

Homeowner BMP Crediting



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

Benefits of Homeowner BMPs

- Provides a way for individual residents to play a role in Bay restoration
- Gives local governments and watershed groups another option for nutrient reduction credit
- Potential for “green job” work-force development
- Use of innovative websites, tracking tools and smart phone apps to streamline the BMP data flow

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

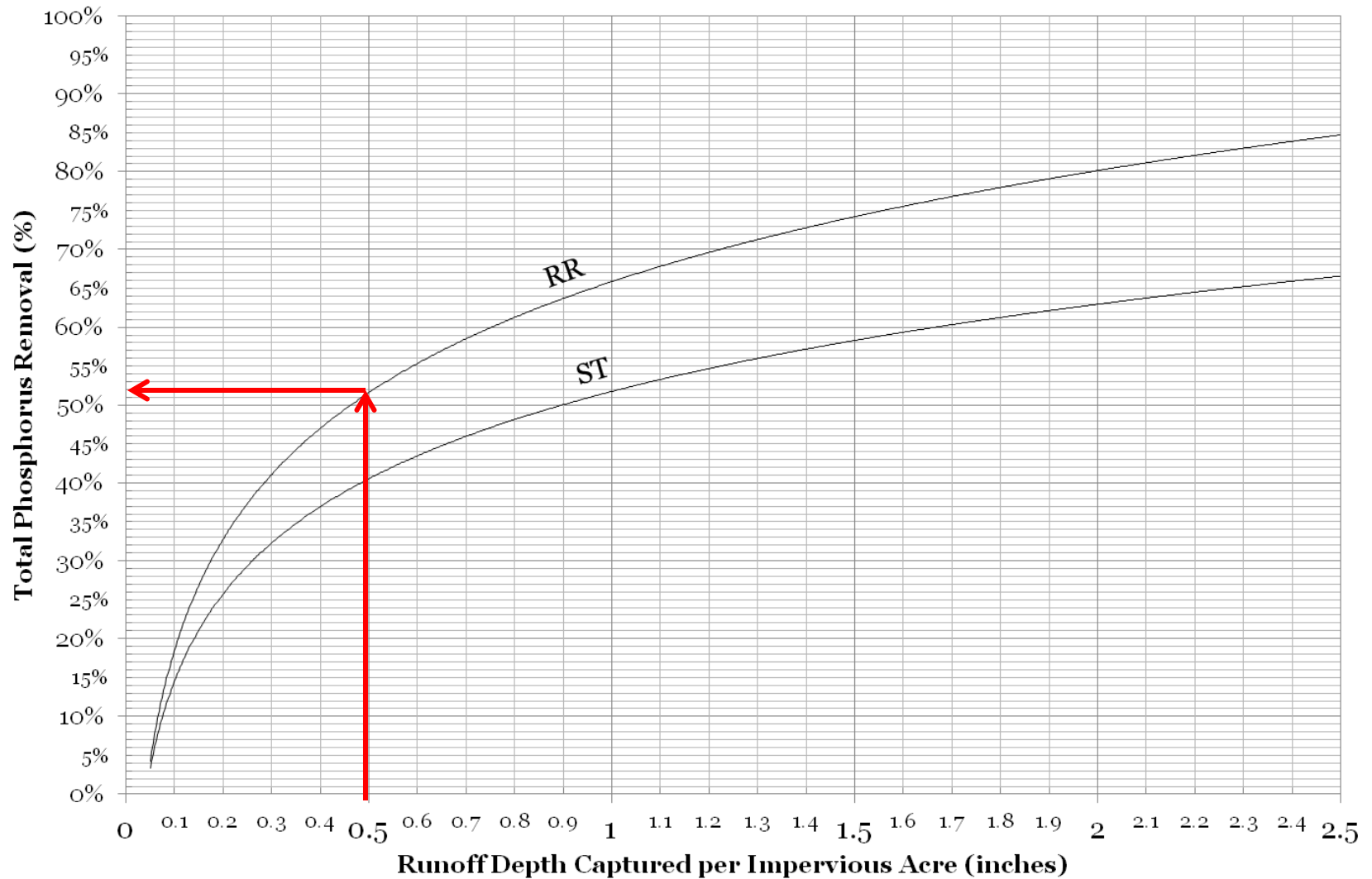
Notes:

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

- 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
- Approved by WTWG on 2/6/14 w/ revisions

Homeowner BMP reporting

- WTWG approved for three specific modifications for homeowner BMP reporting:
 1. AGGREGATION:
 2. ENTER HOMEOWNER BMP AS A UNIQUE CLASS OF BMP IN SCENARIO BUILDER:
 3. NEIEN FLEXIBILITY

AGGREGATION

- Allow localities to aggregate individual homeowner BMP data into a single practice at the county level, which is then reported to the state without any specific geographic location data (apart from the river-basin segment in which it occurred).

ENTER HOMEOWNER BMP AS A UNIQUE CLASS OF BMP IN SCENARIO BUILDER

To prevent confusion and possible double-counting, aggregate homeowner BMP data will be entered as a unique practice in Scenario Builder, as either:

- (a) the total acreage treated by on-site retrofits (HOME-BMP)
- (b) total acreage treated by qualifying UNM practices (HOME-UNM)
- (c) total square feet of tree planting (HOME-TP).

NEIEN FLEXIBILITY

- Homeowner practices are individually small but collectively so numerous that it is neither practical nor useful to give them a specific individual geographic address in NEIEN.
- To receive credit, local governments still must maintain records for each individual homeowner BMP, including contact information and geographic information (lat/long or street address).
- Local governments need to retain specific data records on individual practices in order to track and verify them over time.

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



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

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). UNM practices have 3 year duration.
- 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.

Questions and Comments

