

Chesapeake Bay Program Mid-Point Assessment

James Davis-Martin
Virginia Department of Environmental Quality
Chesapeake Bay Program, Water Quality Goal Team

Mid-Point Assessment Overview

- Evaluation of 2017 Progress to determine if the Partnerships goal of implementing management practices to achieve 60% of the required reductions was achieved.

Mid-Point Assessment Overview

- Revise Modeling System - 2012 through 2017
- Document and Enhance Verification – 2015 through 2017
- Review, Assess and Accept Modeling System – 2016-2017
- Strengthen Decision Support Tools – 2017
- **Evaluate 2017 Progress – 2017/2018**
- Develop 2018-2019 Milestones – 2017/2018
- Develop Phase 3 WIPs – 2017 through 2018
- Update TMDL – 2018/2019

Revise Modeling System

- Update BMPs following the Partnership's BMP Protocol
- Update Land Use
- Revise Model System Structure
- Improve Representation of the Hydrologic Network
- Rework Manure Simulation
- Incorporate Verification Framework
- Study James River Chlorophyll-a
- Account for Conowingo Infill
- Consider the Effects of Climate Change
- Use Multiple Models for Shallow Water Simulation
- Improve the Model Calibration Process

Document and Enhance Verification

- Clean-up of historical BMP databases
- Practice life spans
- Enhance data collection and reporting of federal practices
- Accounting for non-cost-shared practices
- Preventing double counting
 - USDA 1619 Agreements Needed
- Development and documentation of jurisdictional BMP verification programs

Review, Assess & Accept Modeling System

- Review of Modeling System scheduled to begin in 2016
 - Partnership Reviews
 - STAC Reviews
- Final Approval of v6.x Model in 2017

Strengthen Decision Support Tools

- Modeling System Uncertainty Analysis
- Modeling System Documentation and Transparency
- Expand Use of Monitoring Trends Data
- ChesapeakeSTAT – Data and information sharing portal
- MAST/CAST/VAST/FAST – Planning tools aligned with Models
 - Optimization Module

Evaluate 2017 Progress

- December 1, 2017 – Report Implementation Progress
- January 2018 – Report on 2016-2017 Programmatic Milestones
- Simulate 2017 Progress using v5.3.2 Model
- EPA 2016-2017 Milestones Assessment
- EPA 2017 60% Reduction Goal Assessment
 - Implemented programmatic enhancements may justify shortfalls
 - Implemented capacity building activities may justify shortfalls
 - Future Milestones and WIP 3 must include shortfall make-up plan

Develop 2018-2019 Milestones

- Drafts December 2017, Final May 2018
- Jurisdiction Milestone Development
 - Programmatic Milestones
 - Implementation Milestones
- Increased Federal Facilities Participation
- EPA Milestones Assessment
 - Targets Based on Straight Line from 2017 60% to 2025
 - First Milestones using the new Phase 6 Model

Develop Phase 3 WIPs

- Develop Basin TMDL Targets
 - Use v6.x Model
- Establish WIP 3 Expectations
 - Interview of Stakeholders for Lessons Learned
 - Bounded by Model Limitations (Uncertainty Analysis)
- Run 2017 Progress using v6.x Model as new starting point
- Jurisdictions Develop Phase 3 WIPs
- EPA Evaluation of Phase 3 WIPs

Revise TMDL Allocations

- EPA Decision TBD
- Changes in Scientific Understanding, Models, Regulatory Requirements and WIPs are Likely to Necessitate Changes to Bay TMDL Allocations

Mid-Point Assessment Questions

James Davis-Martin; (804) 698 - 4298;
James.Davis-Martin@deq.virginia.gov