



# Watershed Working Group

25 January, 2011

# Meeting Agenda

**9:30 Opening Remarks – Fran Castro**

**9:45 Brief history of CNMI Watershed Working Group –  
Fran Castro**

**10:00 Introduction to Stormwater Sampling Project –  
Rachel Zuercher**

**10:15 Group discussion to determine priority testing  
sites – Rachel Zuercher**

**10:45 Schedule next meeting – Fran Castro**



**Commonwealth Of The  
Northern Mariana Islands**  
Saipan, Tinian, Rota, And Northern  
Islands

# **Unified Watershed Assessment**

September 1998



**WATERSHED PLANNING GROUP**  
**MISSION, OBJECTIVES, STRATEGIES, AND WORK TASKS**

- A. Determine Group Directions**
1. Develop interagency watershed group's identity through official CNMI and Federal designation.
  2. Generate ideas for resource use and development.
  3. Focus on problem watersheds.
  4. Prioritize watersheds for resource protection.
  5. Develop strategies to achieve objective goals.
  6. Utilize Soil and Water Conservation District - expand Soil and Water Conservation District's role to include non-agriculture issues.
- B. Provide Technical Assistance**
1. Provide guidance for total resource management.
  2. Share collective knowledge for decision makers.
  3. Support individual agency efforts.
  4. Provide collected resource information to agencies or groups for their use.
  5. Provide information on land development pressures for use by agencies.
  6. Identify resource considerations for infrastructure development.
  7. Delineate desired areas for preserves, parks, or temporary moratorium areas including connecting corridors between these.
  8. Adapt known resource information for geographic information system use.
- C. Be Involved with Decision Making and Regulatory Changes**
1. Increase agency (inc. Federal) participation in permitting activities.
  2. Promote more coordinated project review procedures.
  3. Support development of CNMI's coastal nonpoint pollution plan.
  4. Develop ameliorative approach to const. watershed management.
  5. Develop resource protection strategies for incorporation into zoning standards.
  6. Assist in the protection of watershed resources with better water wellhead protection measures--incorporate into projects.
  7. Initiate legislative action for critical watershed protection.
- D. Develop Specific Work Products**
1. Promote public education of watershed processes.
  2. Promote public education regarding effects of land clearings.
  3. Produce an atlas of CNMI island resources.
  4. Develop natural resource library for public or college library.
  5. Develop an on-island natural resources expertise roster.
- E. Funding**
1. Assist in prioritizing grant dollar expenditures for infrastructure.
  1. Attract new grant dollars for watershed projects.
  2. Receive funds to implement (pooling of resources)
  3. Maximize use of limited funding dollars to eliminate duplication of effort.





# **RFP11-DEQ-039**

## **“Saipan Stormwater Quality Sampling and Watershed Boundary Delineation”**

**...are soliciting proposals from qualified firms to conduct stormwater quality sampling within priority drainages in Saipan to provide sound data upon which decisions can be based regarding our local action strategies and overall non-point source pollution reduction plans.**

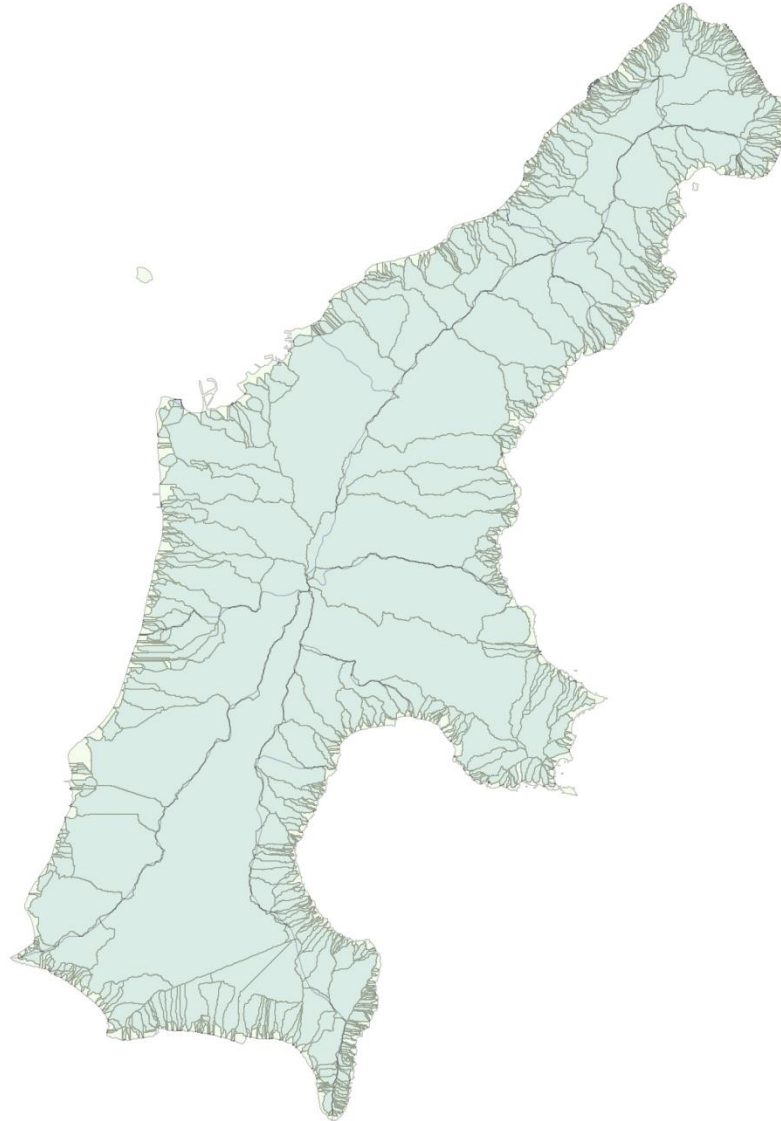
**Proposal deadline: 9 February, 2011**



# Major Project Objectives

- **Ground-truth six (6) sub-watershed boundaries**
- **Gather stormwater quality data in ten (10) priority areas**
- **Develop final report to be used by resource agencies for project planning and site prioritization**

# Sub-watershed Boundary Mapping





# Stormwater Quality Sampling

***2. Locations of water quality concern throughout Saipan have been identified and will be the focus of this portion of the project. Stormwater flows upstream of these areas will be used as water quality sampling points. Data will be collected at these points and analyzed for dissolved oxygen, temperature, pH, conductivity, turbidity, nitrates and phosphates in accordance with the DEQ lab. No less than three points on one flow should be sampled. The contractor is responsible for developing an appropriate sampling plan (to be approved by DEQ).***





# Ten Priority Areas?

- Tanapag drainage area
- Lower Base drainage area
- Laolao – stormwater monitoring is underway

**CNMI Watershed Working Group is tasked with identifying the ten priority sites on Saipan for stormwater quality testing.**



**“Using the new watershed-based waterbody segments, an entire segment is listed as impaired for recreational use if beach advisories are issued for more than 10% of all sampling events in a given year, for any single monitoring site within the segment.”**

**DEQ 305(b) Water Quality Report, 2010**



<b>Watershed Segment</b>	<b>Pollutant</b>	<b>Pollutant Source</b>	<b>TDML Priority</b>
Kalabera	O	Unknown	L
Talofofo	E, O	Livestock, Sediment	H
Kagman	E, O	OSTS	H
Laolao	E, Bio, O	OSTS, Sediment, Livestock	H
Isley West	E, O	Unknown, Municipal PS (Agingan outfall)	M
Isley East	E, O	Unknown, Sediment	
Susupe North	DO, O	SSO, Urban Runoff	M
Susupe South	E, DO, O	SSO, Urban Runoff	M
W Takpochau North	E, DO, Bio, O	SSO, UR, Sediment, Landfills, MPS	H
W Takpochau Central	E, Mer, DO Bio, O	SSO, UR, Sediment	H
W Takpochau South	DO, Bio, O	SSO, UR, Sediment	M
Achugao North	E, DO, Bio, O	OSTS, SSO, UR, Sediment, Livestock	M
Achugao South	E, DO, Bio, O	OSTS, SSO, UR Sediment, Livestock	H
As Matuis	DO, O	OSTS, Sediment, Livestock	L
Managaha	O	OSTS (Improved)	L
Lake Susupe	E. coli	Unknown	

**O - Orthophosphates**

**E - Enterococci**

**Bio - Biocriteria**

**DO - Dissolved Oxygen**

**OSTS - On-site Treatment Station**

**MPS - Municipal Point Source**

**UR - Urban Runoff**

**SSO - Sanitary Sewer Overflows**

