Phase II WIP Development

Potomac River Basin Drinking Water Source Protection Partnership Meeting

April 26th, 2011
To avoid getting lost in the details...

... lets boil it down to the basics:

- **Allocations:** For the major source sectors

- **2-Year Milestone Commitments for 2012 & 2013:**
  - Implementation Actions
  - Program Development Actions

- **2017 Interim Strategy:** Plausible actions for achieving 70% of the Final Target by 2017.
  - Implementation Actions
  - Program Development Actions
• **Agriculture**: Expanding & Adding Programs

• **Municipal Wastewater**:
  – Major ENR upgrades
  – Minor Upgrades? Some have been proposed.

• **Stormwater**:
  – Phase I & II MS4s: Target has been set in Phase I WIP
  – Opportunities for alternative reductions in near term

• **Septic Systems**:
  – An approach has been proposed in Phase I WIP
  – Consider alternative reductions

• **Other**: Industrial sources, Atmospheric…
Basic Expectations of WIP

• Interim & Final Target Loads

• Strategies to Meet Targets
  – Strategy Narrative
  – Load Reduction Analysis (& Gap Analysis)
  – Cost Estimate & Strategy to Address Funding Gap
  – Schedule for “Program Development” (Including Funding)

• Contingency Strategies

• Tracking, Reporting and Verification

• Accounting for Growth in Loads

• Capacity Analysis & 2-Year Milestones
Overview of Phase II Process

- Set up Local Teams
- Spring Activities before Numbers are Available*
- Orientation to Load Analysis Tools
- Assess Revised Phase I Allocations & Strategies
- Discuss & Refine Strategies and Target Loads
  - Reach Consensus, Use State Default or Hybrid
- Validate Revised Strategies via EPA Models
- Finish Writing Phase II Document
- Finalize 2-yr Milestones by end of 2011
- Public Review & Revise WIP (Fall of 2012)

* Described in Next Slide
New Numbers are not Ready until Late Spring…
… but there is Plenty to be Done.

Winter/Spring WIP Development Activities:

- Get Oriented (Study the Background Materials)
- Form Local Teams (Identify Local Primary Contacts)
- Local Governments: Setup Internal Coordination
- Determine “Current Capacity” for Implementation
- Begin Developing 2-Year Milestones
- Describe Tracking & Reporting (Current & Aspirations)
- Start WIP Report Documentation
- Prepare for Analyzing “the Numbers”
- Prepare for Trading and Offsetting Future Loads
## Phase I Interim Targets

### Nitrogen Reductions by 2017

<table>
<thead>
<tr>
<th>Source</th>
<th>Reduction (lbs)</th>
<th>Primary Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1,100,000</td>
<td>Many Practices</td>
</tr>
<tr>
<td>Wastewater</td>
<td>5,651,000</td>
<td>ENR Upgrades</td>
</tr>
<tr>
<td>Stormwater</td>
<td>448,000</td>
<td>Retrofit 20% - 30% of Developed land w/o Stormwater Controls</td>
</tr>
<tr>
<td>Septic Systems</td>
<td>290,000</td>
<td>Upgrade about 60% of systems in the Critical Area</td>
</tr>
</tbody>
</table>
- Predict the pace of implementation in the future
- Based on “current resources” (capacity)
- Worksheets to Standardize Information Request:

### Section I: Point Source Implementation Plan

<table>
<thead>
<tr>
<th>WWTP</th>
<th>Water Supply</th>
<th>Estimated Current Capability</th>
<th>Existing Limits</th>
<th>Strategies/Plans</th>
<th>Barriers/Obstacles</th>
<th>Tech Assistance Needed</th>
<th>New Initiatives</th>
<th>Tracking &amp; Monitoring</th>
<th>Stakeholder Role in Implementations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millington</td>
<td>T</td>
<td>Upper Chester</td>
<td>0.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worton</td>
<td>G</td>
<td>Motor Creek (Marlton Creek)</td>
<td>0.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kennettville</td>
<td>G</td>
<td>Motor Creek (Marlton Creek)</td>
<td>0.15</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toms River</td>
<td>G</td>
<td>DEP Pond</td>
<td>0.25</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Chesterland</td>
<td>T</td>
<td>Motor Creek</td>
<td>0.15</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seabrook</td>
<td>T</td>
<td>Toms River</td>
<td>0.15</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Section II:

**Watershed Restoration and Education Programs**

**Current Programs Implementing the Strategy:**
The following table is adapted from “A User’s Guide to Watershed Planning in Maryland” which provides a framework for how programs and policies could be aligned to protect and restore watersheds. In addition, this format also mirrors an approach outlined in Maryland Department of the Environment’s recently released TMDL Implementation Guidance. For more information:

http://www.mde.state.md.us/Programs/WaterPrograms/TMDL/TMDLImplementation2006guidanceDocument.asp
Example: Stormwater

- Phase I MS4 Jurisdiction Retrofit Goals

<table>
<thead>
<tr>
<th>Permitted Jurisdictions</th>
<th>County and Municipal Baseline Impervious Acres</th>
<th>Chesapeake Bay Program Urban Acres (Impervious and Pervious)</th>
<th>Budget (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Municipality</td>
<td>Total Land Area (Acres)</td>
<td>Total Urban Land in County (Acres)²</td>
<td>Equivalent Urban Watershed Acres Restored (Acres)³</td>
</tr>
<tr>
<td>Permit Issuance</td>
<td>Restrained Impervious Area (Acres)²</td>
<td>Percent Restored</td>
<td>Restoration Required Turn Current Permit (Acres)</td>
</tr>
<tr>
<td>11/8/2004</td>
<td>265,477</td>
<td>45,177</td>
<td>1,094</td>
</tr>
<tr>
<td>1/3/2005</td>
<td>51,418</td>
<td>23,373</td>
<td>1,659</td>
</tr>
<tr>
<td>6/15/2005</td>
<td>280,060</td>
<td>31,000</td>
<td>6,818</td>
</tr>
<tr>
<td>7/5/2001</td>
<td>324,552</td>
<td>25,840</td>
<td>1,007</td>
</tr>
<tr>
<td>10/13/2004</td>
<td>311,680</td>
<td>35,732</td>
<td>661</td>
</tr>
<tr>
<td>7/14/2005</td>
<td>289,280</td>
<td>11,344</td>
<td>669</td>
</tr>
<tr>
<td>7/31/2002</td>
<td>289,011</td>
<td>2,597</td>
<td>45</td>
</tr>
<tr>
<td>3/11/2002</td>
<td>424,141</td>
<td>6,573</td>
<td>729</td>
</tr>
<tr>
<td>11/1/2004</td>
<td>286,490</td>
<td>8,303</td>
<td>256</td>
</tr>
<tr>
<td>6/20/2005</td>
<td>160,640</td>
<td>11,701</td>
<td>255</td>
</tr>
<tr>
<td>10/21/2005</td>
<td>incorporated</td>
<td>20,720</td>
<td>302</td>
</tr>
<tr>
<td>Total:</td>
<td>2,682,748</td>
<td>201,833</td>
<td>13,292</td>
</tr>
</tbody>
</table>
Current Capacity: Stormwater

Example Estimate:
Average Annual Pace of Implementation

2007  622 acres
2008  930 acres
2009  + 712 acres
Total  2,274 acres / 3 yrs =

~ 758 ac/year

Other Considerations:
Current Capital Budget
Status of Projects in the Pipeline
Local Knowledge
2-Year Milestone: Stormwater

Initial Estimate of 2-Year Milestone

Example Estimate:
Average Annual Pace of Implementation

<table>
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<tr>
<th>Year</th>
<th>Acres</th>
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<td>2007</td>
<td>622</td>
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<td>2008</td>
<td>930</td>
</tr>
<tr>
<td>2009</td>
<td>+712</td>
</tr>
<tr>
<td>Total</td>
<td>2,274</td>
</tr>
</tbody>
</table>

\[ \text{Total} = 2,274 \text{ acres} / 3 \text{ yrs} = \approx 758 \text{ ac/year} \]

Other Considerations:

Current Capital Budget
Status of Projects in the Pipeline
Local Knowledge
Current Capacity: Other Aspects

- Legal & Regulatory
- Financial
- Staffing
- Technical
- Programmatic

Narratives:
- Current Programs
- Identify Barriers, Needs, Gaps
Connecting the Dots

• Current Capacity Analysis
  • Needs/Gaps
  • 2-Yr Milestones:
    – Implementation Actions
    – Program Development

• Strategy Development
The Phase II Schedule

• The schedule is Tighter than Desired
• We will Need to Simplify where Possible
What is a “Phase II WIP”? 

- EPA requests One Phase II WIP from Maryland

- Basic Composition of Phase II WIP Document:
  - Statewide Summary
  - County-scale Chapters

- Jurisdictions May Develop More In-depth Plans:
  - Included with WIP as an Appendix, or
  - Referenced outside of the WIP:
    - Locally maintained document
    - Web link to on-going local watershed planning
2-Year Milestones

• 2013 Milestones are a Key Focus:
  – Near-Term Tangible Commitments
  – Basis of the First EPA Evaluation (Not Counting Delivery of WIP)
  – Many Local Team members can develop these now

• Two Categories of Milestone Commitments:
  – Accelerated Implementation Actions
  – Program Enhancement Actions (these Support WIP Strategies)

• Give Advanced Notice to Senior Local Officials:
  – Begin Developing and Elevating Milestone Options
  – Schedule Future Briefings of Elected Officials if Necessary
MD Assessment Scenario Tool

• Modeling
  – Use reduced form model to produce preliminary results
  – Consistent with EPA Bay TMDL models
  – Stakeholder involvement in scenario development
  – Iterative process

• Information Management System to
  – Facilitate consistent and transparent approach
  – Combine WIP Team scenarios for direct input into EPA Bay Model
## Next Steps

<table>
<thead>
<tr>
<th>Month</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>• Next Local Team Meetings:</td>
</tr>
<tr>
<td></td>
<td>– Affirm Local Team Composition</td>
</tr>
<tr>
<td></td>
<td>– Follow-up Introductory Materials</td>
</tr>
<tr>
<td></td>
<td>– Initial Responses to Info. Request</td>
</tr>
<tr>
<td></td>
<td>– Start Documenting Tracking Systems</td>
</tr>
<tr>
<td>April</td>
<td>• Next Local Team Meetings:</td>
</tr>
<tr>
<td></td>
<td>– Start Working on the Current Capacity Request Due in May</td>
</tr>
<tr>
<td></td>
<td>– Start Documenting Tracking Systems</td>
</tr>
</tbody>
</table>
A Word on Agriculture
Agriculture’s Role in WIPII

- Development & Implementation of Agricultural Component of WIPII
- Assist County Government in Development & Implementation of the Urban Component
  - E & S and Environmental Site Design
- Work with planning office on Smart Growth policy
  - Trading & Offsets
Development & Implementation of Agricultural Component of WIPII

- SCD assigned county load allocation for agriculture
- Develop 2 year implementation goals
- Utilize Ag workgroups
- Report plan back to county WIP Teams
- Already developed in MOUs for 2009 & 2012
- Tracked & reported through Conservation Tracker
• Participants
  – SCD
  – Natural Resources Conservation Service
  – UMD Extension
  – Agribusiness
  – Farm Service Agency
  – Farm Bureau
  – Farmers
  – County Agricultural/Environmental Planner
  – NGOs
Assist County in the Development & Implementation of Urban Component (SCD Role)

- Districts delegated E & S review
- Expanded role to provide pre-construction conferences
- New stormwater regulation require Environmental Site Design
Work with Planning Office on Smart Growth Policy

• Districts provide counties, municipalities and the developers the access to farmers and landowners willing to trade and have offsets
• Districts provide verification and inspection of offsets
• Developers will need permanent offsets that require easements
• District funding to develop and implement program
Contacts:

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