

City of Rochester – August 2021 Progress Update - MAAM

Planned Structural BMPs – The following list includes projects that are already planned in CIP, designphase, etc.

Year	Project	Description	Estimated LoadReduction Potential (lbs TN/yr)	Costs	2021 Progress Update	2022 Anticipated Progress
2021-23	Colonial Pines Sewer Extension - Phase 3	Phase 3 of a neighborhood sewer extension project with drainage infrastructure improvements	TBD	\$5,500,000	Construction bids were received by the City on 8/12/21.	Construction is anticipated to be on-going into 2023.
2021-23	Strafford Square Roundabout	New roundabout installation project with drainage infrastructure improvements including new BMPs	3.59	\$6,000,000	The first of two construction contracts was awarded on 5/26/21.	Construction is anticipated to be on-going into 2023.
2022-23	Woodman Area Infrastructure Improvements	Neighborhood Complete Streets project with drainage infrastructure improvements including improved outfalls and new BMPs	6.01	\$7,000,000	Final design is nearing completion; advertisement for bids is anticipated in fall 2021.	Construction is anticipated to be on-going into 2023.
By 2025	Union Street Municipal Parking Lot	Parking lot reconstruction with drainage infrastructure improvements including new BMPs	7.14	TBD	Design consultant has been selected by the City. Design is anticipated to begin in fall 2021.	Final design is anticipated to be completed in 2022.
By 2025	Wakefield Street Reconstruction	Complete Streets project with drainage infrastructure improvements including new BMPs	16.54	TBD	Design consultant has been selected by the City. Design is anticipated to begin in fall 2021.	Design to continue through 2022.

Non-structural BMPs – The following list includes existing ongoing and future planned efforts:

Anticipated Year of initial implementation (ongoing work)	Project	Description	Estimated Load Reduction Potential (lbs TN/yr)	Costs	2021 Progress Update	2022 Anticipated Progress
Ongoing	Street Sweeping	Sweep curbed streets monthly (Apr-Nov); sweep Downtown weekly (Apr-Nov)	250	TBD	Swept 2,100 lane miles and removed 205 CY of sediment so far in 2021.	Continued high frequency of street sweeping.
Ongoing	Leaf Litter Management	Collect leaf litter monthly (Apr-May, Oct-Nov); collect bagged organic waste for 2 wks in spring and fall	690	TBD	Collected bagged leaf litter twice in May and plan for twice in November.	Continued frequency of leaf litter collection.
Ongoing	Leaf Litter Management	Provide location for residents to drop off leaf and yard waste year-round	TBD	TBD	Residential disposal of yard waste provided at WM.	Continue to provide yard waste disposal at WM.
Ongoing	Catch Basin Cleaning	Ensure CB sumps are no more than 50% full at any time	290	TBD	Cleaned 462 CBs so far in 2021; annual goal is 900 CBs.	Continue to target a goal of 25% of all CBs cleaned yearly.
Ongoing	Fertilizer Program	Exclusively use slow release fertilizer on municipal property; advocate for and work with State RE: nitrogen fertilizer restrictions	TBD	TBD	Continued stated fertilizer practices on municipal property.	Continue fertilizer practices and advocate with the State.

Other Efforts – The following list includes innovative efforts

Anticipated Year	Project	Description	Estimated Load Reduction Potential (lbs TN/yr)	Costs	2021 Progress Update	2022 Anticipated Progress
2021-23	Colonial Pines Sewer Extension – Phase 3	Extension of public sewer collection system to connect homes on septic systems (Phase 3 – 71 properties)	364	\$5,500,000	Construction bids were received by the City on 8/12/21.	Construction is anticipated to be ongoing into 2023.
By 2022	Nitrogen Source Identification Report	Identify catchment areas with potentially high nitrogen loading	TBD	TBD	Approved a consultant scope of work for report.	Anticipate finalizing report by 6/30/22.
Ongoing	Public Education/ Outreach	Distribute targeted messaging regarding grass clippings/ fertilizer (Apr-May), pet waste (Jun-Jul), and leaf litter (Aug-Oct)	TBD	TBD	Grass clippings/ fertilizer and pet waste messages delivered; leaf litter planned for Sept.	Continue messaging to target audiences during seasonally appropriate time periods.
Ongoing	Public Education/ Outreach	Distribute targeted messaging regarding septic system maintenance and LID development	TBD	TBD	Septic system messaging planned for Sept.; LID planned for Aug.	Continue messaging to target audiences.
Ongoing	Private Development/ Redevelopment	Enforce City’s updated Chapter 218 Stormwater Ordinance requiring treatment	100-300 ¹	TBD	Revised Stormwater Ordinance adopted on June 1, 2021	Continued enforcement of Stormwater Ordinance
2021	Staffing/Resources	City has funded a third Assistant City Engineer position to focus on stormwater related projects and Ordinance enforcement	TBD	TBD	Third Assistant City Engineer position has been posted	Anticipated increase in capacity to focus on stormwater

¹ The City’s estimates for load reductions of 100 to 300 lbs. N/year were estimated to occur as a result of structural BMP retrofits through redevelopment on commercial properties as required by revised City stormwater ordinance. These estimates were based on an assumption that 10 to 50 acres of impervious area are redeveloped and retrofitted with BMPs, which depends upon actual development activity.

Other Efforts (continued from previous page) – The following list includes innovative efforts

Ongoing	Septic System Programs	Advocate for and work with State RE: advanced septic system treatment for nitrogen and enforcement of connection to public sewer law within 100'	TBD	TBD	August meeting with NHDES and certain communities scheduled	Continue to advocate
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Pilot Projects – The following list includes pilot projects:

Anticipated Year	Project	Description	Estimated Load Reduction Potential (lbs TN/yr)	Costs	2021 Progress Update	2022 Anticipated Progress
2021	Pilot Septage Receiving Facility Upgrade	Receive septage at the Headworks Facility observing process response; new location would add this additional carbon source to SND process	TBD	TBD	The City's WWTF began receiving up to 5,000 gpd of septage at the headworks facility on April 1, 2021, as a pilot test for a potential future permanent septage receiving facility at this location. City anticipates completion and evaluation of pilot septage upgrade by October 31, 2021.	Anticipated design, bid and construction of a Septage Receiving Facility Upgrade by December 31, 2022.

Initiatives at WWTFs – The following list includes efforts aimed at reducing TN output from WWTFs during the eelgrass growing season. Such efforts may include optimization of plants, projects aimed at reducing inflow/infiltration, facility upgrades, or similar measures.

Anticipated Year	Project	Description	Estimated Load Reduction Potential (lbs TN/yr)	Costs	2021 Progress Update	2022 Anticipated Progress
2022	Septage Receiving Facility Upgrade	Pending results of the pilot study, construct new septage receiving facility at a location more favorable for nitrogen treatment at the WWTF	TBD	\$800,000+	Based upon completion and evaluation of a pilot septage upgrade by October 31, 2021, the City will design, bid and construct an upgrade to its septage receiving facility.	Anticipated design, bid and construction by December 31, 2022.
2022	Carbon Storage and Feed Building	Complete construction of a new building to facilitate storage and metered injection of a carbon source into the SND process	TBD	\$3,300,000+	City anticipates awarding new contract and resuming construction of the carbon storage and feed building project in Fall 2021.	City anticipates completion of the carbon storage and feed building project by October 31, 2022.
2022	Aeration Automation Project	Complete construction of automation equipment for operation of aeration; optimize for nitrogen removal with Septage Receiving and Carbon Feed	TBD	\$400,000	City awarded a contract for installation and implementation of equipment and programming to optimize aeration automation which is ongoing in 2021.	City anticipates completion of this project by October 31, 2022.
2021-24	Sewer System Master Plan	Evaluate sewer collection system for sources of Inflow/ Infiltration	TBD	TBD	Ongoing efforts for data collection and monitoring in Spring / Summer 2021. City, working with its consultant, anticipates submission of a scope of work to EPA and NHDEP by September 1, 2021.	City anticipates continuing the master planning effort over the next 2 to 3 years culminating in a final Master Plan.

Initiatives at WWTFs (continued from previous page) – The following list includes efforts aimed at reducing TN output from WWTFs during the eelgrass growing season. Such efforts may include optimization of plants, projects aimed at reducing inflow/infiltration, facility upgrades, or similar measures.

2024	Nitrogen Reduction Report	Evaluate progress to date regarding nitrogen reduction and indicate any further action needed to ensure compliance with effluent limit	TBD	TBD	Ongoing efforts described above.	Ongoing efforts described above.
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