

Update on Urban Sector Activities

- Homeowner BMPs
- Revised Urban BMP Verification Guidance
- Development of Verification Tools
- Urban Panel Updates and Cross Walks

1. Homeowner BMP Crediting Policy



Background on Homeowner BMPs

- Almost 50 communities and watershed groups offer incentives and technical assistance to homeowners
- Strong interest from many stakeholders to get credit for qualifying projects
- Individual practices have small impact on pollutant reduction, but collectively may be an effective load reduction strategy

Link Between Expert Panel Reports and Homeowner BMPs Credits

<i>Individual BMP</i>	<i>Status</i>	<i>Notes</i>
Rain Garden	Approved	Define drainage area and rainfall depth treated by each individual practice and then use the retrofit adjustor curves of expert panel for on-site retrofits
Rain Barrel	Approved	
Permeable Pavement	Approved	
Downspout Disconnection	Approved	
UNM Pledge ¹	Approved	Define turf area (TA) and associated removal rates based on risk factor for each individual urban nutrient management plan or pledge, as specified in expert panel report
UNM Plan, Hi Risk ²	Approved	
Tree Planting	Interim/ Pending	Interim rate exists for sf of tree canopy, but an expert panel is expected to modify rate in 2104
Impervious Cover Removal ⁴		Impervious cover converted to pervious cover

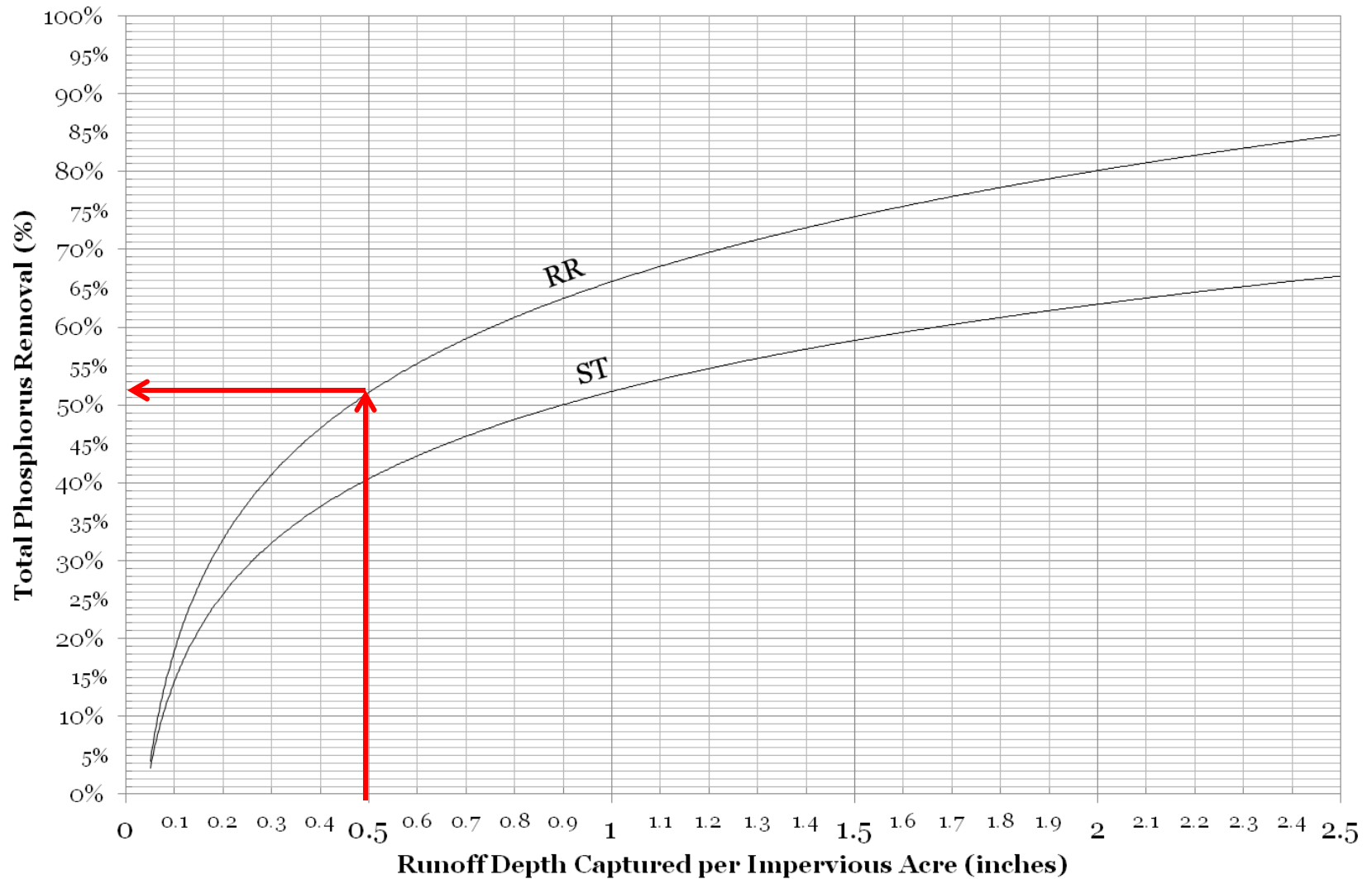
Notes:

¹ May not acceptable in some Bay states

² Communities in MD may not be eligible for this credit

³⁴ Model as a land use change from impervious load to pervious load

Total Phosphorus Removal for RR and ST New Development Practices



Similar curves are also available for sediment and total nitrogen

UNM Rates

Urban Pervious Land Reductions Associated with Urban Nutrient Management Plans		
Risk Type	TN Removal per Qualifying Acre	TP Reduced per Acre
High	20 %	10 %
Low	6 %	3 %
Blended	9 %	4.5 %
Source Appendix F, Approved by WTWG 9 /13		

Homeowner BMP Crediting



UNM Plan for 9200 Bradford Pear Lane: 0.5 acres		
1	Get Expert Lawn Advice	✓
2	Maintain Dense Cover on Turf	✓
3	Choose NOT to fertilize	✓
4	Recycle Lawn Clippings and Compost Fallen Leaves	✓
5	Correct Fertilizer Timing	N/A
6	Use Slow Release Fertilizer	N/A
7	Set Mower Height at 3 inches	✓
8	No off-target fertilization	N/A
9	Fertilizer free buffer zones around water features	✓
10	Increase soil porosity and infiltration	✓

Urban Nutrient Mgmt
 Rain gardens
 Rainwater Harvesting
 Downspout Disconnection
 Tree Planting
 Permeable Driveways

Work Done in Last Year

- Stakeholder engagement
- CSN Memo on crediting mechanisms
- Development of tracking/verification tools
- Pilot in Howard County, MD
- Homeowner BMP Guide released
- Homeowner Policy approved by USWG on 11/19/13
- Verification Guidance for Voluntary Urban BMPs approved by USWG 1/21/14

Inspection and Verification of Homeowner BMPs

- Challenge: how to track and verify a few hundred thousand practices down the road
- Visual indicators developed for rapid inspection and verification of homeowner BMPs.
- Use of web-based and smart phone technology



WTWG Meeting on Feb 6

- Requests approval from the WTWG for three specific modifications in BMP reporting:
 1. AGGREGATION:
 2. ENTER HOMEOWNER BMP AS A UNIQUE CLASS OF BMP IN SCENARIO BUILDER:
 3. NEIEN FLEXIBILITY

Verification Issues

- USWG approved streamlined verification guidance for non-regulatory BMPs on January 21, 2014
- Non-regulatory BMPs are considered a minor source of state-wide urban sector nutrient reductions, as defined by the CBP-VRP (2013).
- Simplify the homeowner BMP reporting process while still retaining a high degree of verification rigor

Verification Guidance

Important Note: The ultimate decisions on BMP verification is reserved by individual Bay states as described in their forthcoming state-wide verification protocols. These protocols will be generally consistent with the final CBP verification guidance document for all sectors which is scheduled for completion later in 2014.

Homeowner BMP Verification Guidance

- The actual installation of each homeowner BMP must be field-verified by the local government or designated third party at the time of construction, and homeowner submitted BMP data will require validation, by spot checking it against typical default values for the practice.

Homeowner BMP Guidance

- The credit duration for homeowner BMPs has been reduced to 5 years as compared to the 10 years afforded to larger retrofits (UREP, 2012). The credit can be renewed based on verification that the practice still exists and is working.

Homeowner BMP Verification

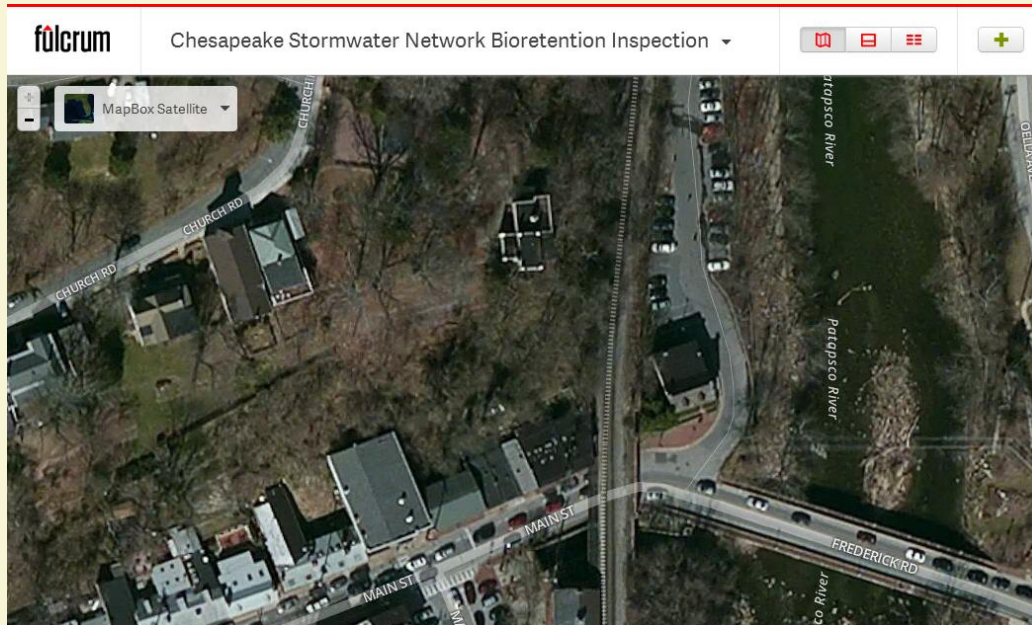
- Local governments may opt to use the sub-sampling approach as outlined in USWG (2014). Alternatively, they may request homeowners to submit digital photos to confirm their practices, with the final decision on BMP condition made by the locality.


Verification Tool Development

- SMART Tool
- Visual Indicators
- Homeowner BMP guidance
- Smart phone inspection app

Inspection App

- Final stages of testing
- Online tracking
- Upload photos directly from phone/tablet
- Creates PDF report



Schueler's	
Created	2013-08-23 17:32:35 UTC by Stormwater Maintenance & Consulting
Updated	2013-08-31 20:08:35 UTC by Stormwater Maintenance & Consulting
Location	39.27427, -76.732554
Project Information	
Client Name	Schueler's
Site Name	Schueler
Site Address	
Facility ID	1
Inspection Date	2013-08-23
Inspector Name	Ted & Cecilia
Overview Photos of Facility	
Overview of facility	

Standardization of Homeowner BMP Design, Installation and Upkeep in the Bay Watershed

- CSN Homeowner Guide
 - Open- source "adaptable" document
- For homeowner or their contractors
- Non -technical design approach, but step by step "standards" for assessment, design, installation and maintenance
- Supplies the key parameters needed as input to tools to compute load reduction

Homeowner Guide to Make Your Property Bay Friendly



June 19, 2013

This document was produced by the Chesapeake Stormwater Network and the RiverWise Team Partners under the Chesapeake RiverWise Communities Program.

Nissa Dean, Anna Mathis, Jacob Bauckman, Donna Morelli, Drew Siglin, Alliance for the Chesapeake Bay; Suzanne Etgen, Jennifer Vaccaro and Lara Mulvaney, Anne Arundel County Watershed Stewards Academy; Tom Schueler, Cecilia Lane, Anne Guillet and Rupert Rossetti, Chesapeake Stormwater Network; Bryan Seipp, Center for Watershed Protection; Jen Dindinger, UMD Sea Grant Extension Program; Sarah Lane, UMCES, DNR; Sherree Hughes, Wetlands Watch

SMART Tool: Update

- UMD SeaGrant in the process of building certification training program for:
 - County staff
 - Volunteers (watershed stewards and master gardeners etc.)
 - Inspecting and verifying BMPs
- Pilot counties to submit data to MDE
- MDE to submit to CBP

Expert Panel Updates

- Enhanced Erosion and Sediment Control
- Street Cleaning
- Floating Treatment Wetlands
- Illicit Discharge Elimination
- Urban Land Use Loading Relationships