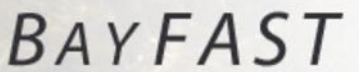


BUILDING PHASE 3 WIPS WITH BAYFAST



[Facilities](#) | [Scenarios](#) | [Costs](#) | [Scenario Worksheets](#) | [Scenario Results](#) [Log Out](#)

Octoraro-2017 Planned Summary Results

[? Help](#)

Description: Planned BMPs to hit 2017 Milestone target
Facility: Octoraro Watershed-draft
Date Created: 4/29/2015 4:38:17 PM [Download Results](#) | [Compare Scenarios](#)

Total Loads

Load Type	Lbs Nitrogen Edge of Stream	Lbs Nitrogen Delivered	Lbs Phosphorus Edge of Stream	Lbs Phosphorus Delivered	Lbs Sediment Edge of Stream	Lbs Sediment Delivered
Landuse	1,961,329.4	1,407,015.9	89,136.4	70,218.4	106,471,065.6	108,190,770.7
Septic	52,497.7	37,217.1	0.0	0.0	0.0	0.0
Total:	2,013,827.1	1,444,233.0	89,136.4	70,218.4	106,471,065.6	108,190,770.7

January 7, 2016

Olivia Devereux

DECISION SUPPORT TOOLS

- Chesapeake Bay Program offers four decision support tools to facilitate development of plans that reduce nitrogen, phosphorus and sediment:
 - **Facility Assessment Scenario Tool – BayFAST.org**
Site specific planning tool where user defines the planning area and land uses.
 - **Chesapeake Assessment Scenario Tool – CASTtool.org**
Chesapeake Bay portion of NY, MD, WV, DE, DC, VA, PA included
 - **Maryland Assessment Scenario Tool – MASTonline.org**
Maryland-specific version of CAST. Maryland-specific geographies like State Highway Administration and Phase I and II areas are available through the interface. MAST also has loads available for historical years to assist with local TMDL watershed planning.
 - **Virginia Assessment Scenario Tool – VASTtool.org**
Virginia-specific version of CAST. VAST is now identical to CAST.
- Tools output nitrogen, phosphorus and sediment load for What-If scenarios of different BMPs. **All use the same assumptions and calculation methods as the Chesapeake Bay Program's Watershed Model.**

FEATURES OF ALL TOOLS

- **OPTIMAL**—Create plans for meeting a nitrogen, phosphorus, or sediment load allocation using the most cost-effective strategy.
- **RAPID**—Calculate and quickly revise “on-the-fly” estimates of load reductions.
- **FLEXIBLE**—Allow users to understand which BMPs provide the greatest load reduction benefit, the extent to which these BMPs can be implemented, and the cost of these BMPs.
- **CONSISTENT**—Closely approximate the results of the Chesapeake Bay Program’s (CBP) Watershed Model.
- **TRANSPARENT**—Scenarios and results can be shared among users and with CBP and states. The tools’ calculation methodology is well-documented and replicable.

PHASE III WIPS

- Recommendations from: *Chesapeake Bay Program's Phase II WIP Stakeholder Assessment* included a *Draft Action Plan for Increased Local Partner Engagement*
 - Engage localities and municipalities—both staff and elected officials
 - Consider priorities of local partners
 - Utilize local knowledge
 - Early and consistent communication
- EPA is presenting expectations and seeking input from CBP partnership
- June 2017: Final expectations planned to be issued
- June 2018: Draft WIPs due
- December 2018: Final WIPs due

PURPOSE OF TOOLS

- The tools are designed as simple planning tools
 - Complex calculations and information hidden behind the interface
 - Users only need to know general information
- Commonly used for
 - Milestones
 - NFWF proposals and reports
 - 319 Plans
 - WLAs for MS4s
 - Nutrient and sediment local TMDL development and watershed management plans
- Users are state and local planners who want to improve efficiency, savings, return on investment and quality of life in their communities
 - Virginia's Planning District Commissions
 - MD Phase I and II permittees
 - Pennsylvania's Conservation Districts for the MS4 Pollution Reduction Plans

BREAK FOR INTERACTIVE DEMO

www.bayfast.org

Percent change in Land Use Loads from Scenario 2: VA Development Baseline to Scenario 3: VA Development Plan

Land Use ▲	% Change Nitrogen	% Change Phosphorus	% Change Sediment
> Sector: Agriculture			
✓ Sector: Urban			
CSS construction	0.0	0.0	0.0
CSS extractive	0.0	0.0	0.0
CSS impervious developed	0.0	0.0	0.0
CSS pervious developed	0.0	0.0	0.0
nonregulated extractive	0.0	0.0	0.0
nonregulated impervious developed	0.0	0.0	0.0
nonregulated pervious developed	0.0	0.0	0.0
regulated construction	-7.6	-13.6	-61.1
regulated extractive	0.0	0.0	0.0
regulated impervious developed	-3.0	-5.8	-4.7
regulated pervious developed	-3.0	-5.7	-4.1
> Sector: Forest			
> Sector: Septic			
> Sector: Water			
✓ Sector: Total			
Total	-3.8	-9.2	-32.7

Download 

STRATEGIES FOR MEETING YOUR LOAD REDUCTION TARGET

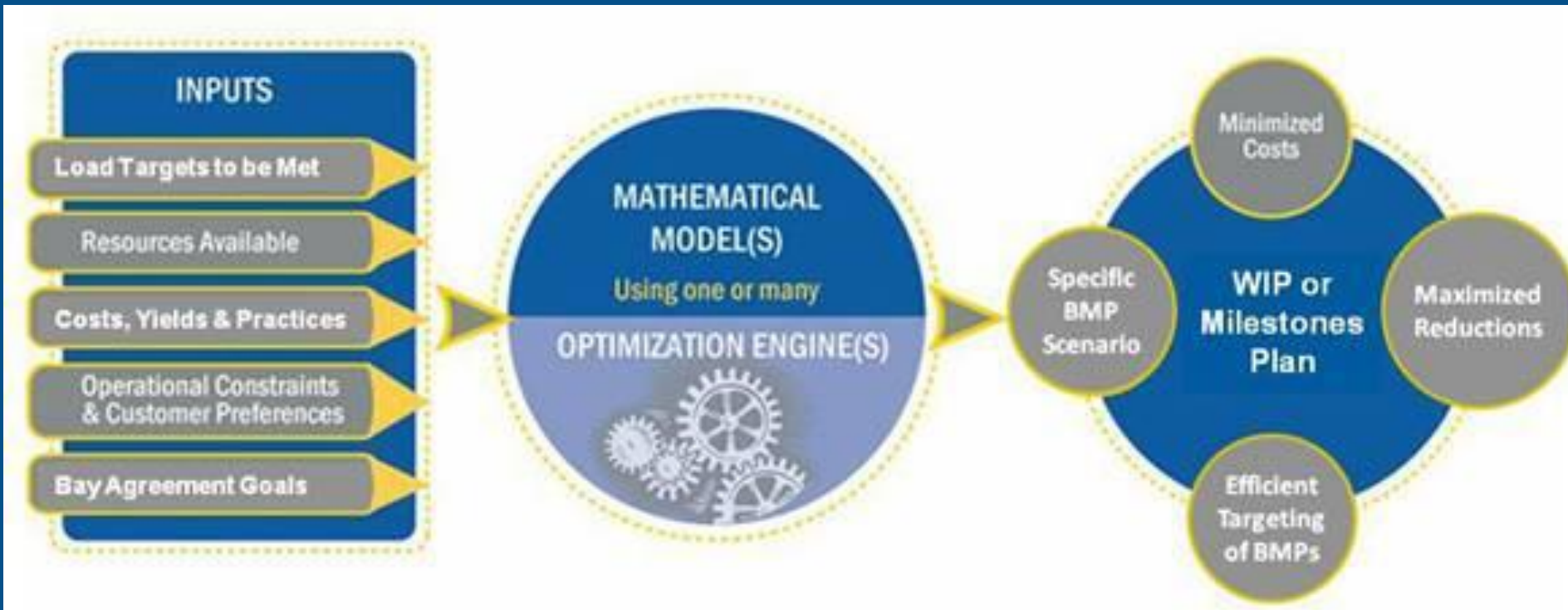
- Address the load from the area with the highest delivery factors
- Target the highest loading land uses by looking at the baseline lb/a (no BMP scenario)
- Sort BMPs for those eligible to treat those land uses with highest load
- Choose BMPs that have the highest load reductions/efficiencies
- Consider cost and reallocating loads among sectors based on cost
- Consider doing something different, not more of the same

NEXT ENHANCEMENT

Optimization—Users input objectives, tool outputs BMPs in the plan

“Cracking the WIP”

Designing an Optimization Engine to Guide Efficient Bay Implementation
A Scientific and Technical Advisory Committee Workshop



FACILITATE WIP DEVELOPMENT

- Trainings are always available for local groups
 - Trainings are designed and tailored for specific audiences
 - Travel to local areas, like a PDC, for in-person training
 - Webinars can be tailored
 - General webinars are conducted, recorded, and available on the tool's website
- Specific questions answered via email and phone. Questions usually like:
 - How to use the tool
 - How to interpret results
 - How to relate to users terminology, not CBP terminology
 - What else can be done to maximize reductions
 - How to present output