



Department of the Environment

Moving to Phase II Watershed Implementation Plans

Regional Kick-off Meetings

January/February 2011





Overview

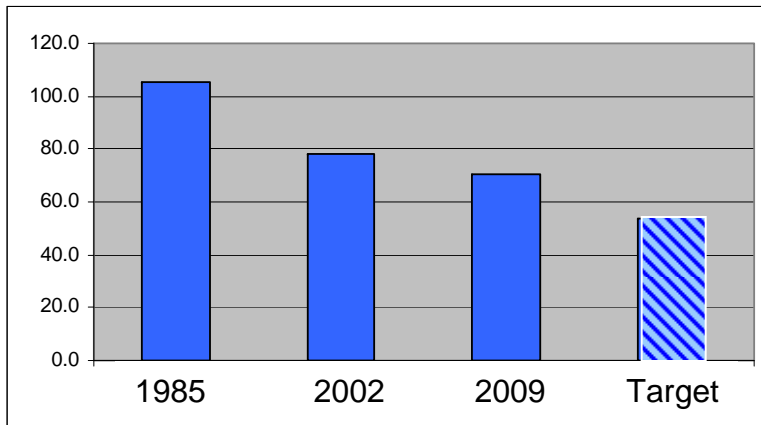
- The Bay water quality does not meet water quality standards despite three decades of effort to do so.
- Consequently, EPA and the States have agreed to a more regulatory approach that includes a Baywide TMDL, and implementation plans for that TMDL.
- Although goals are not met, we have made very considerable progress.



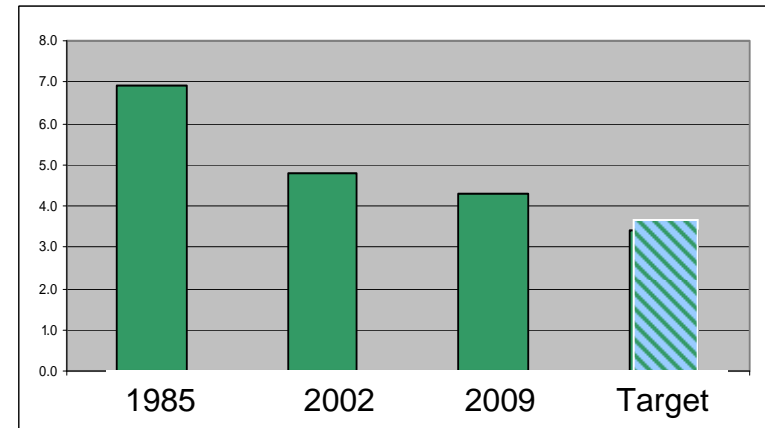
Progress

- 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



Phosphorus





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, septics, 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?

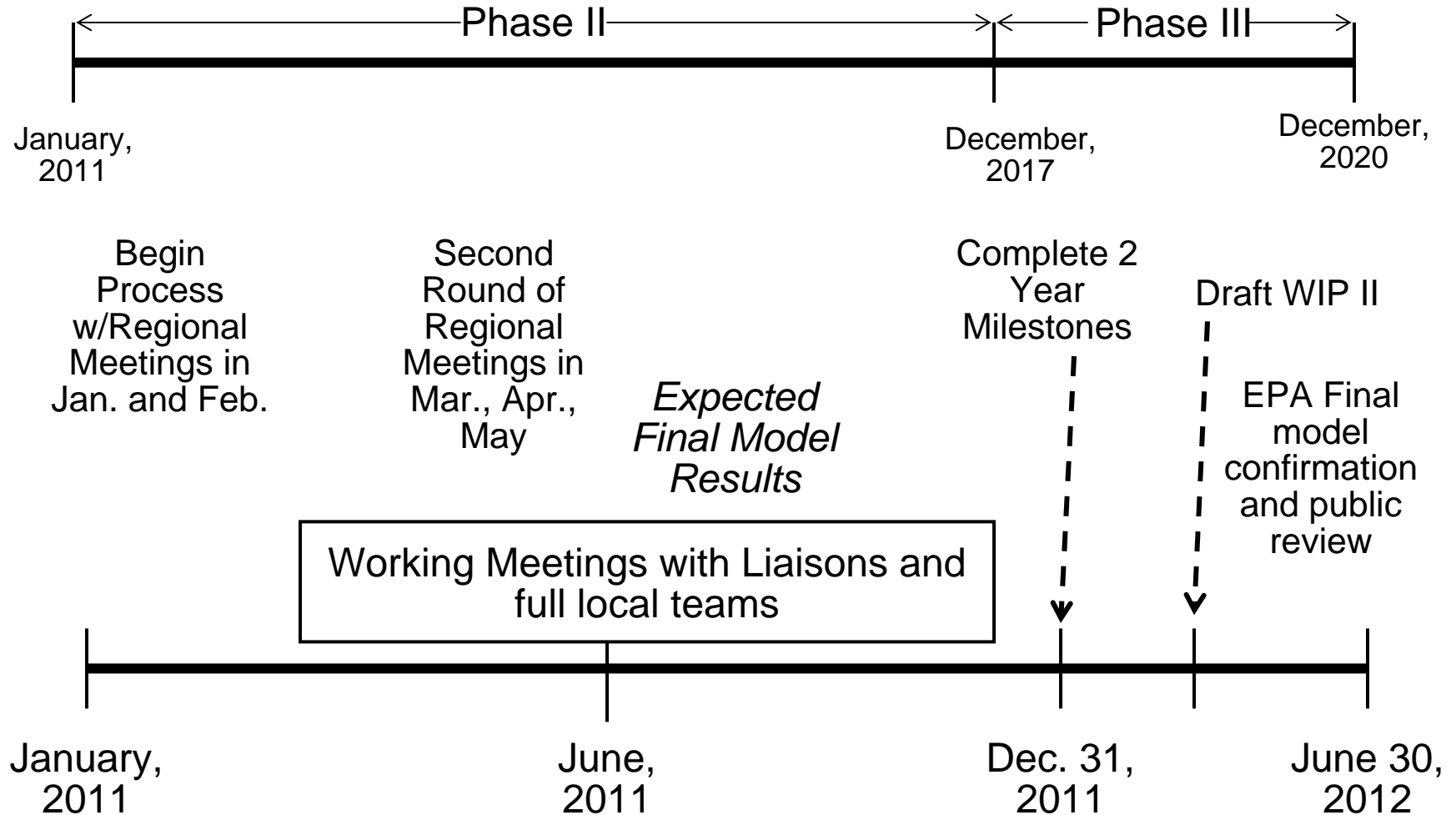
- Strategies will be refined and adjusted:
 - Local governments can look for trades and similar opportunities
 - Model will be modified with respect to land use and nutrient management
- Increased geographic specificity
- Increased sector specificity





Approximate Time Line

All dates are contingent on receipt of EPA Final Results





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.



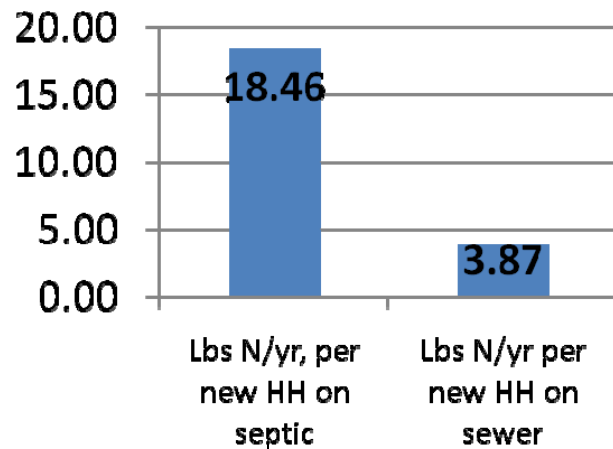


Critical Next Steps

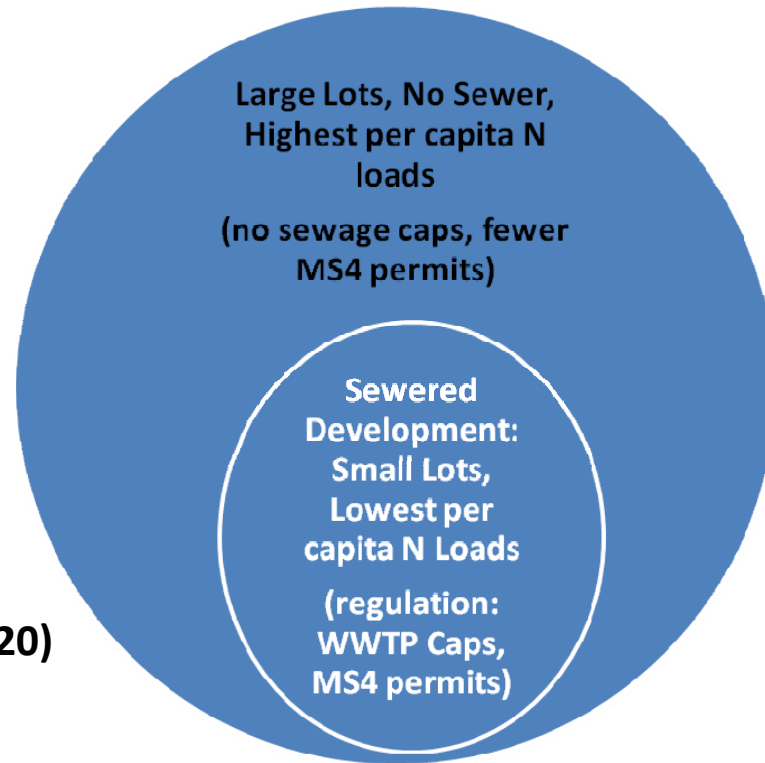
- Workplan for 2012-2013 milestones.
- “Infrastructure” priorities:
 - Funding: Opportunity to consult with **Environmental Finance Center**
 - Staffing: Admin and Technical
 - Tracking and Reporting
- Sector priorities: e.g., SW, Septics, Ag, WWTPs
- Geographic priorities
- Begin development of offset 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 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.