

Overview of TMDL Plans

TMDL Plan Workshop
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Outline:

- Details
- Schedule
- Plan Elements
- Issues



Some Terminology

- In MD – restoration plans
- In VA – action plans
- In DC – implementation plan

All refer to need for MS4 permittees to file plans documenting how and when they will achieve all applicable wasteload allocations (WLAs) for promulgated TMDLs

Permit Requirement Details

As part of the TMDL restoration plans, County shall:

- Include the ***final date*** for meeting applicable WLAs and a ***detailed schedule*** for implementing all structural and nonstructural water quality improvement projects, enhanced stormwater mgmt prgms, and alternative stormwater control initiatives necessary for meeting applicable WLAs;
- Provide ***detailed cost estimates*** for individual projects, programs, controls, and plan implementation;
- Evaluate and track the implementation of restoration plans through ***monitoring or modeling to document the progress*** toward meeting established benchmarks, deadlines, and stormwater WLAs; and
- Develop an ongoing, **iterative** process that continuously implements ... projects, programs, etc.

(Language from Maryland permits issued in 2014)

Non-Bay TMDL WLAs in Region

of stormwater wasteload allocations by category in major COG jurisdictions

DRAFT

Pollutant	DC	MD			
	<i>Note: DC data to be added in consultation with DC DOE staff</i>	Charles	Frederick	Montgomery	Prince George's
Biological Oxygen Demand				2 (Nutrients)	5 (Nutrients)
Enterococci				2	2
Escherichia (E.COLI)			3	2	2
Fecal Coliform (F.COLI)		1			
Nitrogen (TN)		1		2	6
Phosphorous (TP)		1	4	6	7
Sediment (TSS)			5	10	11
Polychlorinated Biphenyls (PCBs)		7		2	7
Other Toxics					
Trash				1	2
		VA			
Pollutant	Alexandria	Arlington	Fairfax	Loudoun	Prince William
Escherichia (E.COLI)	3	2	16 (6 nested)	1	11 (7 nested)
Fecal Coliform (F.COLI)	3	1	2		1
Nitrogen (TN)					
Phosphorous (TP)					
Polychlorinated Biphenyls (PCBs)	3	1	4		
Sediment (TSS)			3	2	1

Notes: Data derived from individual MS4 permit addendums in Virginia; MDE's TMDL Data Center accessed at <http://wlat.mde.state.md.us/ByMS4.aspx>. Did not separately count WLAs for different sections of the same watershed

Deadlines for Plans

MD Phase I permits – within 1 year of permit issuance

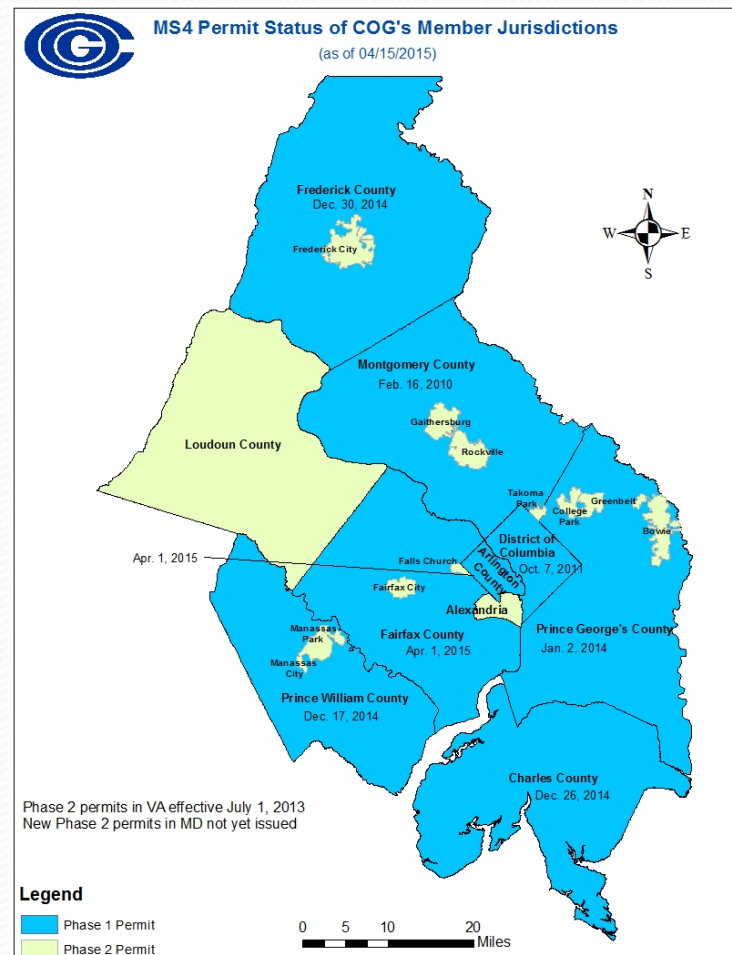
MD Phase II permits – tbd

VA Phase I permits -- within 2 years of permit issuance

VA Phase II permits – 2-3 years depending on when TMDLs were issued

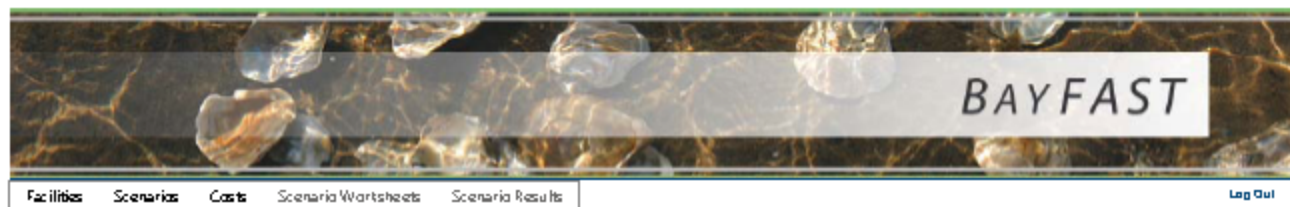
DC Phase I permit -- within 2 years of permit issuance

“Approval” of regulatory agency



Basic Elements of Plan

- Individual (or aggregate) wasteload allocations – as set by TMDLs
- Baseline Loads – load of a specific pollutant generated by the MS4 at the time of TMDL issuance – used to determine load reduction needed to attain WLA either in percentage (percent reduction) or absolute load terms
 - Almost always based on modeling
 - Maybe CBP watershed model (BayFast tool)
 - Helpful to calculate BMPs on ground at that time





Basic Elements (cont)

- Final Dates by which individual WLAs will be attained.
- Interim Goals – amount of progress in load reduction to be achieved during current 5-year permit term (beyond that-?)
 - In DC plan, milestones = enforceable targets in 5-year permits; benchmarks = estimated annual load reductions -- not enforceable
- Assessing Progress - via modeling or monitoring

Other Elements of Plan

- Adaptive Management / Living Document– permit language or guidance talks about ability to modify schedules and other plan elements in response to new conditions
 - Can you modify load allocations? (not without reopening TMDL)
 - Can you modify final attainment date?
- Consolidated plans can be used rather than individual plans for each WLA
 - Examples include Montgomery, DC
- Public Participation – (MD and DC)
 - may become more stringent in MD following recent Court of Special Appeals decision
- Documenting spending (MD and DC)



Issues

- Addressing infeasible or inaccurate TMDLs/WLAs
 - Percent reductions for non-Bay nutrient and sediment TMDLs may exceed Bay TMDL reductions
 - Bacterial reductions tend to be higher than nutrient, sediment reductions
 - Some WLAs (PCBs, some other toxics) don't lend themselves to numerical reduction approach
- Relationship to Bay Program's new Toxics Management Strategy
- Who's responsible for gathering data for delisting



More Issues

- Accounting for new development
- How adaptive will plans prove to be?
 - Changing Baselines – New version of CBP watershed model will change land use and loading estimates
 - Can end dates be adjusted
- Metrics / comparison between jurisdictions