

Impervious Area Restoration Work Plan

Timeline	Management Strategies & Goals
Year 1 10/31/18 – 10/30/19	<ul style="list-style-type: none"> ✓ Develop impervious area baseline assessment. ✓ Perform watershed assessments and identify water quality problems and opportunities for restoration. ✓ Develop restoration work plan for MDE review & approval. ✓ Assess opportunities and timelines for implementing water quality BMPs. ✓ Determine funding needs and develop a long-term budget. ✓ Develop a list of specific projects to be implemented for restoration and identify on the Restoration Activity Schedule.
Year 2 10/31/19 – 10/30/20	<ul style="list-style-type: none"> • Collect contractor proposals for the first restoration project (forestation on pervious urban – 10 acres). • Apply for restoration grants / assess opportunities to form partnerships. • Evaluate and refine budget needs for project implementation. • Update and submit Urban BMP database. • Maintain inspection records for all BMPs.
Year 3 10/31/20 – 10/30/21	<ul style="list-style-type: none"> • Implement first restoration project. • Collect contractor proposals for the second restoration project (Silo Hill SWM Pond Retrofit). • Apply for restoration grants / assess opportunities to form partnerships. • Update and submit Urban BMP database and documented maintenance and inspection status for all BMPs. • Develop adaptive management strategies for BMP implementation that identify opportunities for improved processes and procedures. • Continue to identify opportunities for water quality improvement projects and collaborative partnerships to meet restoration requirements.
Year 4 10/31/21 – 10/30/22	<ul style="list-style-type: none"> • Implement second restoration project. • Update and submit project implementation status in the Restoration Activity Schedule. • Update and submit Urban BMP database and documented maintenance and inspection status for all BMPs. • Submit narrative describing progress and updated adaptive management strategies toward implementing restoration projects.
Year 5 10/31/22 – 10/30/23	<ul style="list-style-type: none"> • Collect contractor proposals for the third restoration project (Northgate – ED Pond #1 Retrofit). • Apply for restoration grants / assess opportunities to form partnerships. • Update and submit project implementation status in the Restoration Activity Schedule.
Year 6 10/31/23 – 12/31/24	<ul style="list-style-type: none"> • Implement third restoration project.

Restoration Activity Schedule

Type of Restoration Project	BMP Code	Estimated Cost	Imperv. Acres Treated	Imperv. Acre Target & Balance	Project Status	Projected Implementation Year	MD Grid Coordinates	
							Northing	Easting
				20.36				
Silo Hill SWM Pond Extended Detention Dry Pond Retrofit	TBD	\$100,000 - \$150,000	7.96	12.40	P	2022	742711.9375	1222636.875
Northgate – ED Pond #1 Extended Detention Dry Pond Retrofit	TBD	\$100,000 - \$150,000	6.07	6.33	P	2024	743726.9375	1221451
Planting Trees / Forestation on Pervious Urban	FPU	\$50,000 - \$70,000	3.80	2.53	P	2021	TBD	TBD
Mechanical Street Sweeping	MSS	\$0.00	0.492	2.038	C	2018/2019	N/A	N/A
Catch Basin Cleaning	CBC	\$0.00	0.011	2.027	C	2018/2019	N/A	N/A
Mechanical Street Sweeping	MSS	\$0.00	TBD	TBD	P	2019/2020	N/A	N/A
Catch Basin Cleaning	CBC	\$0.00	TBD	TBD	P	2019/2020	N/A	N/A
Mechanical Street Sweeping	MSS	\$0.00	TBD	TBD	P	2020/2021	N/A	N/A
Catch Basin Cleaning	CBC	\$0.00	TBD	TBD	P	2020/2021	N/A	N/A
Mechanical Street Sweeping	MSS	\$0.00	TBD	TBD	P	2021/2022	N/A	N/A
Catch Basin Cleaning	CBC	\$0.00	TBD	TBD	P	2021/2022	N/A	N/A
Mechanical Street Sweeping	MSS	\$0.00	TBD	TBD	P	2022/2023	N/A	N/A
Catch Basin Cleaning	CBC	\$0.00	TBD	TBD	P	2022/2023	N/A	N/A
Mechanical Street Sweeping	MSS	\$0.00	TBD	TBD	P	2023/2024	N/A	N/A
Catch Basin Cleaning	CBC	\$0.00	TBD	TBD	P	2023/2024	N/A	N/A

P = Planning & Design, UC = Under Construction, C = Completed, TBD = To Be Determined, OG = On Going, N/A = Not Applicable

FPU = Planting Trees or Forestation on Pervious Urban, MSS = Mechanical Street Sweeping, OUT = Outfall Stabilization, CBC = Catch Basin Cleaning

Estimated cost to meet MS4 permit restoration requirements by 2025

- **\$256,035.78 - \$376,035.78**

Restoration Activity Summary

Silo Hill SWM Pond (FR15POI000531)

- The Silo Hill extended detention pond was constructed in 2002. The design of this facility consists of a dry pond with multi-stage riser, although the pond appears to be functionally wet. This facility has a total drainage area of 22.22 acres and intercepts runoff from the Silo Hill subdivision. Total untreated impervious within the drainage area is 7.96 acres. The Town will retrofit this basin. Estimated costs range from \$100,000 to \$150,000.

Northgate – Extended Detention Pond #1 (FR15POI000140)

- The Northgate extended detention pond #1 was constructed in 1994. The design of this facility consists of a dry pond with multi-stage riser. This facility has a total drainage area of 17.31 acres and intercepts runoff from the Northgate subdivision. Total untreated impervious within the drainage area is 6.07 acres treated. The Town will retrofit this basin. Estimated costs range from \$100,000 to \$150,000.

Planting Trees / Forestation on Pervious Urban

- The Town will conduct forestation on 10 acres of pervious urban land. Areas buffering a stream will be considered high priority.
- Calculating impervious acre credit:
 - Acres of reforested land multiplied by 0.38 = acres of credit
 - $10 \times 0.38 = 3.80$

Mechanical Street Sweeping

- The Town's Department of Public Works will mechanically sweep at least one mile of Town streets each month and track the weight of dry material collected per permit year.
- Calculating impervious acre credit:
 - Tons of dry materials collected multiplied by 0.40 = acres of credit
 - _____ x 0.40 = _____
 - **2018/2019:** 1.23 tons x 0.40 = 0.492 acres

Catch Basin Cleaning

- The Town's Department of Public Works will clean catch basins as needed and track the weight of dry material collected per permit year.
- Calculating impervious acre credit:
 - Tons of dry material collected multiplied by 0.40 = acres of credit.
 - _____ x 0.40 = _____
 - **2018/2019:** 0.0275 tons x 0.40 = 0.011 acres