MS4 General Permit Town of Southbury 2024 Annual Report Existing MS4 Permittee Permit Number GSM 00028 January 1, 2024 – December 31, 2024

This report documents the Town of Southbury's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2024 to December 31, 2024.

Part I: Summary of Minimum Control Measure Activities

1. Public Education and Outreach

1.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	Ongoing	Attendance at Farmers' Markets	Raise Public Awareness	Land Use Office	2/15/19	Ongoing	Approximately 500 attendees at the Farmers' Market.
1-2 Address education/ outreach for pollutants of concern*	Ongoing	Storm Drain Markers (PRWC)	Raise Public Awareness	Land Use Office / Department of Public Works	2/15/19	Ongoing	Total of approximately 1,500.

1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.

Continued coordination with the Pomperaug River Watershed Coalition. Earth Day Celebration Spring 2025 Energy Fair Spring 2025 Green Expo Spring 2025

1.3 Details of activities implemented to educate the community on stormwater

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
See item 2.2 – Public Involvement	See PRWC Report Attached	Varied topics, see Appendix		Land Use Department in partnership with the PRWC
Town of Southbury's Webpage has links addressing BMP for stormwater	Home owners (approx. 150)	Protecting the watershed, stormwater management		IT Department Post Document on website
Reviewing plans for development to ensure their compliance with LID and 2004 CT Stormwater Manual	Developers (approx. 20)	Impervious surfaces, BMP's for site control	Sediment Load	Land Use Department, Public Works Department
Aquifer Protection Area Letter	150 Property owners within the APA regulated area	Aquifer protection regulated activites		Land Use Department
Hazardous Waste Drop-off April 12, July 26, September 27, 2024	Residents (approx. 90)	HHW events give residents the opportunity to properly dispose of hazardous materials that are commonly used in the home including paint, pesticides, household cleaners, poisons, and chemicals, helping to keep potentially hazardous waste out of local landfills and sewers, providing extra protection for wetlands and waterways.	Paint, cleaning products	Public Works in partnership with NVCOG

2. Public Involvement/Participation (See Below and PRWC Outreach Log 2024)

2.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Continue availability of Final Stormwater Management Plan to the public	Ongoing	Posting to website	Posted at southbury- ct.org	Land Use Dept.	4/3/2017	8/1/2021	Available on web www.southbury-ct.org
2-2 Comply with public notice requirements for Annual Reports	Ongoing	See report	See final report	Land Use Dept.	2/15/2024	2/15/2024	Available on web www.southbury-ct.org

2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

Hold periodic sub-committee meetings to discuss status of stormwater progress. Continue outreach with PRWC; stress BMPs whenever possible.

2.3 Public Involvement/Participation reporting metrics

Metrics	Date	Posted
Availability of the Stormwater Management Plan to public	3/31/2017	www.southbury-ct.org
Availability of Annual Report announced to public	2/15/2025	www.southbury-ct.org & First Selectman's Office

3. Illicit Discharge Detection and Elimination

3.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
3-1 Develop written IDDE program	Completed	IDDE plan for the town was developed in 2020.	Continue to implement the IDDE plan	Public Works / Land Use Dept.	Jul 1, 2018	Feb. 2020	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In progress	Attribute table added to GIS database detailing location of outfalls as a separate layer. GIS data continues to be updated as Dry Weather Screening is performed.	Completed list of outfalls on the GIS database , allowing for tracking	Public Works	Jul 1, 2019	June 30, 2019	>95% outfalls and catch basins have been added as a layer to the Town's GIS. There is additional info available in GIS about each catch basin, for example maintenance and cleaning dates.
3-3 Implement citizen reporting program	Completed	Delegation of tasks to town staff from the online reporting system by the Public Works department.	Closed records on the IWORQ Database.	Public Works	Jul 1, 2017	Feb. 2017	
3-4 Establish legal authority to prohibit illicit discharges	In progress	Regulations were incorrectly adopted under Zoning regs and will need to be adopted as stand alone regs.	Amend the ordinance to adopt an enforcement arm of the WPCA	Soil and Erosion Control Officer/ In-Land Wetlands	Jul 1, 2018	Anticipated completion date December 31, 2025	
3-5 Develop record keeping system for IDDE tracking	Complete	Work orders tracked in the IWORQ system.	Maintained recorded	Public Works Tracks in IWORQ for the Legal Authority	Jul 1, 2017	Feb. 2017	
3-6 Address IDDE in areas with pollutants of concern	Ongoing	No areas of concern have been identified as needing follow-up.	Maintained record	Soil and Erosion Control Officer/ In-Land Wetlands	Not specified	Ongoing	

3.2 Describe any IDDE activities planned for the next year, if applicable.

Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process. Hazardous waste collection days to reduce illegal discharge into watershed. Continue use of IWORQ Work Order tracking system to track reports made by concerned citizens.

3.3 List of citizen reports of suspected illicit discharges received during this reporting period (through iWorq).

Date of Report	Location / suspected source	Response taken
None reported		

3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period using the following table.

Location	Date and	Discharge to	Estimated	Known or	Corrective measures planned and completed (include	Sampling data
(Lat. Long./ street	duration of	MS4 or	volume	suspected cause	dates)	(if applicable)
crossing /address and	occurrence	surface water	discharged	/ Responsible		
receiving water)				party		
455 Community House	Nov 24, 2020	Culvert to	None Found	UNK	Field Visit to Research – Nothing Found	NA
Rd		Ditch				
84 Hollow Swamp Rd	Jan 2, 2019	Water from	None Found	UNK	Investigate and Found not to be an Illicit Discharge	NA
		Neighbor				

3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.

Citizens are able to complete a Citizen Request Work Order online on the Town's website or call the Public Works Office, as well as through the complaint section of the Land Use website to report their concerns. Public Works coordinates with the Soil and Erosion Control Officer/ Inland Wetlands Officer. A spreadsheet of the report log is maintained on the IWORQ database. Environmental related complaints are tracked in Municity permitting system software with description, observations and resolutions notes.

3.6 Provide a summary of actions taken to address septic failures using the table below.

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known
None reported.		

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	841
Estimated or actual number of interconnections	450
Outfall mapping complete	90%
Interconnection mapping complete	90%
System-wide mapping complete (detailed MS4 infrastructure)	90%
Outfall assessment and priority ranking	10%
Dry weather screening of all High and Low priority outfalls complete	10%
Catchment investigations complete	10%
Estimated percentage of MS4 catchment area investigated	10%

3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

Vac Haul training for catch basin cleaning (all PW employees – annually) Salt Calibration training (all PW employees – annually)

4. Construction Site Runoff Control

4.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Complete	IWWC Regulation update complete January 2020. Sediment and Erosion Control Ordinance is established.	Confirm that ordinance does not need to be changed to update BMP manual reference.	Land Use Department	July 1, 2019	Inland Wetlands Commission approved Regulation update in January 2020.	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Ongoing	All applications funneled by online permitting system through Building Department to ensure all necessary approvals are received.	Check off list in the online permitting program	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	
4-3 Review site plans for stormwater quality concerns	Ongoing	Approximately 25 site plans were reviewed for compliance.	All site plans are reviewed for compliance with a variety of regulations, including stormwater quality.	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	BMP manual guidelines for the State of Connecticut are available as are optional pre- application meetings for all applicants.
4-4 Conduct site inspections	Ongoing	Site inspections were conducted with all major construction projects.	The Zoning and Wetlands Enforcement Officer maintains records of new constructions and problem areas that require site visits.	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	Sediment and Erosion Control bonds are required for all projects.

BMP (Continued from above)	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-5 Implement procedure to allow public comment on site development	Ongoing	Strategic Task Force commission was established with an avenue for public survey to receive general comments.	Zoning Enforcement Officer Database of Complaints.	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	Avenues for public comment on development projects are continuously being assessed and updated as needed.
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Ongoing	All pertinent regulatory material is reviewed to determine additional requirements prior to issuance of permit.	Permit language	Land Use Department	July 1, 2017	Ongoing standard operating procedure.	

4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.

Continue the following practices:

- Utilize IWORQ system for citizen feedback and reporting of land disturbance activities and illicit discharge.
- Site plan reviews
- Site inspections
- Continue interdepartmental cooperation in plan reviews and permit approvals
- Require consistency with 2002 Guidelines for Soil Erosion and Sediment Control and the 2004 Stormwater Quality Manual.

5. Post-construction Stormwater Management

5.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	In progress	LID practices were recommended to be incorporated into the zoning regulation re- write.	Planning requirements in the Zoning Regulation.	Land Use Department	Jul 1, 2021	Anticipated completion Date July 1, 2025	Requests contractors to explore alternate designs to incorporate LID designs. Encourages roof leader drains discharging to infiltrators for new construction single family dwellings. Alternate designs are currently promoted by Land Use Department, but have yet to be codified.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	In progress	LID practices were recommended to be incorporated into the zoning regulation re- write.	Verifiable during site plan review.	Land Use Department	Jul 1, 2019	Anticipated completion Date July 1, 2025	Confirmation by inspection or signed affidavit by contractor before Certificate of Zoning Compliance is issued on new projects.
5-3 Identify retention and detention ponds in priority areas	Complete	All town-maintained basins identified and mapped. Land Use follows up with private basin owners.	Create maps and associated status spreadsheet.	Public Works Department	Jul 1, 2019	Completed 12/31/2023	List of town owned Detention basins updated and sent to Public Works Department by the Inland Wetlands Department.
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Complete	Catch basins are digitized on a GIS map viewer. Detention basin maintenance schedule has been created.	Service log for detention basins.	Public Works	Jul 1, 2019	July 2019	Spreadsheet of detention basin maintenance created and updated regularly.

5-5 DCIA mapping	Complete	The Town contracted with a consultant to perform DCIA baseline calculation.	Excel Spreadsheet Calculated percentage	Land use Department	Jul 1, 2020	Completed 7/14/2022	
ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-6 Address post- construction issues in areas with pollutants of concern continued	Ongoing	Identify erosion and sediment problems in impaired waters through complaint system. Develop and implement solutions to the problems as funding is available, or use legal authority to hold property owners accountable.	Town staff to correct issues on Town-owned property to the extent practicable and incorporated into list of planning projects. Privately-owned land typically issued wetlands violation notice.	Public: Land Use Department Private: Engineering firm	Not specified	Ongoing standard operating procedure.	Update annual report with identification of problem areas, the cost of the retrofit, and the anticipated pollutant reduction.
5-7 Turf Reduction and vegetative buffers	Complete	The Town's Wetland Regulations require applicants to preserve as much of the natural buffer as possible.	Review needed for requirements for turf reduction.	Land Use Department	Not specified	Ongoing standard operating procedure	
5-8 Standards to protect trees	Ongoing	The Town's streetscape plan requires trees along developed areas. These trees are maintained by an arborist throughout the year, including trimming and pruning.	Maintain the Town's streetscape and status as a "Tree City".	Land Use Department / Public Works Department	Not specified	Ongoing standard operating procedure	The landscaping plan is not only aesthetically pleasing, it is also important for evapotranspiration.
5-9 Coordinate with local Health Department	Ongoing	The local Health Department is included in application reviews.	Continue to coordinate with the Health Department.	Land Use Department / Building Department	Not specified	Ongoing standard operating procedure	

5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

Continue to encourage and enforce LID site development practices. Continue requirements for access easement in subdivisions. Continue to address post-construction sediment and erosion control issues as they occur. Continue to encourage preservation and enhancement of natural buffers. Continue to require consistency with the 2004 Stormwater Quality Manual. Continue interdepartment coordination in application reviews.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	593.6 acres
DCIA disconnected (redevelopment plus retrofits)	TBD
Retrofits completed	0
DCIA disconnected	0 % this year / 0 % total since 2012
Estimated cost of retrofits	Not yet determined
Detention or retention ponds identified	35 (town-maintained)

5.4 Briefly describe the method to be used to determine baseline DCIA.

The town contracted with a consultant to calculate DCIA baseline. DCIA was estimated from high-resolution impervious cover (excluding state roads) and land use/cover data available from UConn NEMO and empirical equations (Sutherland Equations) relating DCIA and Total Impervious Area (TIA). The DCIA estimates were developed at the CTDEEP Local Basin scale.

6. Pollution Prevention/Good Housekeeping

6.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-1 Develop/implement formal employee training program	Ongoing	Annual trainings held for all relevant Public Works employees on salt calibration and operation of vac truck.	Attendance Records	Public Works	Jul 1, 2017	Ongoing Standard Operating Procedure	
6-2 Implement MS4 property and operations maintenance	Ongoing	Funding allocated to Public Works for drainage maintenance and repair including detention basins, catch basins and culverts.	Report from director	Public Works Director	Jul 1, 2018	Ongoing standard operating procedure	
6-3 Implement coordination with interconnected MS4s	Ongoing	The Town continues to work with CT Water to inspect and rehabilitate manholes to reduce I&I. The Town continues to coordinate with DOT for the state-owned storm system, including crossings and culverts.	Meeting with Connecticut Water, sewage division scheduled and minutes recorded.	Public Works Director	Not specified	Ongoing	

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-4 Develop/implement program to control other sources of pollutants to the MS4	In progress	Create a list of facilities in town not required to register under the Industrial Stormwater Permit, and review screening and monitoring results for compliance.	Review stormwater general permit registrant list and identify potential contributing facilities not on the list.	Public Works Department / Engineering firm	Not specified	Anticipated completion date December 31, 2024	Compare locations of locations identified and monitor results to determine if further investigation is needed.
6-5 Evaluate additional measures for discharges to impaired waters	See BPM 6-10 -	6-13	1	'	1	'	,
6-6 Track projects that disconnect DCIA	In progress	Review of previous projects within Town dating back to July of 2012 did not identify any significant disconnect projects.	Create a spreadsheet to track disconnected DCIA acreage.	Land Use Department / Public Works Department	Jul 1, 2017	Anticipated completion date December 31, 2024	
6-7 Implement infrastructure repair/rehab program	Ongoing	Drainage system maintenance and repair continues, including detention basins, and pipe inspections performed with a new camera.	Spreadsheet and repair schedule	Public Works Department	Jul 1, 2021	Ongoing	

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-8 Develop/implement plan to identify/prioritize retrofit projects	In progress	In 2022, a review of Town-owned properties for potential DCIA reduction retrofit sites was performed. Funding requested in FY 25-26 budget for consultant to identify retrofit projects.	Identify required repairs based on data from previous permit. Make repairs as funding becomes available.	Public Works Department	Jul 1, 2020	Anticipated completion date Dec 31, 2025	
6-9 Implement retrofit projects to disconnect 2% of DCIA	Ongoing	Funding requested in FY 25-26 budget for consultant to identify retrofit projects.	Disconnect 2% of the Town's DCIA	Public Works Department	Jul 1, 2022	Anticipated completion date Dec 31, 2026	
6-10 Develop/implement street sweeping program	Ongoing	The Town sweeps all its streets twice a year, and additional areas on an as-needed basis.	Spreadsheet	Public Works Department	Jul 1, 2017	Ongoing standard operating procedure	
6-11 Develop/implement catch basin cleaning program	Ongoing	The Town vacuums 10% of its catch basin a year. A new vac truck was purchased to expedite this process. All catch basins have been numbered in GIS for more accurate reporting.	Spreadsheet	Public Works Department	Jul 1, 2020	Ongoing standard operating procedure	
6-12 Develop/implement snow management practices	Ongoing	The Town trains Public Works staff on Salt Calibration to reduce waste and uncessessary salting.	Management manual	Public Works Department	Jul 1, 2018	Ongoing standard operating procedure	
6-13 Map and inventory highly erosive areas in Town Right of Way (ROW)	Ongoing	Eroding areas in ROW are reported by Town staff and added to list of projects.	Identify areas contributing large volumes of sediment to Town waterbodies.	Public Works Department		Ongoing standard operating procedure	Eroding areas are stabilized with rip rap to prevent further deterioration.

6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

Paint, batteries, waste oil, antifreeze accepted at town transfer station. Household Hazardous Waste days held 3x/year. Continue employee training programs. Continue street sweeping programs. Continue catch basin maintenance and inspections.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	Yes
Street sweeping	
Curb miles swept	520 miles
Volume (or mass) of material collected	80 CY
Catch basin cleaning	
Total catch basins in priority areas	Unknown
Total catch basins in MS4	6391
Catch basins inspected	<mark>751</mark>
Catch basins cleaned	<mark>615 (est)</mark>
Volume (or mass) of material removed from all catch basins	<mark>437 CF (est)</mark>
Volume removed from catch basins to impaired waters (if known)	Not known
Snow management	
Type(s) of deicing material used	Treated Rock Salt
Total amount of each deicing material applied	1,615 tons
Type(s) of deicing equipment used	Salt Spreaders
Road miles treated	126 miles
Snow disposal location	n/a
Staff training provided on application methods & equipment	Yes
Municipal turf management program actions (for permittee properties in basins with N/P	
Reduction in application of fertilizers (since start of permit)	0 lbs
Reduction in turf area (since start of permit)	0 acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$0

6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program

Streets are assigned to inspection teams by the Highway Foreman. Crews utilize an industrial vacuum truck to travel the assignment length to inspect and inventory catch basins. If there is sediment in the catch basin, the grate is pulled and the silts and sands are vacuumed out. Chronic silt migration resulting from gravel driveways is addressed by requiring the resident to address the issue creating the problem. Material that is vacuumed out of the catch basin is taken to the Public Works yard.

6.5 Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project.

The retrofit identification and prioritization process consists of a desktop screening evaluation to identify potential retrofit sites followed by field evaluations to confirm feasibility of retrofits, develop retrofit concepts, and prioritize retrofit projects. The initial desktop analysis is used to determine which sites to further evaluate prioritized sites with the following criteria:

- 1. Municipally-owned properties
- 2. Greater than 1 acre of impervious area or greater than 30% of impervious area (using high-resolution impervious cover and land use/cover data available from UConn NEMO)
- 3. Moderately well drained to excessively well drained soils (using USDA/NRCS 2007 Soil Drainage Class data)
- 4. Mostly or entirely outside of the 100 year flood zone (using FEMA Flood Zone data)

Once site visits are completed, preliminary stormwater retrofit concepts will be identified and evaluated for budgetary cost and approximate amount of DCIA that would be disconnected.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.

The retrofit plan will identify retrofit sites and projects. The plan will outline a recommended list of prioritized retrofit projects to achieve the 1% DCIA disconnection goal annually and in future years, to the Maximum Extent Practicable.

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.

The retrofit plan will identify retrofit sites and projects. The plan will outline a recommended list of prioritized retrofit projects to achieve the 1% DCIA disconnection goal annually and in future years, to the Maximum Extent Practicable.

Part II: Impaired waters investigation and monitoring

1. Impaired waters investigation and monitoring program

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution. This data is available on the MS4 map viewer: http://s.uconn.edu/ctms4map.

Nitrogen/	Phosphorus 🔀	Bacteria 🔀	Mercury	Other Pollutant of Concern			
1.2 Describe progra	m status.						
Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.							
Impaired waterbodi	Impaired waterbodies are monitored and tested several times annually by the Pomperaug River Watershed Coalition. Results can be						
Approximately 372 outfalls have been mapped in the town's priority area. 99 outfalls still require initial screening. 33 outfalls were found to have evidence of possible illicit discharge in previous screenings. In the past, a consultant performed the outfall screening. The town has now contracted with a consultant that provided training to relevant town employees to allow town employees to continue screening of outfalls independently. Screenings will be conducted by town staff in 2025. Screening results have been included							
in past reports.							

2. Screening data for outfalls to impaired waterbodies

2.1 Screening data

Complete the table below for any outfalls screened during the reporting period. Each Annual Report will add on to the previous year's screening data showing a cumulative list of outfall screening data.

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?		
Nothing to report this period. Town staff will perform screenings in 2025.							

2.2 Credit for screening data collected under 2004 permit

If any outfalls to impaired waters were sampled under the 2004 MS4 permit, that data can count towards the monitoring requirements under the modified 2017 MS4 permit. Complete the table below to record sampling data for any outfalls to impaired waters under the 2004 MS4 permit.

Outfall	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
None reported.					

3. Follow-up investigations

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment				
Nothing to report.						

4. Prioritized outfall monitoring

Once outfall screening has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2020.

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
Not yet determined				

Part III: Additional IDDE Program Data

1. Assessment and Priority Ranking of Catchments data

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations).

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank
CT6800-00_01	В	1
CT-6800-00_03	В	2

2. Outfall and Interconnection Screening and Sampling data

2.1 Dry weather screening and sampling data from outfalls and interconnections

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken
Nothing to report	Nothing to report this period. Town staff will perform screenings in 2025.									

2.2 Wet weather sample and inspection data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

Outfall / Interconnection ID	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern
Nothing to report this period. Town staff or consultant will perform samplings in 2025.									

3. Catchment Investigation data

3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

Outfall ID	Receiving Water	System Vulnerability Factors
Nothing to	report this period. Budget requested	for FY 25-26 to begin project.

Where SVFs are:

- 1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
- 2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
- 3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
- 4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
- 5. Common trench construction serving both storm and sanitary sewer alignments.
- 6. Crossings of storm and sanitary sewer alignments.
- 7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
- 8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
- 9. Areas formerly served by combined sewer systems.
- 10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.

- 11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).
- 12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data

Key Junction Manhole ID	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants			
Nothing to report	Nothing to report this period. Budget requested for FY 25-26 to begin project.							

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants				
Nothing to report this period. Town staff or consultant will perform samplings in 2025.								

3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

Discharge location	Source location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed		
Nothing to report this period. Budget requested for FY 25-26 to begin project.									

Part IV: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Chief Elected Official or Principal Executive Officer	Document Prepared by
Print name: Jeffrey A. Manville, First Selectman	Print name: Matthew Tarnowski, Project Administrator
Signature / Date:	Signature / Date:

PRWC Activities Log 2024 (Jan - Dec)

SUMMARY

POMPERAUG RIVER



Total Number of Outreach Programs & Water Resource Planning Meetings: 121 (does not include mass media hits) Number of Program & Meeting Attendees: 1,816* (does not include mass media) Additional Number Reached through Mass Media Outreach: 118,108*

(newsletter, brochures, publications, website, signage and storm drain markers)

Date	Topic / Program Title	Venue	Audience	# of Attendees
1/1/24	First Day Hike (w/ SLT)	Platt Farm Preserve, Southbury	Watershed Residents and Beyond	15
1/20/24	MLK Day of Service River Cleanup (w/SLR)	Old Town Beach, Southbury	SLR Consulting Team Volunteers	8
1/24/24	Water-Themed Trivia Night	Heritage Hotel, Southbury	Watershed Residents and Beyond	35
1/25/24	State of the Watershed Presentation	Woodbury Senior Center	Watershed Residents and Beyond	12
1/31/24	State of the Watershed Presentation	Southbury Town Hall	Watershed Residents and Beyond	24
2/20/24	Water Story Time and Craft Event	Southbury Library	Preschool-aged children and parents	12
2/22/24	Water-Themed Trivia Night	Heritage Hotel, Southbury	Watershed Residents and Beyond	30
2/28/24	Road-Stream Crossing Presentation	Woodbury Public Library	Watershed Residents and Beyond	12
	Road-Stream Crossing Presentation	Shove Building, Woodbury	Woodbury Town Officials	8
2/29/24	Pollinator Pathways Panel	Woodbury Senior Center	Watershed Residents and Beyond	120
3/7/24	CAWS Conference (Exhibiting)	Heritage Hotel, Southbury (Hosted by CT Association of Wetland Scientists)	CT Residents, Officials, and Wetland Scientists	150
3/14/24	Water-Themed Trivia Night	Heritage Hotel, Southbury	Watershed Residents and Beyond	65
3/5/24 & 3/18/24	CPOP "Critter Crossing" Sign Workshop/Installation (w/ Flanders)	PRWC Office, Flanders	Volunteers	10

Date	Topic / Program Title	Venue	Audience	# of Attendees
April - Oct.	Stream Sampling	Multiple Locations	Volunteers	14
4/6/24	Pomperaug River Cleanup Event for Woodbury Trash Cleanup Day	Hollow Park, Woodbury	Woodbury Residents and Beyond	30
4/14/24	Riparian Buffer Maintenance	Lake Stibbs, Southbury	Watershed Residents and Beyond	3
4/18/24	Riparian Buffer and Rain Garden Maintenance	Cedarland Park and Community House Park, Southbury	Watershed Residents and Beyond	3
4/20/24	River Walk at Woodbury Earth Day	Hollow Park, Woodbury	Watershed Residents and Beyond	10
4/20/24	Woodbury Earth Day (Exhibiting)	Hollow Park, Woodbury	Watershed Residents and Beyond	250
4/27/24	Vernal Pool-ooza (w/RLT)	Minor Memorial Library, Roxbury	Watershed Residents and Beyond	20
May-Oct.	Thermal Monitoring	Multiple Locations	Volunteers	4
5/11/24	Plant with a Purpose	Lake Stibbs, Southbury	Volunteers	11
5/13/24	Benefits of Buffers Presentation	Bethlehem Public Library	Watershed Residents and Beyond	2
5/18/24	River Ramblers	Janie Pierce Park, Southbury	Watershed Residents and Beyond	8
5/29/24	Pints for Pomperaug Benefit Event	Black Hog Brewing, Oxford	Watershed Residents and Beyond	125
6/15/24	River Ramblers	Nonnewaug Falls, Bethlehem/Woodbury	Watershed Residents and Beyond	11
6/22/24	Water Chestnut Removal #1	Lake Stibbs, Southbury	Volunteers	5
6/27/24	Celebrate our Watershed Paddle (w/HVA & SLT)	Lake Zoar/Pomperaug River, Southbury	Watershed Residents and Beyond	25
6/29/24	Water Chestnut Removal #2	Lake Stibbs, Southbury	Volunteers	9
7/10/24	Audubon Camp Guest Program #1	BOTR Audubon Center, Southbury	Youth	30
7/11/24	Paddle with a Purpose #1	Lake Zoar, Southbury	Volunteers	4
7/19/24	Audubon Camp Guest Program #2	BOTR Audubon Center, Southbury	Youth	4
Date	Topic / Program Title	Venue	Audience	# of Attendees

7/19/24	Paddle with a Purpose #2	Pomperaug River, Southbury	Volunteers	8
7/20/24	River Ramblers	Bent of the River Audubon Center, Southbury	Watershed Residents and Beyond	11
7/24/24	Flanders Camp Guest Program	Flanders Nature Center Woodbury	Youth	24
7/25/24	Water Chestnut Removal #3	Lake Stibbs, Southbury	Volunteers	6
7/27/24	Water Chestnut Removal #4	Lake Stibbs, Southbury	Volunteers	8
8/11/24	Green Corn Festival (Exhibiting)	(hosted by IAIS) Hollow Park, Woodbury	Watershed Residents and Beyond	50
8/17/24	River Ramblers	West Mtn. Hillside Farm, Washington	Watershed Residents and Beyond	6
8/24/24	Oxford Rebuild Expo (Exhibiting)	Quarry Walk, Oxford	Flood Affected Watershed Residents	30
9/10/24	Macroinvertebrate Survey Training	Hybrid, Woodbury Library	Volunteers	12
9/14/24, 9/21/24 & 9/22/24	Macroinvertebrate Survey	Multiple Sites	Volunteers	12
9/15/24	Woodbury Fall Fest (Exhibiting)	Hollow Park, Woodbury	Woodbury Residents and Beyond	100
9/21/24	River Ramblers	Trolley Bed Preserve, Woodbury	Watershed Residents and Beyond	11
9/24/24	Source Water Protection Webinar (w/ CT WPC)	Virtual	CT Residents	75
9/28/24	Storm Drain Marking	Woodlake Community, Woodbury	Boy Scout Troop 480	10
9/28/24	Southbury Energy Fair and Green Expo (Exhibiting)	Southbury Green	Watershed Residents and Beyond	30
10/5/24	Nonnewaug River Cleanup for Woodbury Fall Cleanup Day	Strong Meadow Preserve, Woodbury	Watershed Residents and Beyond	3
10/10/24	Pomperaug 101 Presentation	Naugatuck-Pomperaug Trout Unlimited (TU), Beacon Falls	TU Naugatuck- Pomperaug Chapter	15
10/17/24	Imagine a Day Without Water Webinar (w/ CT WPC)	Virtual	CT Residents	25
10/19/24	Dr. Marc J Taylor Memorial Walk	Platt Farm Preserve, Southbury	Watershed Residents and Beyond	24
10/19/24	River Walk at Bent Fest	BOTR Audubon Center Southbury, CT	Watershed Residents and Beyond	10
10/19/24	Bent Fest (Exhibiting)	BOTR Audubon Center Southbury, CT	Watershed Residents and Beyond	60
Date	Topic / Program Title	Venue	Audience	# of Attendees
10/24/24	Meet Your Greens	Woodbury Brewing Co., Woodbury	Watershed Residents and Beyond	20

10/26/24	CT Envirothon Macroinvertebrate Program	Chatfield Hollow State Park (Killington CT)	CT Envirothon Teams (High School)	60
10/30/24	HV Wastewater Tour	HV Wastewater Treatment Facility, Southbury	Watershed Residents and Beyond	20
Nov. & Dec.	Road Salt Monitoring	Multiple Locations	Volunteers	8

Recurring Meetings with Regular Member Participation and/or Programs that Take Place on Various Dates with Varied Participants*

Date	Topic / Program Title	Venue	Audience	# of Attend ees	# of Progr ams
Various Dates (Bi-Monthly)	Three Rivers Park Ad Hoc Committee	Woodbury Senior Center	Ad Hoc Committee Members	8	16
Various Dates (Monthly)	Water Planning Council Advisory Group (WPCAG)	Zoom Conference Calls	WPCAG Members & Public	25	10
Various Dates (Monthly)	Water Planning Council (WPC)	Zoom Conference Calls	Council Members, Subcommittee Members & Public	25	10
Various Dates (Monthly)	Water Planning Council (WPC) Outreach and Education Group	Zoom Conference Calls	Council Members, Subcommittee Members & Public	8	10
Various Dates (Quarterly)	Heritage Village Water System Advisory Group	Zoom Conference Calls	Connecticut Water Company Staff and HVWS Advisory Group Members	12	2
Various Dates (Quarterly)	Conservation Partners of the Pomperaug (CPoP)	Zoom / BOTR Audubon Center	Conservation Partners	12	4
Various Dates	Ambient Water Quality Monitoring (Bacteria & Nitrate)	15 Sampling Stations Watershed Wide	Volunteers	14	6
Various Dates	Sustainable CT / Sustainable Southbury Meetings	Zoom	Southbury Residents & Town Staff	5	3

*62 Individual Landowners Assisted with Specific Subject Matter Questions (Flooding Concerns, Well Contamination, Surface Water Quality, Invasive Plants, Fisheries, Erosion, Dams, Land Use, etc.)

PRWC Outreach through Mass Media

Date	Activity	Audience	# Reached**	
Spring 2024	River Smart Guide to Waterfront Living Magazine Style Direct Mail	Riparian Property Owners in Pomperaug Watershed	3600 households (also online and additional 2400 copies available throughout the region)	
Ongoing	PRWC Website (<u>www.pomperaug.org</u>)	Watershed Residents and beyond	2,965 unique users	
Ongoing	RiverSmart Website (<u>www.riversmartct.org</u>)	Watershed Residents and beyond	201 unique users	
Ongoing	PRWC E-Newsletter	Watershed Residents and beyond	1,408 digital copies emailed each month June-Nov.	
November	PRWC Print Winter Newsletter	Watershed Residents and beyond	1,200 print copies mailed	
Ongoing	PRWC Facebook Page	Watershed Residents and beyond	1.4K Followers	
Ongoing	PRWC Instagram Page	Watershed Residents and beyond	1034 followers	
Ongoing	Press Releases in Voices Newspaper	Watershed Residents	31,300 per issue	
Ongoing	Press Releases in Waterbury Rep-Am	Watershed Residents and beyond	45,000 per issue	
Ongoing	The Patch (Southbury)	Southbury Residents	Unknown	
Ongoing	Hamlet Hub (Southbury)	Southbury Residents	Unknown	
Date	Activity	Audience	# Reached**	
Ongoing	Storm Drain Markers	Watershed Residents	30,000	
Ongoing	Educational Interpretive Signage at Cedarland Park, Community House Park, & Lake Stibbs Southbury	Watershed Residents	Unknown	
Ongoing	Informational Brochures, Newsletters,, and Displays at Public Libraries, Town Hall Offices, and locally owned businesses	Watershed Residents and beyond	Unknown	
Ongoing	Southbury Code Red System & HVWC Customer Notification Call Lists Low Flow Operations Plan – Thresholds reached / request for voluntary water conservation	Southbury Residents / HVWC customers	Unknown No Alerts Issued in 2024	

** There may be overlap in persons reached.

PRWC Participation in Trainings / Workshops / Conferences (Topics include but are not limited to Municipal Stormwater, Climate Resiliency, Water Resource Protections, and Water Quality)

Date	Activity	Venue / Host
1/20/24	Burr Hill Farm Networking Event	Burr Hill Farm, Middlebury
2/7/24	Trout Unlimited Presentation with CT DEEP	Naugatuck-Pomperaug Trout Unlimited, Beacon Falls
3/6/24	Aquifer Protection Webinar	CT Water Planning Council (WPC)
3/7/24	Connecticut Association of Wetland Scientists (CAWS) Annual Meeting and Environmental Conference	CAWS, Heritage Hotel, Southbury
4/10/24	UCONN CLEAR Webinar: The Role of Riparian Buffers in Watersheds and Your Local Landscape	UCONN Center for Land Use Education & Research (CLEAR)
4/30/24	Watershed Conference: Exploring Nature-based Solutions for Healthier Watersheds in a Changing Climate	Rivers Alliance/ UCONN CLEAR, Haddam
5/14/24	Revising the Conservation Plan for Long Island Sound Webinar	Long Island Sound Study
5/26/24	Organizational Development vs Strategic Planning Webinar	NANOE
9/10/24	CT Community Foundation (CCF) Annual Meeting	CCF, Heritage Hotel, Southbury
9/23/24	Nature for Resilient CT Webinar	Resilient Land and Water
9/24/24	Source Water Protection and Emerging Contaminants Webinar	CT WPC
10/17/24	Flash Drought Webinar	CT WPC
10/29/24	Invasive Plant Symposium	CT Invasive Plant Working Group, UCONN, Storrs
11/7/24	Non-profit Development Webinar	Nonprofit Tech for Good
11/7/24	Post-Election Implications for Water Policy	River Network
11/12/24	Generational Giving	Qgiv by Bloomerang
11/13/24	Sustainable CT Awards Ceremony	Sustainable CT, The Kate, Old Saybrook
11/19/24	Rivers and Roads: Impacts of Freshwater Salinization Webinar	IWLA (Izaak Walton League of America)
12/13/24	Housatonic Valley Association Annual Meeting	HVA, American Mural Project, Winsted

River Smart Guide to Waterfront Living How to Keep Your Water Clean RIVER-FRIENDLY TIPS FOR MAINTAINING YOUR PROPERTY IDEAS FOR YOUR SPRING GARDEN SIMPLE STEPS TO CURB POLLUTED RUNOFF INTRO TO SEPTIC SYSTEMS **\$ PRIVATE WELLS**

In the spring of 2024, PRWC published a 12page, magazine-style <u>River Smart Guide to</u> <u>Waterfront Living</u> which was mailed to every landowner in the Pomperaug Watershed with wetlands or watercourses within or bordering their property (approximately 3600 copies). The guide provides useful, "evergreen" resources on topics like private well testing, septic maintenance, and reducing chemical use while informing residents of actions they could take to protect the health of their community's water resources.



39 Sherman Hill Road, C103 Woodbury, CT 06798 www.pomperaug.org

An additional 2400 copies of the River Smart Guide have been made available at local businesses, libraries, town halls, nature centers, and during community events throughout the watershed and surrounding region. Distribution of the guide was further complimented by a series of 6 advertisements highlighting various River Smart tips that ran in Voices Newspaper as well as watershed stewardship projects and educational programming.

It's your watershed, handle with care.



To learn more about your local rivers and groundwater and to support the Pomperaug River Watershed Coalition, visit www.pomperaug.org





2024 Dr. Marc Taylor Intern Achievements

PRWC employed two Dr. Marc Taylor Interns for an eight-week field season. They completed an impressive season of technical work including North Atlantic Aquatic Connectivity Collaborative Stream Crossing Assessments, Invasive Species Management, and Ambient Water Quality Monitoring. The team achieved the following:

- Completed all remaining accessible road-stream crossing assessments (bridges and culverts) in Southbury (286) and Bethlehem (79) following North Atlantic Aquatic Connectivity Collaborative (NAACC) protocols to evaluate suitability for aquatic life passage. Aquatic life passage barrier ratings and field data for each crossing can be viewed online at https://naacc.org/naacc_search_crossing.cfm.
- Collected 2 rounds of monthly bacteria, nitrate, and conductivity samples from 15 sites located throughout the watershed providing ambient water quality data to Connecticut Department of Energy and Environmental Protection
 - Updated an online, interactive, color-coded map of sampling results that shows whether the given location is suitable for swimming, fishing, boating, etc. Map is viewable at www.pomperaug.org/monitoring
 - Updated web pages for each sampling site to include a table showing bacteria, nitrate, and conductivity data for each sampling round.
- Conducted thermal spot checks for stream temperature data loggers placed at 11 monitoring sites throughout the watershed. Stream temperature is taken and recorded to serve as a data point to compare the logger data to for quality assurance purposes.



North Atlantic Aquatic Connectivity Collaborative (NAACC) Assessment Summary 2024



PRWC began surveying road-stream crossings in the Pomperaug Watershed following protocol from the <u>North Atlantic Aquatic Connectivity Collaborative (NAACC)</u> during the 2020 field season. PRWC participates in the assessment of road crossings for non-tidal streams and rivers, using NAACC's data collection forms and training materials.

Poorly designed and undersized culverts and bridges are barriers to aquatic organisms and hazards to communities during storms. Streams are linear habitats for aquatic and semi-aquatic life species such as Brook Trout, American eel, stream salamanders, turtles, and crayfish. Road crossings can fragment streams into small pieces, preventing organisms from accessing critical habitats. These crossings may also be infrastructure liabilities and flooding hazards for communities. During storms, undersized and improperly installed culverts can become clogged with debris or overwhelmed, leading to road flooding, stream bank erosion, or even wash out the whole road.

Through these assessments, data collected by field assessors are submitted to NAACC and processed to be rated according to the severity of the barrier they present for aquatic organism passage. This helps provide mapped information on culverts, bridges, or crossings that may need to be prioritized for repair or

replacement to improve the connectivity of the stream or river both in terms of streamflow and discharge of storm events as well as aquatic life movement up and down the system. Aquatic life passage barrier ratings and field data for each crossing can be viewed online at https://naacc.org/naacc_search_crossing.cfm.

PRWC has completed assessments for all of the safely accessible road-stream crossings in Woodbury (163 public crossings out of the 171 that have been identified), and presented a <u>Road-Stream</u> <u>Crossing Management Plan</u> to the Town of Woodbury. This Plan will help the Town prioritize repair or replacement of the crossings with an added layer of climate resiliency planning.

Additionally, as of Aug. 2024, PRWC has assessed all accessible road-stream crossing assessments in Southbury (286) and Bethlehem (79). This data is being processed and will be used to generate a Road-Stream Crossing Management Plan for each town. Preliminary crossing data from Southbury has already been shared with the Town of Southbury to assist in flood recovery efforts.







Bethlehem

PRWC will review the assessment data with Town Land Use and Department of Public Works and the Regional Planning Agency (NVCOG) staff to prioritize crossing upgrades based on those that present the great barrier for aquatic organism passage, undersizing to handle storm volumes, or issues related to deterioration of infrastructure that may result in culvert failure.



NOTE: PRWC has conducted road-stream crossing assessments in Woodbury, Bethlehem, and Southbury. The Housatonic Valley Association has completed assessments in the Pomperaug Watershed neighboring towns of Oxford, Watertown, Morris, Washington, and Roxbury.

Bacteria/Nitrate

PRWC launched a bacteria and nitrate monitoring program in 2019 wherein stream water samples are collected from 15 sites throughout the watershed. Sampling frequency has been once a month between April and October. The samples collected by PRWC staff and volunteers are delivered to a state certified water testing laboratory for analysis and results are reported back to PRWC. Data is available to the watershed community in the form of an interactive map on PRWC's website at www.pomperaug.org/bacteriaandnitrate. Data was not collected in August 2024 due to flooding.

By sampling for *E. coli* bacteria and nitrate, PRWC is able to further characterize pollutant sources and problem areas, and further bracket priority areas for non-point source pollution and stormwater runoff reduction projects. These data also help differentiate sources of bacteria contamination in the river.

In 2023, PRWC published two Technical Memos - one presenting the findings of its Ambient Water Quality Monitoring and the other detailing the findings of a complementary Streamwalk Assessment Survey of Weekeepeemee River. These findings were further integrated into <u>Pomperaug Watershed</u> <u>Based Plan Addendum</u> which highlights the updated existing conditions and presents a reprioritized best management practice implementation strategy to address polluted runoff and achieve compliance with state and federal water quality standards.

The Technical Memos and Watershed Based Plan Addendum are available to view on the PRWC website at <u>www.pomperaug.org/scientific-reports</u>.

Sodium Chloride

This year, PRWC fully launched a new sodium chloride monitoring program to assess the impacts of road salt application on freshwater ecosystems (from November to March) as a partner of the Izaak Walton League of America's (IWLA) <u>Salt Watch</u> program. Eight stream sites in close proximity to large paved areas were selected in Woodbury and Southbury to test for sodium chloride (road salt). This program follows an emerging trend among watershed groups and municipalities toward recognizing and mitigating the negative impacts of excessive road salt application on the environment. Data collected this season (Nov 2024- Feb 2025) will be made available to the watershed community in the form of an interactive map on PRWC's website at <u>www.pomperaug.org/salt-monitoring</u>.

PRWC's road salt monitoring program will help identify areas in the watershed that need to be salted more responsibly to protect public safety *and* aquatic life. PRWC is also engaging in community education and outreach on this topic (as a partner organization of <u>River Smart CT</u>) to help watershed residents understand the impacts of salt on the environment and how they can curb excessive salt application while still maintaining public safety.

Stream Temperature Monitoring Summary (2012-2024)

Since 2012, PRWC has deployed a network of stream temperature data loggers that are programmed to record water temperature every hour starting June 1 and through at least August 31. PRWC adheres to

data quality protocols established by CT DEEP for their Volunteer Stream Temperature Monitoring Program (VSTeM). PRWC's network of sites monitored has ranged from as many as 13 sites (2014) to as few as 5 sites (2021) depending on equipment availability. PRWC deployed data loggers to 11 stream locations throughout the watershed in 2024. Historic flooding in August resulted in the loss of 4 loggers, which will need to be replaced for the upcoming field season. Data from 7 loggers that were retrieved has been downloaded and summarized against three key metrics used to determine the site's thermal classification (Cold, Cool, Warm). The key metrics are June to August mean temperature, July mean temperature, and maximum daily mean temperature between June and August. The majority of sites are classified as Cool water habitat with two sites demonstrating mean July temperatures that indicate transition to warm water habitat. One site registers as Cool transitioning from Cold water habitat.



CT Dept. of Energy and Environmental Protection



Several sites now have more than 10 years of seasonal data, which creates a solid baseline record of conditions and trend analysis can begin. Regardless of data set size, each site is evaluated on a seasonal basis to classify the thermal regime of the stream as Cold, Cool, or Warm in relation to habitat type and the type of fish community that can be supported. This is an important metric when it comes to protection of species like brook trout that rely on cold water habitat as well as supporting recreation fishing for species like small and largemouth bass that thrive in warm water habitats. As cold water habitats have been predicted to occur in the headwater tributaries of the Pomperaug Watershed (<u>CT DEEP</u>), PRWC is making an effort to include these streams in its monitoring so there will be data that may serve as the basis for future protections. PRWC's stream temperature monitoring sites and summary data can be explored at https://www.pomperaug.org/streamtemperature. Raw data can be downloaded from the EcoSHEDS (Spatial Hydro-Ecological Data Systems) portal hosted by the U.S. Geological Survey http://db.ecosheds.org/viewer.

Storm Drain Marker Project Summary

Approximately <u>3,570</u> Storm Drain Markers have been installed throughout the Pomperaug River Watershed towns since 2014.

Storm drains are the openings you see along curbs and in streets and parking lots. They collect stormwater and transport it through a system of pipes to nearby ponds, lakes and streams, and ultimately to Long Island Sound. Storm drains do not lead to a treatment facility. Anything that goes into a storm drain eventually ends up in our waters. The storm drain markers provide a gentle prompt to not dump anything down the drain and that only rain should go down the drain because of the connection to nearby rivers and streams.

Reminders:

Drain Marker Inventory Depleted in 2017. Drain Marker Inventory Replenished in 2019. Drain Marker Inventory Depleted in 2021. Drain Marker Inventory Replenished in 2024. ** = Replacement Storm Drain Markers Added.

In fall 2024, 250 storm drain markers were installed in the Woodlake Community (Woodbury). An additional 750 markers will be installed throughout the watershed in spring 2025.





PRWC interns and volunteers installing storm drain markers through the Pomperaug Watershed.

Town (Approx. Marker Count)	Year	List of Roads / Locations		
	2021 (11)	Reservoir Rd	Russian Village	
	2020 (400)	Hinman Ln Ivy Hills Rd Old Highway Rd Sunset Ridge Rd	Grasslands Rd Wood Lot Rd New Wheeler Rd	Short Rock Rd Dublin Hill Rd Bucks Hill Rd
	2019 (137)	Heritage Rd Poverty Rd Jeremy Swamp Rd (<i>partial</i>)	Hillhouse Rd Peach Orchard Rd Peter Rd (<i>partial)</i>	Spruce Brook Rd E Flat Hill Rd
Southbury (~1248 Markers)	2017	Glen Ln Sunburst Dr Settlers Hill Rd Lumlot Rd Chestnut Tree Hill South Ridge Rd Cedar Grove Rd	Skyview Dr Horizon Hill Hill Crest Dr Beecher Dr Woodland Hills Rd Ivy Hills Rd	Homestead Rd Railstone Dr Overton Farm Rd Luther Rd Forest Rd Bagley Rd
	2016	Main Street South <i>(partial)</i> Heritage Rd	North Poverty Rd Flood Bridge Rd	Old Field Rd**
	2015	Eagle View Rd Grey Rock Rd	Little Fox Ln Sleepy Hill Rd	Valley Stream Ln
	2014	Bagley Rd Berkshire Rd Carriage Dr Cedar Trl Charter Oak Rd Coachmans Dr Colonial Dr Community House Rd Coughlin Dr E Hill Rd Fawn Ridge Ct Forest Rd Fox Run Dr Gate Post Ln Hicock Dr Hillside Rd Old Waterbury Rd	Horse Fence Hill Rd Housatonic Trl Judd Rd Lantern Park Ln N Lantern Park Ln S Luther Dr Manor Rd Mansion House Rd Meadow Brook Rd Midland Trl Munn Rd Northern Trl Oak Tree Rd Oakdale Dr Old Field Rd Old Poverty Rd	Painter Rd Pascoe Dr Patriot Rd Petriot Rd Peck Ln Pepper Tree Hill Ln Pine Hill Rd Pomperaug Trl Poplar Dr Poverty Rd Poverty Rd River Trl Spring Trl Sylvan Crest Dr White Birch Ln Wolfpit Dr

Town (Approx. Marker Count)	Year	List of Roads / Locations		
	2024 (250)	Woodlake Community (Woodlake Road, Woods Way, Hilltop Drive, Clubhouse Drive) & Transylvania Road		
	2020 (200)	Minortown Rd Mill Rd	Main St N Main St S	Middle Road Turnpike
	2019 (192)	Grassy Hill Rd Woodlake Entrance Bacon Pond Rd Bear Run Trolley Bed Rd Linden Rd Old Sherman Hill Rd** Whittlesey Rd (<i>partial</i>)	Upper Grassy Hill Rd Tuttle Rd Park Rd River Bend Dr Saxony Ln Meadowbrook Ln Sherman Hill Rd (<i>partial</i>) Church Street	Transylvania Rd Sage Rd Judson Ave Owl Ridge Rd Cam Ave Arrowhead Way (<i>partial</i>) Good Hill Rd (<i>partial</i>) Flanders Rd (<i>partial</i>)
	2017	White Deer Rocks Rd. Sage Rd Terrell Rd Joshua Hill Rd Crane Rd Barbara Ln Park Rd Rail Tree Hill Rd	Hollow Rd** Streamside Ave Westside Rd Fairgrounds Rd Westwood Rd Stone Pit Rd Hoop Pole Hill Rd	Fieldstone Rd Essex Ln Inwood Ln Good Hill Rd Meadowbrook Ln Old Grassy Hill Rd Grassy Hill Rd
Woodbury (~1097 Markers)	2016	Old Sherman Hill Rd		
NO DUMPING!	2015	Alder Ct Bacon Pond Rd Barn Hill Rd Barnhill Rd Beechwood Ct Cedar Spring Ln Church St Clubhouse Dr Deer Hill Ct Edgehill Ct Fox Run Great Hollow Rd Grey Fox Trl Hesseky Meadow Rd	Hilltop Dr Hollow Rd Ironwood Ln Juniper Ct Lower Commons Maple Hill Ln Meadow Crest Dr N Gate Rd No Meadows Old Town Farm Rd Orenaug Ave Plumb Brook Rd Racoon Ridge	S Meadows School St Shagbark Ln Silver Brook Ln Summit Ct Sycamore Ave Tamarack Ln Timber Ln Transylvania Rd Upper Cmns Washington Ave Woodlake Rd Woods Way
	2014	Coach Light Dr Gate Post Ln Hillview Ln Hyland Ave Meadow Ave Middle Quarter Rd	Old Fair Grounds Rd Old Sherman Hill Rd Orchard Ave Orchard Ln Orton Ln	Pomperaug Rd River View Ln S Pomperaug Ave Sherman Heights Rd Weekeepeemee Rd

Town (Approx. Marker Count)	Year	List of Roads / Locations		
Bethlehem (~236 Markers) NO DUMPING! UNDER DRAINS TO WATERWAYS	2021 (60)	Kasson Rd Auncient Oak	Deerwood Dr Thomson Rd	Cabbage Ln
	2019 (141)	Main Street N Sunset Rd	Munger Ln Main Street S (<i>partial</i>)	Robert Leather Rd Flanders Rd (<i>partial</i>)
	2016	Nonnewaug Rd		
	2015	Double Hill Rd	Kasson Ave	Orchard Ave
	2014	Crane Hollow Rd Lake Ave	Lake Dr	Long Horizon Rd
Watertown (~371 Markers)	2021 (89)	Judd Farm Rd Guernseytown Rd	Wolf Hill Rd Skilton Rd	Hamilton Ln Hamilton Ave
NO DUMPING!	2015	Balmoral Dr Dunrobin Ln Eastwood Hall Rd Guernseytown Rd Inverary Dr Stonehenge Pl	Kent Ter Malvern Hill Rd Neill Dr Pepperidge Tree Rd Platt Rd	Stoneleigh Rd Warwick Rd Westgate Rd Whispering Hill Rd Winding Brook Farm Rd