

Clean Water Act Section 303(d): Total Maximum Daily Loads

Guam Stormwater Workshop
July 27, 2011



Session Objectives

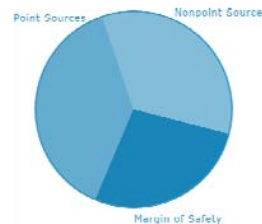
- Brief overview of CWA section 303(d) and Total Maximum Daily Load Program
- Approved TMDLs in Guam
- Relationship with storm water and construction and development
- Summary - Possible implications for dischargers

Clean Water Act

- Section 305(b) of the Clean Water Act (CWA) requires States and Territories to assess waterbodies every two years.
- Total Maximum Daily Loads (TMDLs) prepared for impaired waters on the Section 303(d) list.
- A TMDL is the maximum amount of pollutant that can be discharged to the waterbody and still meet water quality standards.

Total Maximum Daily Load

- $TMDL = \sum WLA + \sum LA + \text{Allowance for Future Growth} + \text{Margin of Safety}$
 - Waste Load Allocations (WLAs) assigned to point sources.
 - Load Allocations (LA) assigned to non-point sources.
 - In practice, allocations may be expressed as mass, concentration, or other measures.



Approved TMDLs in Guam

- Ugum Watershed Sediment TMDL – approved by U.S. EPA February 22, 2007
- Guam Northern Watershed Beaches Bacteria TMDL – approved by U.S. EPA March 17, 2010



Ugum Sediment TMDL

- Ugum Watershed 7.3 square miles, south from Talofofo and Fena watersheds in southern Guam
- No point sources identified; WLA = 0
- Implementation currently through voluntary nonpoint source program projects

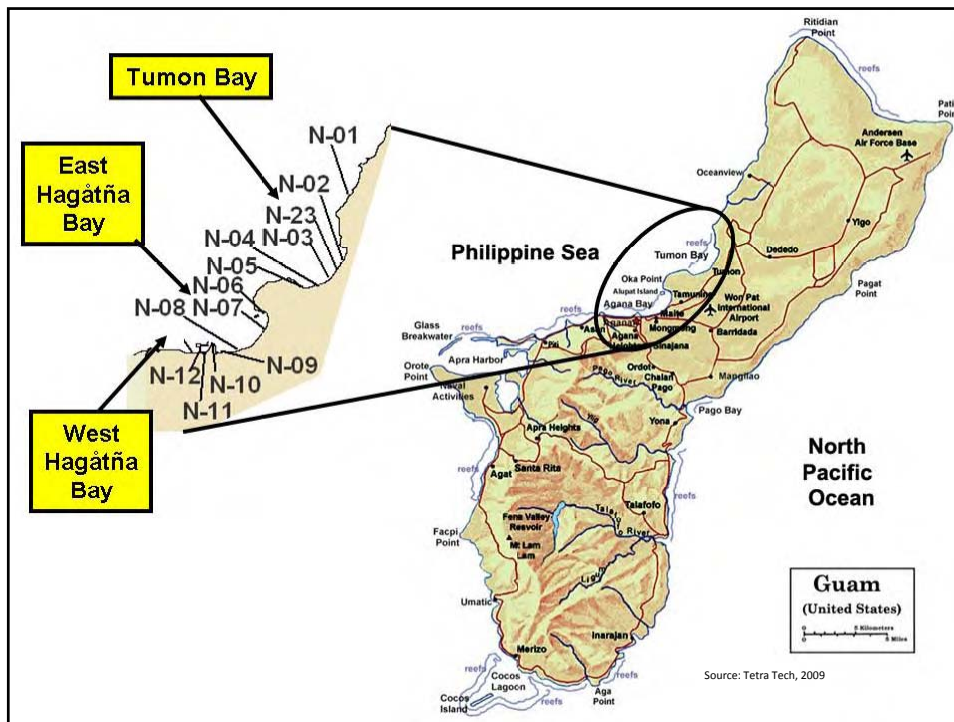


Effective Erosion and Sediment Control

- Effective erosion and sediment control for construction in the affected watersheds can improve water quality and mitigate future implications of the TMDL
- Other likely measures include:
 - Numeric effluent limits
 - Requirements placed on MS4's
 - Regional projects
 - Other non-point source project

Guam Northern Watershed Beaches Bacteria TMDL

- N01-Tanguisson Beach
- N24-Gun Beach
- N25-North San Vitores /Okura
- N02-San Vitores
- N23-Fujita
- N03-Matapang Beach Park
- N04-Guma Trankilidat
- N05-Ypao Beach
- N06-Sleepy Lagoon
- N07-Dungca's Beach
- N26-Alupang Towers Beach
- N08-Trinchera Beach
- N09-Padre Palomo Park
- N10-Hagåtña Channel
- N11-Paseo Outrigger Ramp
- N12-Hagåtña Boat Basin
- N13-Hagåtña Bayside Park



Summary Points

- TMDLs provide another level of protection for impaired water bodies
- Implementation plans can have implications for point source and nonpoint source dischargers
- Effective erosion and sediment control can provide significant benefits

Resources

- Ugum Sediment TMDL document:
http://www.epa.gov/waters/tmdl/docs/33620_Ugum%20Sediment%20TMDL.pdf
- EPA's Impaired Waters and TMDL Program:
<http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/>

Questions?