

Dealing with Impervious Cover Removal

URBAN STORMWATER WORKGROUP

SEPTEMBER 15, 2020

Refresher

February:

- First presentation outlining the need

April:

- Memo presented on historical reporting of ICR and path forward
- Set up small ad-hoc team to make some recommendations
- Keep it simple, and distinguish ICR from other, similar BMPs



The Definitions

Impervious Cover Removal: Replacing impervious surfaces with pervious surfaces that have been de-compacted and amended to promote infiltration.

Impervious Cover Disconnection: Disconnecting existing impervious area runoff from stormwater drainage systems, such as directing rooftops and/or on-lot impervious surfaces to pervious areas.

Basic Qualifying Conditions

ICR:

1. New pervious surface should be de-compacted and amended over a minimum depth of 3 inches to promote infiltration and reduce runoff.
2. New pervious surface should be maintained in a turfgrass or meadow condition. The area should not be fertilized and should generally not be converted into a high traffic area prone to compaction, such as an athletic field.
3. Area should be under 0.5 acre in size. Larger areas will be picked up by CBPO high resolution land use imagery, scheduled to be updated every 5 years.

ICD:

https://www.chesapeakebay.net/documents/Impervious_Disconnection_Expert_Panel_Report_WQGIT_approved_December_2016.pdf

So many BMPs



The Reductions

Table 4. Nutrient and Sediment Reductions for ICR¹

	TN	TP	TSS
ICR	36%	0%	61%

¹See Appendix B for detailed methodology.

What's up with TP

Target Land class	Land Use	Acres	Loading Rate Ratio	Loading Rate (pounds per acre per year)
Developed	CSS Buildings and Other	39580	0.83	0.69
	CSS Construction	1516	3.89	3.21
	CSS Roads	10849	1.04	0.86
	CSS Tree Canopy over Impervious	4466	0.91	0.75
	CSS Tree Canopy over Turfgrass	15934	0.79	0.65
	CSS Turf Grass	29800	1.04	0.86
	MS4 Buildings and Other	164843	0.83	0.69
	MS4 Construction	65955	3.89	3.21
	MS4 Roads	59965	1.04	0.86
	MS4 Tree Canopy over Impervious	24896	0.91	0.75
	MS4 Tree Canopy over Turfgrass	102715	0.79	0.65
	MS4 Turf Grass	311048	1.04	0.86
	Non-Regulated Buildings and Other	295033	0.83	0.69
	Non-Regulated Roads	211292	1.04	0.83
	Non-Regulated Tree Canopy over Impervious	78512	0.91	0.75
	Non-Regulated Tree Canopy over Turfgrass	255214	0.79	0.65

Reporting

Proposed ICR Technical Reporting Requirements:

- *Practice Name:* Impervious Cover Removal
- *Measurement Name:* Impervious Acres (Acres)
- *Location of the BMP:* Qualifying NEIEN Geographies, including Lat/Long, or County, or Hydrologic Unit Code (HUC12, HUC 10, HUC8, HUC6, HUC4), or State
- *Date of implementation:* Year practice was installed
- *Previous Land Uses:* Roads; Buildings and Other Impervious
- *Credit Duration:* 10 years

Review

- Comments and Objections by October 1
- If no objections or substantial revisions are received, we'll consider it approved by the USWG and move it to the WTWG.
- Otherwise, re-visit in October.