Moving to Phase II
Watershed Implementation Plans

Regional Kick-off Meetings
January/February 2011
Overview

• The Bay water quality does not meet water quality standards despite three decades of effort to do so.

• Consequently, EPA and the States have agreed to a more regulatory approach that includes a Baywide TMDL, and implementation plans for that TMDL.

• Although goals are not met, we have made very considerable progress.
Progress

- Bay Agreement Voluntary Actions
- Some Required Actions:
  - Phosphate Detergent Ban
  - Potomac River WWTP Phosphorus Removal
  - Agricultural Nutrient Management Plans
  - Enhanced Nutrient Removal (ENR) Upgrades

**Nitrogen**

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**Phosphorus**

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Basic Background

- Court Settlement: Ches. Bay TMDLs by December 2010
- EPA Led a Regional TMDL Development and Allocation Process
- Watershed Implementation Plans:
  - Allow States to Allocate Loads
  - Support “Reasonable Assurance” of Implementation
  - Part of new federal “Accountability Framework” to Ensure Results
More Background

- Federal “Accountability Framework”
  - Bay TMDLs
  - Watershed Implementation Plans (WIPs)
  - 2-Year Implementation Milestones
  - Tracking & Evaluating Progress
  - Federal “Consequences”

- EPA made it clear from the WIP backstops that they are serious this time.

- Most basically, it is all about getting pounds of N, P and tons of sediment out of the Bay.
Glossary

- **Allocations**: Maximum allowable load; WLA and LA.

- **Basins**: Five major basins in Maryland: Potomac, Susquehanna, Patuxent, Western Shore, Eastern Shore.

- **Contingencies**: “Plan B” If a strategy does not achieve the projected load reduction a contingency must be in place to make up the deficit.

- **Sectors**: Point sources, agriculture, stormwater, septic, forest.
Glossary

- **Strategies**: Best management practices, programs or approaches that reduce nutrient and sediment loads.

- **Two Year Milestones**: part of the accountability framework. Goals will be assessed and contingencies imposed at two year intervals.

- **TMDL** = Wasteload Allocation + Load Allocation + MOS

- **WIP**: Watershed Implementation Plan
What is the WIP?

- Watershed **Implementation** Plan.
- Provides “reasonable assurance” for the TMDL, including reductions from non-regulated sectors.
- Creates the foundation for an **implementation** schedule and milestones.
- Provides the basis for accountability.
- Establishes the strategies and practices that will be used to reach the interim goal of 70% of the total reductions by 2017.
Phase I WIP

- Set equitable allocations by sector and basin.
- Provided legal basis for stricter permits to accelerate progress.
- The WIP provided a “default” implementation plan that can be used “as is” or applied proportionally during Phase II.
- Started the discussion.
Highlights of Phase I

- Finalized State allocations
- Continue the ENR strategy
- More stringent stormwater permits with increased focus on enforceability.
- Many new agricultural practices to be applied.
- Leaves room for smart growth
- Offset loads from all other growth.
Goal of Phase II

- Refinement of Phase I.
  - Refine strategies and finalize local allocations
  - Provide finer geographic resolution for allocations

- Increased emphasis on cost and cost effectiveness.
  - Develop more cost effective and lower cost strategies.
  - Develop funding approaches.
  - Trading/offsets

- Assign responsibility for load reductions.

- Respond to model changes and improvements.
Key Outcomes of Phase II

Will determine at local level:

• Who’s responsible for how much implementation

• Implementation costs to each source sector

• How much growth/economic development can fit, where, & at what costs
Who gets allocations?

• Any entity that generates significant loads and has authority or is required to control them. Examples:
  – Local governments: wastewater, stormwater, septic systems.
  – Soil Conservation Districts: agriculture.
  – State Highways: urban stormwater
  – Federal Facilities: urban stormwater, wastewater, agriculture
  – Other major facilities, e.g., airports, parks, etc. and atmospheric deposition.
Process and Approach

- Work at the county geographic scale to include all who get allocations.
- Start with revised allocations based on Model revision, using same equity rules as in TMDL and Phase I.
- Revise to achieve greater cost effectiveness and feasibility, but must still meet local water quality standards.
What will change from Phase I in Phase II?

• Strategies will be refined and adjusted:
  – Local governments can look for trades and similar opportunities
  – Model will be modified with respect to land use and nutrient management

• Increased geographic specificity

• Increased sector specificity
Approximate Time Line

All dates are contingent on receipt of EPA Final Results

Phase II

January, 2011

Begin Process w/Regional Meetings in Jan. and Feb.

Second Round of Regional Meetings in Mar., Apr., May

Expected Final Model Results

Working Meetings with Liaisons and full local teams

June, 2011

Phase III

December, 2011

Complete 2 Year Milestones

Draft WIP II

EPA Final model confirmation and public review

December, 2017

Expected Final Model Results

December, 2020

Phase III

June 30, 2012

All dates are contingent on receipt of EPA Final Results.
Time Frame

- Current schedule calls for submission by June 2011 – an extension has been requested.

- Regardless of extension, two year (2012-2013) milestones must be ready by December, 2011.

- Final model (5.3.2) and allocation may not be available until June – *we cannot wait for final numbers to begin working!*
Critical First Steps

• Meetings in January and February for elected officials, staff and liaisons.

• Identify county, municipal, SCD contacts.

• Identify county team.

• Building on existing plans (Phase I, WREs, Comp Plan, permits, local TMDLs) draft a preliminary work plan and begin work on strategy development.
Critical Next Steps

• Workplan for 2012-2013 milestones.

• “Infrastructure” priorities:
  – Funding: Opportunity to consult with Environmental Finance Center
  – Staffing: Admin and Technical
  – Tracking and Reporting

• Sector priorities: e.g., SW, Septics, Ag, WWTPs

• Geographic priorities

• Begin development of offset policy working with State agencies.
Growing Smarter

263,225 Additional Households Forecasted in Maryland (2010 -2020)
29% served by septic tanks
71% served by ENR WWTP
Offsetting Growth

- All growth adds to the nutrient load, but not equally, e.g. ENR plant vs. septics
- Areas will be classified as high, medium or low per capita impact
- Impose highest offset requirements (more than the added load) where loads per capita are high and least where loads are low
- There will be competition for scarce offsets
- Once TMDL allocations are achieved it will be necessary to maintain loads at allocation levels.
Pilot Experiences

• It can be done!
• Substantial effort for everyone.
• Communication is paramount.
• State or local can lead, but the Phase II Plan must meet State and EPA requirements.
• Build on WRE, existing local TMDLs*, Water and Sewer Plans, comp plans.
• Control your destiny.

* Any nutrient or sediment reductions for local TMDLs also count for Bay TMDL and vice versa.
More Experiences

- Start early.
- We are all doing this for the first time.
- BMP information is essential if you want to receive credit for what you have done.
- It will be a substantial effort for everyone and a consistent level of effort will be required from those involved.
Phase III

- 2017-2020
- May be preceded by revised TMDL in 2017.
- Expectation is that there will be new and innovative practices that can be applied at that time.
- Full implementation of what is needed to achieve water quality standards, by 2020.