site:	Local	National	Regional/global
Environmental	High	High	Low
significance			
Socio-economic	High	High	Low
significance			

List of available data sets:

0. MAJOR CONCERNS AND ISSUES

Major Concerns	Issues
1. Freshwater shortage	Reduction in stream flow or quality
	2. Pollution of existing supplies
11. Pollution	3. Microbiological
	4. Chemical
	5. Suspended solids
	6. Solid wastes
	7. Oil spills
111. Habitat and community modification	8. Loss of ecosystems or ecotones
	Type: freshwater and marine
1V. Unsustainable exploitation of living	9. Over-exploitation
resources (e.g. forestry, fishing, commercial agriculture)	10. Impact on biological and genetic diversity
V. Global change	
VI. Other (please specify e.g public health,	11. Public health
economic productivity)	12. Economic productivity
	13. Recreational
	14. Social

6. Hot-Spot 2: _Matepona River_____

#	Name of the criteria	Weigh(1 – 4)	Rating
1	Size of affected area (as percentage of	1	1 - less than 1%
	total national land area)		2 - 1 to 5%
			3 - 5 to 10%
			4 - 10-50%
			5 - over 50%
2	Affected population (as percentage of	3	1 - less than 1%
	national population)		2 - 1 to 5%
			3 - 5 to 10%
			4 - 10 to 50%
			5 - over 50%
3	Extent to which the natural watershed,	4	5- very important (>80%)
	or aquifer and any associated receiving		4- important (50-80%)
	coastal and marine waters support the livelihood of local communities (e.g		3- average importance (30-50%)
	subsistence or commercial farming,		2- low importance (10-30%)
	forestry, mining, tourism, fisheries);		1- very low importance (<10%)
4	Extent to which the natural watershed,	2	5- very important (>80%)
	or aquifer and any associated receiving		4- important (50-80%)
	coastal and marine waters support the national development (e.g. commercial		3- average importance (30-50%)
	farming, forestry, mining, tourism,		2- low importance (10-30%)
	fisheries);		1- very low importance (<10%)
5	Extent to which the site is a recognized	3	5 – yes, very high priority
	government priority (refer to National		4- yes, high priority
	Sustainable Development Strategy, or other strategic action plans e.g. NEAP)		3- yes, medium priority
			2 – yes, low priority
			1 – no, not a priority

6	Extent to which the site is of regional and/or global significance and priority (see WWF ecoregions, IUCN categories, UNESCO world heritage sites etc.).	2	 5 - yes, very high priority 4- yes, high priority 3- yes, medium priority 2 - yes, low priority 1 - no, not a priority
7	Degree of Degradation at the site (e.g. type of degradation)	3	5 – extremely high 4 – high 3 – average 2 – low 1 – very low
8	Extent of degradation on watershed/aquifer and any receiving coastal and marine resources and systems	2	5 – extremely high 4 – high 3 – average 2 – low 1 – very low

HOT SPOT ANALYSES

P. Title: Honiara water resources

Q. Location: Honiara

R. Surface Area: 25-30 km²

S. Context of the site:

T. Main human activity(ies) related to the site:

Extraction of water for Honiara City water supply for domestic, recreational and industrial uses.

U. Natural conditions/phenomenon related to the site:

Natural surface and groundwater resources with possible pollution from Honiara City residents and developments

V. Nature of threats and extent of threats (human and natural):

Sewage pollution, chemical pollution, land base developments compromised quality of water resource

W. If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):

Most likely source of pollution from sewage from Honiara City residents

Value of the site:	Local	National	Regional/global
Environmental	High	High	Low
significance			
Socio-economic	High	High	Low
significance			

List of available data sets:

0. MAJOR CONCERNS AND ISSUES

Major Concerns	Issues
1. Freshwater shortage	Reduction in stream flow and quality
	2. Pollution of existing supplies
	3. Salinisation of groundwater
	4. Unknown water resource potential
11. Pollution	5. Extent of pollution threat
	6. Microbiological
	7. Chemical
	8. Suspended solids
	9. Solid wastes
	10. Oil spills
111. Habitat and community modification	11. Loss of ecosystems or ecotones
	Type: freshwater
1V. Unsustainable exploitation of living	12. Over-exploitation
resources (e.g. forestry, fishing, commercial	
agriculture)	
V. Global change	13. Drought
VI. Other (please specify e.g public health,	14. Public health
economic productivity)	15. Economic productivity
	16. Recreational
	17. Social
	18. Tourism

9. Hot-Spot 3: __Honiara Water Resources_____

#	Name of the criteria	Weigh(1 – 4)	Rating
1	Size of affected area (as percentage of	1	1 - less than 1%
	total national land area)		2 - 1 to 5%
			3 - 5 to 10%
			4 - 10-50%
			5 - over 50%
2	Affected population (as percentage of	3	1 - less than 1%
	national population)		2 - 1 to 5%
			3 - 5 to 10%
			4 - 10 to 50%
			5 - over 50%
3	Extent to which the natural watershed,	4	5- very important (>80%)
	or aquifer and any associated receiving		4- important (50-80%)
	coastal and marine waters support the livelihood of local communities (e.g.		3- average importance (30-50%)
	subsistence or commercial farming,		2- low importance (10-30%)
	forestry, mining, tourism, fisheries);		1- very low importance (<10%)
4	Extent to which the natural watershed,	2	5- very important (>80%)
	or aquifer and any associated receiving		4- important (50-80%)
	coastal and marine waters support the national development (e.g. commercial		3- average importance (30-50%)
	farming, forestry, mining, tourism,		2- low importance (10-30%)
	fisheries);		1- very low importance (<10%)
5	Extent to which the site is a recognized	3	5 – yes, very high priority
	government priority (refer to National		4- yes, high priority
	Sustainable Development Strategy, or other strategic action plans e.g. NEAP)		3- yes, medium priority
	omer sumegie denon plans e.g. INDAL)		2 – yes, low priority
			1 – no, not a priority

6	Extent to which the site is of regional and/or global significance and priority (see WWF ecoregions, IUCN categories, UNESCO world heritage sites etc.).	2	 5 - yes, very high priority 4- yes, high priority 3- yes, medium priority 2 - yes, low priority 1 - no, not a priority
7	Degree of Degradation at the site (e.g. type of degradation)	3	5 – extremely high 4 – high 3 – average 2 – low 1 – very low
8	Extent of degradation on watershed/aquifer and any receiving coastal and marine resources and systems	2	5 – extremely high 4 – high 3 – average 2 – low 1 – very low

SENSITIVE AREA ANALYSES

X. Title: Guadalcanal Plains water resource

Y. Location: Guadalcanal

Z. Surface Area: 1,200 km²

AA. Context of the site:

BB. Main human activity(ies) related to the site:

Extraction of water for domestic, agricultural and industrial uses, fishing and recreational uses.

CC. Natural conditions/phenomenon related to the site:

Natural surface and groundwater resources with possible pollution from mining operation, agricultural and industrial developments

DD. Nature of threats and extent of threats (human and natural):

Sewage pollution, chemical pollution, land base developments compromised natural quality of water resources

EE. If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):

Most likely heavy pollution from mining operation and agricultural activities including pollution from residents of the area

Value of the site:	Local	National	Regional/global
Environmental significance	High	High	Low
Socio-economic significance	High	High	Low

List of available data sets:

0. MAJOR CONCERNS AND ISSUES

Major Concerns	Issues
1. Freshwater shortage	Reduction in stream flow or quality
	2. Pollution of existing supplies
	3. Salinisation of groundwater
11. Pollution	4. Microbiological
	5. Chemical
	6. Suspended solids
	7. Solid wastes
	8. Oil spills
111. Habitat and community modification	9. Loss of ecosystems or ecotones
	Type: freshwater
1V. Unsustainable exploitation of living	10. Over-exploitation
resources (e.g. forestry, fishing, commercial agriculture)	11. Impact on biological and genetic diversity
V. Global change	
VI. Other (please specify e.g public health,	12. Public health
economic productivity)	13. Economic productivity
	14. Recreational
	15. Social activities

0. Sensitive Area 1: _Guadalcanal Plains water resources____

	Name of the criteria	Weigh(1-4)	Rating
1	Size of affected area (as percentage of	3	1 – less than 1%
	total national land area)		2 – 1 to 5%
			3 – 5 to 10%
			4 – 10 to 50%
			5 – over 50%
2	Affected population (as percentage of	2	1 – less than 1%
	national population)		2 – 1 to 5%
			3 – 5 to 10%
			4 – 10 to 50%
			5 – over 50%
3	Extent to which the natural watershed,	2	5- very important (>80%)
	coastal and marine resources of the site		4- important (50-80%)
	support the livelihood of local communities (for instance, in the case of		3- average importance (30-50%)
	fisheries, tourism);		2- low importance (10-30%)
			1- very low importance (<10%)
4	Extent to which the natural watershed,	3	5- very important (>80%)
	coastal and marine resources of the site		4- important (50-80%)
	support the national development (for instance, in the case of fisheries,		3- average importance (30-50%)
	tourism);		2- low importance (10-30%)
			1- very low importance (<10%)
5	Extent to which the site is a government	4	5 – yes, very high priority
	priority (refer to NEAP or other strategic		4- yes, high priority
	environmental action programme)		3- yes, medium priority
			2 – yes, low priority
			1 – no, not a priority

6	Extent to which the site is of regional	4	5 – yes, very high priority
	and/or global significance and priority		4- yes, high priority
	(see WWF ecoregions, IUCN categories,		3- yes, medium priority
	etc.).		3- yes, medium priority
			2 – yes, low priority
			1 – no, not a priority
7	Biodiversity value of the site	2	5 – extremely high
			4 – high
			3 – average
			2 – low
			1 – very low
8	Cultural value of the site	3	5 - extremely high
	Cultural variet of the site	3	o extremely high
			4 – high
			3 – average
			2 – low
			2 – low 1 – very low
9	Extent of involvement of communities	2	
9	Extent of involvement of communities in local management	2	1 – very low
9		2	1 – very low 5 -extremely high
9		2	1 – very low 5 -extremely high 4 – high 3 – average
9		2	1 – very low 5 -extremely high 4 – high

HOT SPOT ANALYSES

FF. Title: Auluta Basin

GG.Location: Malaita

HH.Surface Area: 50-100 km²

II. Context of the site:

JJ. Main human activity(ies) related to the site:

Subsistence farming, extraction of materials for housing, hunting, residents.

KK. Natural conditions/phenomenon related to the site:

Partly natural and subsistence farming basin with threat of vegetation clearance for oil palm plantation that could result in pollution of water resources

LL. Nature of threats and extent of threats (human and natural):

Sewage pollution, chemical pollution, land base developments compromised natural basin for subsistence land use practice as means to promote sustainability

MM.If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):

Limited pollution from residents within the basin

Value of the site:	Local	National	Regional/global
Environmental	High	High	Low
significance			
Socio-economic	High	High	Low
significance			

List of available data sets:

0. MAJOR CONCERNS AND ISSUES

Major Concerns	Issues		
1. Freshwater shortage	Reduction in stream flow or quality		
	2. Pollution of existing supplies		
11. Pollution	3. Microbiological		
	4. Chemical		
	5. Suspended solids		
	6. Solid wastes		
	7. Oil spills		
111. Habitat and community modification	8. Loss of ecosystems or ecotones		
	Type: freshwater, terrestrial, vegetation		
1V. Unsustainable exploitation of living	9. Over-exploitation: fishing		
resources (e.g. forestry, fishing, commercial agriculture)	10. Impact on biological and genetic diversity		
V. Global change			
VI. Other (please specify e.g public health,	11. Public health		
economic productivity)	12. Economic productivity		
	13. Social & communal activities		

15. Sensitive Area 2: __Auluta Basin_____

	Name of the criteria	Weigh(1 – 4)	Rating
1	Size of affected area (as percentage of	3	1 – less than 1%
	total national land area)		2 – 1 to 5%
			3 – 5 to 10%
			4 – 10 to 50%
			5 – over 50%
2	Affected population (as percentage of	2	1 – less than 1%
	national population)		2 – 1 to 5%
			3 – 5 to 10%
			4 – 10 to 50%
			5 – over 50%
3	Extent to which the natural watershed,	2	5- very important (>80%)
	coastal and marine resources of the site		4- important (50-80%)
	support the livelihood of local communities (for instance, in the case of		3- average importance (30-50%)
	fisheries, tourism);		2- low importance (10-30%)
			1- very low importance (<10%)
4	Extent to which the natural watershed,	3	5- very important (>80%)
	coastal and marine resources of the site		4- important (50-80%)
	support the national development (for instance, in the case of fisheries,		3- average importance (30-50%)
	tourism);		2- low importance (10-30%)
			1- very low importance (<10%)
5	Extent to which the site is a government	4	5 – yes, very high priority
	priority (refer to NEAP or other strategic		4- yes, high priority
	environmental action programme)		3- yes, medium priority
			2 – yes, low priority
			1 – no, not a priority

6	Extent to which the site is of regional	4	5 – yes, very high priority
	and/or global significance and priority		4- yes, high priority
	(see WWF ecoregions, IUCN categories,		3- yes, medium priority
	etc.).		3- yes, medium priority
			2 – yes, low priority
			1 – no, not a priority
7	Biodiversity value of the site	2	5 – extremely high
			4 – high
			3 – average
			2 – low
			1 – very low
8	Cultural value of the site	3	5 - extremely high
			4 – high
			3 – average
			2 – low
			1 – very low
9	Extent of involvement of communities	2	5 - extremely high
	in local management		4 – high
			3 – average
			2 – low
			1 – very low

HOT SPOT ANALYSES

NN. Title: Water shortages in low lying Atolls

OO.Location: Solomon Islands

PP. Surface Area: 100-200 km²

QQ.Context of the site:

RR. Main human activity(ies) related to the site:

Extraction of water resource for domestic and recreational uses.

SS. Natural conditions/phenomenon related to the site:

Natural groundwater with pollution from residents, salt intrusion

TT. Nature of threats and extent of threats (human and natural):

Sewage pollution, chemical pollution, salt intrusion

UU.If heavy incidence of pollution, list the type of source (point, non point, diffuse) and pre-identify the exact source(s):

Most likely heavy pollution from sewage from resident

Value of the site:	Local	National	Regional/global
Environmental	High	High	Low
significance			
Socio-economic	High	High	Low
significance			

List of available data sets:

0. MAJOR CONCERNS AND ISSUES

Major Concerns	Issues		
1. Freshwater shortage	Pollution of current supplies		
	2. Salinisation of groundwater		
11. Pollution	3. Microbiological		
	4. Chemical		
111. Habitat and community modification			
1V. Unsustainable exploitation of living	5. Over-exploitation		
resources (e.g. forestry, fishing, commercial			
agriculture)			
V. Global change			
VI. Other (please specify e.g public health,	6. Public health		
economic productivity)	7. Economic productivity		
	8. Recreational		
	9. Social		

18. Sensitive Area 3: __Water shortage in low lying Atolls____

	Name of the criteria	Weigh(1 – 4)	Rating
1	Size of affected area (as percentage of	3	1 – less than 1%
	total national land area)		2 – 1 to 5%
			3 – 5 to 10%
			4 – 10 to 50%
			5 – over 50%
2	Affected population (as percentage of	2	1 – less than 1%
	national population)		2 – 1 to 5%
			3 – 5 to 10%
			4 – 10 to 50%
			5 – over 50%
3	Extent to which the natural watershed,	2	5- very important (>80%)
	coastal and marine resources of the site		4- important (50-80%)
	support the livelihood of local communities (for instance, in the case of		3- average importance (30-50%)
	fisheries, tourism);		2- low importance (10-30%)
			1- very low importance (<10%)
4	Extent to which the natural watershed,	3	5- very important (>80%)
	coastal and marine resources of the site		4- important (50-80%)
	support the national development (for instance, in the case of fisheries,		3- average importance (30-50%)
	tourism);		2- low importance (10-30%)
			1- very low importance (<10%)
5	Extent to which the site is a government	4	5 – yes, very high priority
	priority (refer to NEAP or other strategic		4- yes, high priority
	environmental action programme)		3- yes, medium priority
			2 – yes, low priority
			1 – no, not a priority

6	Extent to which the site is of regional	4	5 – yes, very high priority
	and/or global significance and priority		4- yes, high priority
	(see WWF ecoregions, IUCN categories,		3- yes, medium priority
	etc.).		
			2 – yes, low priority
			1 – no, not a priority
7	Biodiversity value of the site	2	5 – extremely high
			4 – high
			3 – average
			2 – low
			1 – very low
8	Cultural value of the site	3	5 - extremely high
			4 – high
			3 – average
			2 – low
			1 – very low
9	Extent of involvement of communities	2	5 - extremely high
	in local management		4 – high
			3 – average
			2 – low
			1 – very low

19. Aggregated Table for Hot-Spot

#	Criteria/Hot Spot	1	2	3
1	Size of affected area (as percentage of total national land	1	2	1
	area)			
2	Affected population (as percentage of national population)	9	9	9
3	Extent to which the natural watershed, or aquifer and any	12	16	20
	associated receiving coastal and marine waters support the			
	livelihood of local communities (e.g. subsistence or			
	commercial farming, forestry, mining, tourism, fisheries);			
4	Extent to which the natural watershed, or aquifer and any	10	10	10
	associated receiving coastal and marine waters support the			
	national development (e.g. commercial farming, forestry,			
	mining, tourism, fisheries);			
5	Extent to which the site is a recognized government priority	12	15	15
	(refer to National Sustainable Development Strategy, or			
	other strategic action plans e.g. NEAP)			
6	Extent to which the site is of regional and/or global	8	4	10
	significance and priority (see WWF ecoregions, IUCN			
	categories, UNESCO world heritage sites etc.).			
7	Degree of Degradation at the site (e.g. type of degradation)	15	15	12
8	Extent of degradation on watershed/aquifer and any	10	10	8
	receiving coastal and marine resources and systems			
	TOTAL SCORES(actual score with multiplications for	77	81	85
	weighting)			
	NORMALISED SCORE (i.e. as a percentage of a possible			
	top score of 100)			

Key issues relevant to the	Honiara water resources
hot spot area	2. Matepona River
	3. Urban Coastal Waters

Aggregated Table for Sensitive Area

	Criteria/Sensitive Area	1	2	3
1	Size of affected area (as percentage of total national land	6	3	3
	area)			
2	Affected population (as percentage of national population)	6	4	4
3	Extent to which the natural watershed, coastal and marine	10	10	10
	resources of the site support the livelihood of local			
	communities (for instance, in the case of fisheries, tourism);			
4	Extent to which the natural watershed, coastal and marine	15	15	12
	resources of the site support the national development (for			
	instance, in the case of fisheries, tourism);			
5	Extent to which the site is a government priority (refer to	20	20	20
	NEAP or other strategic environmental action programme)			
6	Extent to which the site is of regional and/or global	20	12	12
	significance and priority (see WWF ecoregions, IUCN			
	categories, etc.).			
7	Biodiversity value of the site	6	10	6
8	Cultural value of the site	15	15	15
9	Extent of involvement of communities in local management	10	10	10
	TOTAL SCORES (actual score with multiplications for	108	99	92
	weighting)			
	NORMALISED SCORE (i.e. as a percentage of a possible			
	top score of 125)			

Key issues relevant to the	Guadalcanal Plains water resources	
sensitive area	2. Auluta Basin	
	3. Water shortages in low lying Atolls	

Summary Table of Prioritised Hot-Spots and Sensitive Areas

Country: Solomon Islands

Total Population: 410,000

VV. Major Integrated Water Resource and Wastewater Management Issues

Selected Hot-Spots					
	Title Score Priority Issue				
Hot-Spot 1	Honiara water resources	85	Pollution		
Hot-Spot 2	Matepona River	81	Pollution		
Hot-Spot 3	Urban Coastal Waters	77	Pollution		
	Selected Sensitive Areas				
	Title Score Priority Issue				
Sensitive Area 1	Guadalcanal Plains water resources	108	Pollution		
Sensitive Area 2	Auluta Basin	99	Pollution		
Sensitive Area 3	Water shortages in low lying Atolls	92	Others		