

Anacostia River Watershed Trash TMDL

Public Meeting
Washington, D.C.
May 6, 2010





What is a TMDL?

- Total Maximum Daily Load.
- Required under the federal Clean Water Act.
- The maximum amount of an impairing substance or stressor that a waterbody can receive without violating water quality standards.
- Allocates load among pollutant sources (i.e., point and nonpoint).



TMDL Development Process

- $TMDL = WLA + LA + MOS (+ FA)$.
WLA = Wasteload Allocation to point sources.
LA = Load Allocation to Nonpoint Sources.
MOS = Margin of Safety.
FA = Future Allocation (included if applicable).
- Currently expressed as a “mass per unit time, toxicity, or other appropriate measure” (40 CFR 130.2(i)).
- Documentation



Next Steps

- Public Comments are due to DDOE and MDE by May 18, 2010
- All comments will be considered before the TMDL Report is finalized and submitted to EPA for approval



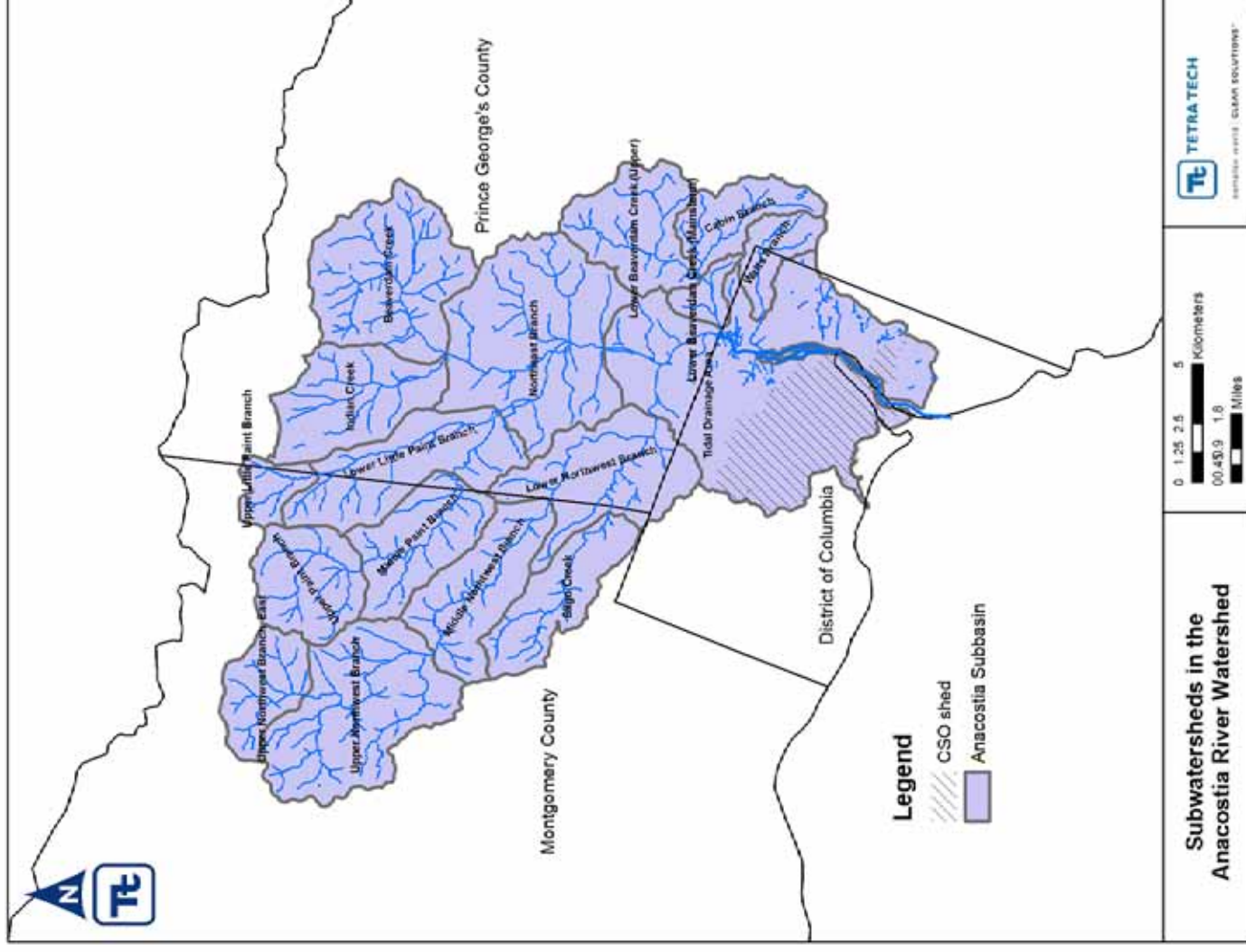
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Anacostia Watershed

- Population over 800,000
- Over 170 sq. miles
- 80% in MD
- 20% in DC



Monitoring Data

- DC Storm Drain Outfall Monitoring
- DC CSO Data
- MD Storm Drain Outfall Monitoring
- DC In-stream Monitoring
- MD In-stream Monitoring



Storm Drain Outfall Monitoring

- Trash traps and trash nets at a variety of land uses to capture trash loading variability
- Loading rates for individual land uses were established
- Only trash, no organic material counted
- Used to calculate point source baseline load



Baseline Load Calculations

- Used loading rates derived from storm drain outfall and in-stream monitoring
- Baseline loads developed for
 - Point sources - MS4, CSO, Permitted Federal, State and Local Facilities
 - Non-point sources



Point Source vs Nonpoint Source

- Point source trash
 - Items small enough to move through storm drain system
 - Bottles, cans, food wrappers, bags, Styrofoam, etc.
- Nonpoint source trash
 - Items too large to move through storm drain system
 - Vehicles, vehicle parts, construction materials, appliances, bikes, etc.
- Defined as such to prevent double counting of trash



DC Point Source Baseline Load

MS4	LU specific based on outfall monitoring	Upper Anacostia 79,874 lbs/yr Lower Anacostia 23,314 lbs/yr
Other Point Sources	LU specific loading rates for DC	Upper Anacostia 7,879 lbs/yr Lower Anacostia 6,457 lbs/yr
CSO	Loading rate and avg. annual CSO volume	Upper Anacostia 62,401 lbs/yr Lower Anacostia 31,185 lbs/yr



MD Point Source Baseline Load

- Load based on land use-specific loading rates for MD derived from outfall monitoring

MS4	Montgomery County	226,869 lb/yr
	Prince George's County	262,393 lb/yr
	Takoma Park	5,488 lb/yr
Federal/State /Local Facilities	Montgomery County	10,896 lb/yr
	Prince George's County	14,862 lb/yr



DC Nonpoint Source Baseline Load

- Loading rates from in-stream sampling were applied to entire stream length of each tributary and mainstem
 - Upper Anacostia 18,343 lb/yr
 - Lower Anacostia 1,705 lb/yr
- Some variation in loading rates, but difference in load is mostly a result of more stream length in Upper Anacostia



MD Nonpoint Source Baseline Load

- Loading rates from in-stream sampling averaged by county and applied to entire stream length of each tributary and mainstem
 - Montgomery County 65,945 lbs/yr
 - Prince George's County 347,958 lbs/yr
- PG County > Montgomery County Loading rates
 - largely due to prevalence of cars, car parts and construction materials.



Trash TMDL

MO CO	Waste Load Allocation	243,253 lb/yr removed
	Load Allocation	65,945 lb/yr removed
PG CO	Waste Load Allocation	314,052 lb/yr removed
	Load Allocation	347,958 lb/yr removed
DC Upper	Waste Load Allocation	150,154 lb/yr removed
	Load Allocation	18,343 lb/yr removed
DC Lower	Waste Load Allocation	60,956 lb/yr removed
	Load Allocation	1,705 lb/yr removed

- TMDL Target = 100 % removal of baseline trash load
- TMDL includes daily loads as well



Assurance of Implementation MS4 and CSS Permits

- DC MS4 permit requires submission of a TMDL implementation plan with an established performance based benchmark
- Montgomery County MS4 permit renewed in February 2010, requires TMDL implementation plans and specifically addresses trash
- Prince George's County MS4 permit expected to be renewed in the next year, most likely with same requirements as Mont. Co.
- DC CSS permit addresses trash-removal in the Nine Minimum Controls and the Long Term Control Plan



Assurance of Implementation Institutional Controls

- Anacostia Watershed Trash Reduction Strategy (MWCOG 2007)
- Potomac River Watershed Trash Treaty (Alice Ferguson Foundation 2005)
- DC Anacostia Watershed Trash Reduction Plan (AWS 2008)
- Anacostia River Clean-Up and Protection Act (DC 2009) – “Bag Ban”



TRASH TMDL COMMENTS

DUE MAY 18, 2010

COMMENTS

- PLASTIC BAGS
- REGIONAL FOOD COMPOSTING
- REOPEN ALL PERMITS
- MDOT BRIDGES
- COUNTY BRIDGES
- PUBLIC PARTICIPATION
- OTHER BASINS

COMMENTS- CONT'D

- LOCAL STORMWATER PERMITS & ALL TMDL POLLUTANTS
- TRASH FREE POTOMAC
- PRIOR APPROVAL TO SIGN ON TO OTHER ORGANIZATIONS LETTERS