

# Chesapeake Bay TMDL Update

Presentation to the Water Resources Technical Committee

July 8, 2010

# Overview

- Overall Schedule
  - EPA – TMDL
  - State/District - WIPs
- EPA – TMDLs (Draft Nutrient Loads)
- Potomac Water Quality
  - Attainment – *Chlorophyll-a*
  - Revised Standards
- Other Related Activities
- Recommendations

# Steps in the TMDL process

## Step 1 – Develop TMDL by December 2010

- EPA - Allocates Tributary/State loads
- Targets (11/3/09)
- **Draft Allocations & Reserve (5%) (7/1/10)**
- EPA - Establishes Bay TMDLs (92 Total)
- States/DC - Develop Phase I WIPS (#??)

## Step 2 – 2011

- EPA – Revises Watershed Model (**Phase 5.4**)
- States/DC - Submit Phase II WIPs
- **Local scale details?**
- **Use Reserve to address WSM changes?**

## Step 3 – 2017

- States/DC - Submit Phase III WIPs
- **60% Implementation Goal**
- EPA - Modifies TMDL s(if necessary)

# Step 1 –Getting to December 2010

July 1 – EPA divides overall “pollution diet” for nitrogen and phosphorus among States/DC

- Includes a ‘5% Reserve (to account for possible load shifts/additional reductions needed when WSM

August 15 – Sediment loads by state/basin determined [Impact uncertain]

September 1 – States and the District complete Draft Phase I Watershed Implementation Plans (WIPs). Dropped requirement for preliminary plans given delays in producing Nutrient loads from Watershed Model.

TBA – Draft Bay TMDL developed and offered for public comment [45 -Days]. Continuation of regular outreach:

November 29 – States and the District complete Final Phase I WIPs - and how Growth is to be addressed.

December 31 – EPA establishes the Bay TMDLs (92)

# Step 2 - 2011

EPA - Revises watershed model with results of two model updates

- Nutrient management effectiveness
- Suburban land characteristics
- EPA removes or reduces “safety factor”

States/DC - Submit Phase II WIPs

- Draft by June 1, 2011
- Final by November 1, 2011
- Plans reflect model updates and finer scale management actions
- Use of ‘Adaptive Management’ concepts (???)

States/DC - Submit for 30-day comment period, any intention to modify their TMDL allocations.

# Step 3 - 2017

In advance, EPA reviews models and decides whether additional updates are needed

## In 2017

- States and the District submit Phase III WIPs
- Focus in Phase III WIPs is ensuring management actions will be in place by 2025 to achieve Bay water quality standards
- **Goal – 60% Implementation to have been achieved**
- EPA modifies any/all of the 92 Bay TMDL, if necessary:
  - To increase/decrease loads - or change Designated Uses (UAA?)
  - To reallocate between WLAs and LAs (e.g., more to WWTPs/SW)
  - And determines if state WIPs need to change as a result

# EPA TMDL – Draft Allocations

- Issued 7/1/10
  - Based on WSM Phase 5.3 Output
- **Table 1 - Allocations**
  - Total Nitrogen & Total Phosphorus – By Basin
- **Table 2 - Allocations**
  - Total Nitrogen & Total Phosphorus – By Jurisdiction (States/DC)
- **Table 3 – Temporary Reserve**
  - Total Nitrogen & Total Phosphorus – By Jurisdiction (States/DC)
- **Loading Comparison Graphs**
  - Nitrogen – By Sector & Scenario
  - Phosphorus – By Sector & Scenario

# Potomac Water Quality

- Recent Attainment Assessments – for *Chloryphyll-a*
  - Lack of DC data, data normalization (?), flawed reduction scenario - Implied need for additional reductions (just in DC?)
  - Has now hopefully been resolved – No additional reductions reqd.
- Water Quality Standards
  - District – Triennial Review process underway
    - Plan to adopt EPA’s ‘Chesapeake Bay Water Quality Criteria – 2010 Addendum’ – by reference
      - Includes modification to how *chloryphyll-a* data is to be analyzed (i.e., via geometric mean vs. arithmetic mean, & 10% assumed Reference Curve)
    - Schedule
      - Public Review to start by end of July
      - 30-day Public Comment period
  - Maryland & Virginia – TBD (will have updates next Monday)



# CBF Settlement with EPA - Updates

By Dec.31, 2010, EPA will issue 92 Bay TMDLs

- Settlement includes a number of details consistent with EPA's development of TMDL to date, e.g. including allocations for new or increased permitted discharges or a provision that any such loads be appropriately offset

Every two years, EPA will review state WIP progress and milestone achievement

- EPA will take “appropriate action” to ensure that the states are making satisfactory WIP progress and achieving their milestones

Beginning in May 2011, EPA will announce two-year milestones for federal agency actions and “will strengthen stormwater practices on federal facilities and on federal lands”

# Settlement Details

By Dec. 31, 2017, EPA will review NPDES permits, including:

- Significant WWTPs
- Proposed construction general permits

EPA will issue a “MS4 Stormwater Permitting Approach for the Chesapeake Bay Watershed” that will identify its performance expectations

- Review all new construction general permits drafted by Bay states and make sure they meet federal standards;
- By July 31, 2010 develop a guidance for major municipal stormwater permits in the Bay region; and
- By Nov. 19, 2012, take final action on industrial and municipal stormwater regulations.

By June 1, 2010, EPA will take final action on the NPDES permit for Blue Plains (unless there are outstanding Endangered Species Act issues) – **Currently, no changes from draft permit are anticipated – But permit has not yet been issued**

EPA will monitor compliance schedules for ENR implementation by significant municipal and industrial wastewater dischargers & assess septic loads

# Settlement Details

EPA will implement a publicly accessible tracking and accounting system to monitor progress toward WLAs and LAs

- Agreement ends in 2017 – Mid-point of TMDL implementation (60% progress)

By Sept. 30, 2010, EPA will propose new stormwater regulations in the Bay watershed to more effectively achieve Bay TMDL goals and to expand the scope of regulated discharges

- EPA to take final action on these regulations by Nov. 19, 2012

By June 30, 2012, EPA will propose new CAFO regulations to more effectively achieve Bay TMDL goals and to increase the number of farms subject to these regulations

- EPA to take final action on these regulations by June 30, 2014

EPA will require an allocation for air deposition of nitrogen from the states in the Bay TMDL, so that some portion of the total nitrogen budget will be attributed to air pollution.

Any questions?

Any additional analysis/information needs?