

MDEStat Meeting

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Table 1: Overdue MDE PEPs FY09

Admin.	Number
ARMA	20
WAS	18
WMA	88
SSA	5
ASA	2
OS/CO	18

Table 2: FY05-08 Sampling Data

	FY05 Actual	FY06 Actual	FY07 Actual	FY08 Actual
Percent of sampled areas with PCB concentrations less than 175 parts per billion (ppb) (for all sampled species).	60%	64%	81%	76%
Percent deviation of PCB concentrations measured in indicator fish (white perch) from the 175 ppb level.	-13%	-13%	-12%	-1%
Percent of sampled areas with mercury concentrations less than 300 ppb (for all sampled species).	68%	69%	88%	80%
Percent deviation of mercury concentrations measured in indicator fish (small and largemouth bass) from the 300 ppb levels.	-5%	-2%	-34%	-21%

* Included in the calculation for this percentage were sampling areas for which PCB data were not available. For the purpose of fish consumption advisories these areas were only sampled for concentration of mercury in fish tissue.

t The threshold concentration used for this calculation was 88 ppb. It is not known what threshold value was used for FY05 and FY06 however, it possible the old threshold of 175 ppb was used because if used for FY07 the result would be -12.57%.

+ Included in the calculation for this percentage were sampling areas for which mercury data were not available. For the purpose of fish consumption advisories these areas were only sampled for concentration of PCBs in fish tissue.

Table 3: TMDL Acceleration Options in General

Option	Strategic Approach	Comments
A. Acid Mine Drainage (AMD)	<p>Implement passive and active dosing systems to return pH to standards. Conduct stream restoration as opportunities present themselves. Work with DNR to re-establish fisheries.</p> <p>Current actions are from limited §319 funds; find additional resources and a means to assure continuing maintenance to avoid new (or renewed) impairments.</p>	<ul style="list-style-type: none"> –Greater certainty of success than for nutrients. –Aaron’s Run is first case. Implementation is under way. –Casselman River is second case. –MDE Bureau of Mines is a key partner. –Fisheries benefits that appeal to local population and facilitate tourism and natural resource related recreation. –Maintenance cost is an outstanding issue.
B. Biological Integrity of non-tidal streams	<p>Maryland identifies biological impairments on a watershed basis using random sampling. Streams are identified on the 303(d) list if greater than 20% of stream miles are degraded. The strategy is to target implementation to watersheds that are just beyond the 20% threshold.</p>	<ul style="list-style-type: none"> –A dozen candidate watersheds have been identified. –Priority candidates tend to differ from 2010 Trust Fund priorities that target worst-case loading. –Opportunities to combine resources are being identified via a multi-agency process. –A “Recovery Potential” targeting method is being employed with EPA ORD support.
C. Fecal Bacteria impairments in shellfish waters	<p>Although bacteria impairments have a reputation for being intractable, some cases show promise because a) the watersheds for shellfish areas are often very small, and b) the percentage reduction needed can be as low as 14%.</p>	<ul style="list-style-type: none"> –Targeting has been initiated. –Deeper analysis of bacteria source tracking (BST) data offers promise as a diagnostic tool. –MDE field office is a key ally. –VA has extensive experience that is being tapped.
D. Ensure that all permits reflect TMDLs and and water quality standards	<p>Strategically we should use every opportunity to reference TMDLs.</p>	<ul style="list-style-type: none"> –E.g., existing turbidity standard should be referenced in both construction GP and individual permit, even if direct enforcement of that standard is unlikely; it brings attention to the requirement, and may provide a basis for enforcement in egregious or frequent violations where sampling may be possible.
E. Dredging offsets	<p>Dredged materials release nutrients. MDE could build a simple table for releases, dependent on dredging methods and volume, for which all dredgers would need to find offsets.</p>	<ul style="list-style-type: none"> –No cost to MDE. –Could greatly accelerate stormwater retrofits or fund septic upgrades.
F. Use more compliance oriented approach for Phase II stormwater jurisdictions	<p>Start floating the idea that subsequent to renewal of the next round of MS4 permits, MDE is going to look at requirements for Phase II jurisdictions.</p>	<ul style="list-style-type: none"> –Untapped opportunities.
G. Acceleration to Demonstrate Incremental Progress	<p>It is challenging to demonstrate Bay restoration or removed waters from the 303(d) list. Our back-up strategy is to demonstrate measurable, incremental water quality improvements. SSA has shared a white paper with EPA that lays out options for demonstrating success. These options infer ways to accelerate TMDL implementation that are most likely to show measurable results.</p>	<ul style="list-style-type: none"> –Analyze existing data to take credit for incremental progress. –Document improvements on micro-scale (systems of BMPs in small catchments). <ul style="list-style-type: none"> o 2010 Trust Fund evaluation process is using this principle. –Invest in implementation with promise to show measurable, incremental improvements.