

MS4 General Permit
Town of Woodbury 2017 Annual Report
Existing MS4 Permittee
Permit Number GSM 000007
January 1, 2017 – December 31, 2017

This report documents the Town of Woodbury’s efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2017 to December 31, 2017.

Part I: Summary of Minimum Control Measure Activities

1. Public Education and Outreach (Section 6 (a)(1) / page 19)

1.1 BMP Summary

BMP	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	Complete	Developed a Town Stormwater Management website which provides educational information and links to various websites (EPA, CT DEEP, UCONN NEMO, PRWC) related to water quality and stormwater management topics	Create Town website to include educational materials	Land Use/ M. Edwards	July 1, 2018	December 2017	woodburyct.org/stormwatermanagement
1-2 Address education/ outreach for pollutants of concern*	Complete	Online educational materials focused on bacteria (pet waste management, impervious cover, impacts of illicit discharges, waterfowl and manure	Updated Town website to include educational materials related to pollutants of concern in Woodbury	Land Use/ M. Edwards	Jul 1, 2018	December 2017	woodburyct.org/stormwatermanagement http://nemo.uconn.edu/ms4/index.htm http://clear.uconn.edu

1-3 Implement public education and outreach	Complete	Utilize existing educational materials to continue public education and outreach. Materials are available in the Land Use office, Town Clerks Office and the Library	Distribute educational materials and make them available to the public in municipal offices	Land Use/ M. Edwards	July 1, 2018	January 2017	Examples of educational materials include EPA's After the Storm: A Citizen's Guide to Understanding Stormwater, Do Not Feed Waterfowl, SepticSmart, Aquatic Hikers, Watershed Newsletter
1-4 Implement public education and outreach	Ongoing	River Smart Resource Kits, provided to the Town by Pomperaug River Watershed Coalition (PRWC) are available in the Land Use Office and at Public Works. These kits have been given to residents of the community including applicants for projects near waterbodies and watercourses. The River Smart Resource Kit includes the following brochures and handouts on how to protect water resources	Distribute educational materials and make the available in municipal offices	PRWC Land Use/ M. Edwards	July 1, 2018	January 2017	https://www.riversmartct.org/learn
1-5 Implement public education and outreach	Ongoing	The Town and PRWC will continue targeted outreach to K-12 students, agricultural, developers, homeowners and businesses on specific aspects of stormwater management	Public Outreach Activities	PRWC Land Use/ M. Edwards	July 1, 2018	Various events throughout 2017	
1-6 Implement public education and outreach	Ongoing	The Town continues to work with the Northwest Conservation District to promote the use of Low Impact Development in the town	Creation of an LID manual	Land Use/ M. Edwards	July 1, 2018	2017	http://nwcd.org/wpsite/low-impact-development-lid/
1-7 Implement public education and outreach	Ongoing	A link is included on the Town website dedicated to the PRWC and their goal of maintaining the health watershed and sharing that with the community.	Update as needed	Land Use/ M. Edwards	July 1, 2018	January 2017	www.pomperaug.org

1-8 Address education/ outreach	Ongoing	Storm Drain Marking– In coordination with the PRWC a storm drain marking program has been underway. Approximately 142 drain markers were installed in Woodbury in 2017	Installation of storm drain markers	PRWC	July 1, 2018	Throughout 2017	
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1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.

PRWC will share its environmental message and outreach materials at the Woodbury Earth Day Festival, Woodbury Fall Fest / Meander on Main Street and at Woodbury Trunk or Treat at Hollow Park.

The Town will continue to partner with local groups, such as the Pomperaug Valley Group, to provide vests for annual litter clean-up events. The public is encouraged to help remove litter and debris, which is then picked up and disposed of by the Public Works Department

PRWC in conjunction with the Woodbury Conservation Commission will hold a Spring Town-Wide Clean Up Day.

The Town will continue to update our online education materials and educational brochures.

1.3 Details of activities implemented to educate the community on stormwater (see attached spreadsheet)

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Watershed Based Plan – Presentation on Project Initiation	Woodbury Land Use Commissions, Public (30)	Watershed planning, Impaired waters, Bacteria, Land Use, Impact of Impervious cover	Bacteria (Woodbury)	Pomperaug River Watershed Coalition
Water Watch Presentation	Watershed Residents (20)	State water planning, water quality		Pomperaug River Watershed Coalition
Nonnewaug High School Renovations Pre-Application Meeting	Woodbury Land Use Commission Representatives and Consultant (20)	Stormwater management, water quality		Pomperaug River Watershed Coalition
Woodbury Earth Day	General Populous (6,000)	Watershed Protection and Environmental Stewardship		Pomperaug River Watershed Coalition
Woodbury Earth Day Workshop	Homeowners (30)	Rain Barrel Workshop		Pomperaug River Watershed Coalition
Presentation to Woodbury Planning Commission	Planning Commission Members, Public (12)	Water Resource Mgmt. for POCD Update		Pomperaug River Watershed Coalition

River Ramblers Hike	Watershed Residents (15)	Environmental Stewardship	Pomperaug River Watershed Coalition
Watershed Protection & Environmental Stewardship, RiverSmart, Bioswales and Invasive Plant Removal	Watershed Residents (45)	Watershed Protection, Water quality and Environmental Stewardship	Pomperaug River Watershed Coalition
River Ramblers Hike	Watershed Residents (12)	Environmental Stewardship	Pomperaug River Watershed Coalition
Riversmart and Watershed Protection	Woodbury and area residents (100)	Watershed Protection, Water quality and Environmental Stewardship	Pomperaug River Watershed Coalition
Spring Clean-up day	Woodbury Residents (20)	Water quality, environmental stewardship	Woodbury Conservation Commission
Fall Clean-up day	Woodbury Residents (30)	Water quality, environmental stewardship	Woodbury Conservation Commission, Pomperaug River Watershed Coalition
Youth Education Programs: Long Haul and Water Filtration	3 rd , 4 th and 5 th grade students (45)	Water use and conservation	Pomperaug River watershed Coalition
Annual Macroinvertebrate Survey	Volunteers (10)	Water Quality	Pomperaug River Watershed Coalition
Youth Education Program: Stormwater in a Jar	Six classes of 7 th graders (150)	Stormwater Management	Pomperaug River Watershed Coalition
Water Watch: A Deeper Look at PRWC Local Water Resource Management Efforts	Western Connecticut Leadership Program Alumni (6)	Water resource management and protection	Pomperaug River Watershed Coalition
Hollow Pond Ad Hoc Committee	Management Plan Committee Members (8)	Water quality and Environmental Stewardship	Woodbury Parks and Recreation
Illicit Discharge Detection and Elimination Workshop	Land Use and Public Works Staff (3)	MS4 Program	UConn Center for Land Use Education and Research

2. Public Involvement/Participation (Section 6(a)(2) / page 21)

2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Comply with public notice requirements for the Stormwater Management Plan	Complete	Complete Stormwater Management Plan	Make final Stormwater Management Plan available electronically on the Town website and paper copies available in Town Hall	Land Use/ M. Edwards	April 3, 2017	July 2017	

2-2 Comply with public notice requirements for Annual Reports	Complete (update annually)	Complete Annual Report	Make draft Annual Report available electronically on the Town website and paper copies available in Town Hall. Publish notice of availability on website or local newspaper.	Land Use/ M. Edwards	Feb 15, 2018	February 15, 2018	www.woodburyct.org
2-3 Comply with public notice requirements for Annual Reports	Complete	Notice of the draft Annual Report is included on the Town website and it will be available for public review and comment. The final report will also be available for public review and comment	Make final Annual Report Annually available electronically on the Town website.	Land Use/ M. Edwards	January 2018	January 2018	
2-4 Establish Stormwater Committee	Complete	An Ad-hoc Stormwater Management Committee was appointed by the Board of Selectmen and consists of Town Employees and a member of PRWC. Additional members may be identified and added.	Provide forum to coordinate SWMP implementation across depts. and commissions	Land Use/ M. Edwards Public Works/ R. Lamothe	-	January 2018	Reason for addition: Committee will represent town departments & commissions with stake in stormwater mgmt.
2-5 Continue to work with local organizations and groups	Ongoing	Conduct Meetings quarterly	Conduct regular meetings of the Woodbury Stormwater Management Committee	Stormwater Management Committee	-	-	
2-6 Continue to work with local organizations and groups	Ongoing	Continue to work with local organizations (PRWC, etc.) to identify public involvement opportunities and assist with plan implementation.	Ensure local coordination related to public involvement opportunities	Stormwater Management Committee	-	-	

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

Hold quarterly stormwater committee meetings to review SMP/General Permit implementation progress.

PRWC will continue the installation of storm drain markers as part of their public participation program

Woodbury will continue to collaborate with area organizations such as the PRWC and the Northwest Conservation District to provide additional public involvement opportunities

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	July 2017	Woodburyct.org/ stormwatermanagement
Availability of Annual Report announced to public	Yes	January 26, 2018	Woodburyct.org/ Landuse/Townplanner and Woodburyct.org/ stormwatermanagement

3. Illicit Discharge Detection and Elimination (Section 6(a)(3) and Appendix B / page 22)

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	In progress	Town is in process of drafting the written IDDE program using the CT IDDE program template	Develop written plan of IDDE program	Land Use/ M. Edwards	Jul 1, 2018	Anticipate partial completion by the deadline of July 1, 2018.	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In progress	An RFP was issued for this work and a consultant will be selected upon budget approval	Update GIS storm system mapping to include required Elements; Develop a list of stormwater outfalls in priority areas.	Public Works/ R. Lamothe; Consultant	Jul 1, 2019	Anticipate completing by deadline of July 1, 2019.	
3-3 Implement citizen reporting program	Complete	The Town has a citizen reporting system. An email address and phone number have been added to the Town website for submitting a report. The reports will be investigated and included in the annual report	Establish a citizen reporting hotline and advertise it on the Town website and in municipal offices.	Land Use/M. Edwards; Public Works/ R. Lamothe	Jul 1, 2017	December 2017	

3-4 Establish legal authority to prohibit illicit discharges	In progress	The town is drafting the necessary legal authority to eliminate illicit discharges.	Adopted Illicit Discharge Ordinance	Land Use/M. Edwards	Jul 1, 2018	Anticipate completing by the deadline of July 1, 2018.
3-5 Develop record keeping system for IDDE tracking	Complete	An IDDE Tracking Form has been created to record illicit discharge abatement activities.	Develop IDDE record keeping system	Land Use/M. Edwards	Jul 1, 2017	January 2018
3-6 Address IDDE in areas with pollutants of concern	Not started	N/A	Identify areas with high potential for septic system failure.	Public Works/ R. Lamothe	Not specified	Anticipate completing by June 2019
3-7 Conduct SSO Inventory	N/A	N/A	The Town does not contain a municipal sanitary sewer system and this permit requirement does not apply.	N/A	N/A	N/A
3-8 Assess and prepare a priority ranking of catchments	Not started	An RFP was issued for this work and a consultant will be selected upon budget approval	Classify each catchment within priority areas into an excluded, problem, high priority, or low priority catchment.	Consultant Public Works/ R. Lamothe	-	-
3-9 Conduct outfall and interconnection screening and sampling	Not started	An RFP was issued for this work and a consultant will be selected upon budget approval	Conduct dry weather screening and sampling (where flowing) of every MS4 outfall and interconnection (except for excluded and problem catchments) Evaluate catchments for System Vulnerability Factors and begin catchment investigations	Consultant Public Works/ R. Lamothe	June 2019	Anticipate completing by June 2019
3-10 Conduct catchment investigations and remove illicit discharges	Not started	An RFP was issued for this work and a consultant will be selected upon budget approval	Where System Vulnerability Factors are present, conduct manhole inspections. Isolate and verify sources. Remove identified illicit discharges and conduct confirmatory outfall screening.	Consultant Public Works/ R. Lamothe	-	-

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

The written program will be posted to the Department of Public works webpage and a link listed in next year’s Annual Report; the Town will update the written IDDE program as needed throughout the permit term.

Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process

3.3 List of citizen reports of suspected illicit discharges received during this reporting period.

Date of Report	Location / suspected source	Response taken
None		

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 (Lat long/ street crossing /address and receiving water)	Date and duration of occurrence	Discharge to MS4 or surface water	Estimated volume discharged	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)	Sampling data (if applicable)
None						

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 that wish to report illicit discharges can call the Land Use office or Public Works or send an email to stormwater@woodburyct.org The Land Use Office reviews the report, records the information on an IDDE Hotline Tracking Form and contacts the IDDE inspector. The Public Works Department IDDE Inspector investigates and responds to the complaint and provides follow-up information and resolution to the Land Use office.

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
N/A (There are no known septic failures at this time)		

3.7 IDDE reporting metrics

Metrics

Estimated or actual number of MS4 outfalls	TBD
Estimated or actual number of interconnections	TBD
Outfall mapping complete	(0%)
Interconnection mapping complete	(0%)
System-wide mapping complete (detailed MS4 infrastructure)	(0%)
Outfall assessment and priority ranking	0(%)
Dry weather screening of all High and Low priority outfalls complete	0
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	0%

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).

The Town of Woodbury will expand on its existing training program which currently addresses stormwater management and water quality issues (conducted annually).

The following Stormwater Best Management Practices education materials have been made available to applicable staff: Salt, Sand and Deicer Storage & Snow Disposal; Good Housekeeping & Spill Prevention; Illicit Connections & Illegal Discharge Reporting; and Spill Clean Up. Appropriate staff were also provided with a PowerPoint on recognizing and reporting illicit discharges.

Training for the next annual report will focus on standard operating procedures consistent with the MS4 general permit; general goals and objectives of the Town’s

Stormwater Management Plan; Identification and reporting of illicit discharges and improper disposal; and spill response protocols and responsibilities

The Town Planner, Zoning Enforcement Officer and the Public Works Director attended the MS4 IDDE requirements workshop in September.

4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

4.1 BMP Summary

BMP	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	Started	Began reviewing regulations to determine necessary revisions	Review and update, as necessary, existing land use regulations and implementation policies for compliance with MS4 permit requirements.	Land Use/ M. Edwards	Jul 1, 2019	Anticipate completing by the deadline of July 1, 2019.	
4-2 Develop/Implement plan for interdepartmental coordination in plan review and approval	Ongoing	Coordinate the functions of all departments and boards involved in the review, permitting, or approval of land disturbance projects.	Continue to implement interdepartmental coordination procedures as described in Section 5.2 of the Town's Stormwater Management Plan.	Land Use/ M. Edwards; ZEO	Jul 1, 2017	Jul 1, 2017	
4-3 Review site plans for stormwater quality concerns	Ongoing	Continue to conduct site plan reviews that incorporate consideration of stormwater controls or management practices to prevent or minimize impacts to water quality on sites with soil disturbance of one acre or more.	Complete site plan reviews for all projects subject to specific land use regulations.	Land Use/ M. Edwards; ZEO	Jul 1, 2017	Jul 1, 2017	
4-4 Conduct site inspections	Ongoing	Continue to conduct site inspections to assess the adequacy of the installation, maintenance, operation, and repair of construction and post-construction control measures	Conduct inspections and enforcement to assess and ensure the adequacy of the installation, maintenance, operation, and repair of construction and post construction	Land Use/ ZEO	Jul 1, 2017	Ongoing	

4-5 Implement procedure to allow public comment on site development	Ongoing	and take enforcement action when necessary The Land Use office continues to allow the public to comment on proposed and ongoing land disturbance and development activities	control measures. Post notice of Woodbury's email address for stormwater related comments on the Town website	Land Use/ M. Edwards	Jul 1, 2017	Jul 1, 2017	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Ongoing	The Land Use office continues to notify developers and contractors of their potential obligation to obtain approval under DEEP's Construction General Permit.	Continue to inform developers/contractors of their potential obligation to register under the DEEP construction general permit and to provide a copy of the Storm Water Pollution Control Plan to Woodbury upon request	Land Use/ M. Edwards; ZEO	Jul 1, 2017	Jul 1, 2017	
4-7 Develop stormwater compliance checklist	In progress	Developing checklist to provide developers on stormwater management compliance requirements	Standardize plan review	Land Use/ ZEO	-	Jul 1, 2018	Reason for addition: Make it easier to ensure compliance with stormwater regulations

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

Integrate stormwater compliance checklist into review process once completed.

5. Post-construction Stormwater Management (Section 6(a)(5) / page 27)

5.1 BMP Summary

BMP	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	In progress	Naugatuck Valley Council of Governments completed a MS4 and Low Impact Development, Local Regulations Assessment for	Review and update, as necessary, existing land use regulations and implementation policies for compliance with the	Zoning Commission Planning	Jul 1, 2021	Anticipate completing by the deadline of	

LID and runoff reduction in site development planning		the Town of Woodbury. This was reviewed by Town Staff and will be utilized as a resource moving forward	General Permit post construction stormwater management requirements	Commission Land Use/ M. Edwards		July 1, 2021
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Not Started	N/A	Review and update, as necessary, current regulations to identify, reduce, or eliminate existing regulatory barriers to implementation of LID and runoff reduction practices. Complete plan reviews and ensure compliance for all projects subject to the legal authority	Land Use/ M. Edwards	Jul 1, 2019	Anticipate completing by the deadline of July 1, 2019
5-3 Identify retention and detention ponds in priority areas	Not Started	N/A	List of all retention and detention ponds in priority areas	Public Works/ R. Lamothe	Jul 1, 2019	Anticipate completing by the deadline of July 1, 2019
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Not Started	N/A	Develop a long-term maintenance plan for retention/detention basins and stormwater treatment structures. Implement maintenance plan including annual inspection of retention / detention basins and stormwater treatment structures and removal of accumulated sediment and pollutants.	Public Works/ R. Lamothe	Jul 1, 2019	Anticipate completing by the deadline of July 1, 2019
5-5 DCIA mapping	Not Started	An RFP was issued for this work and a consultant will be selected upon budget approval	Calculate the Directly Connected Impervious Area (DCIA) of outfall catchment areas using guidance provided by DEEP and UConn CLEAR. Revise DCIA estimate as development, redevelopment, or retrofit projects effectively add or remove DCIA.	Consultant Public Works/ R. Lamothe Land Use/ M. Edwards	Jul 1, 2020	Anticipate completing by the deadline of July 1, 2020

5-6 Address post-construction issues in areas with pollutants of concern	In progress	The Town currently addresses erosion and sedimentation problems and will focus on areas with pollutants of concern	Address erosion and sediment problems noted during inspections	Land Use/ ZEO	Public Works/ R. Lamothe	Not specified
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5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

TBD

5.3 Post-Construction Stormwater Management reporting metrics

Metrics

Baseline (2012) Directly Connected Impervious Area (DCIA)	Acres - TBD
DCIA disconnected (redevelopment plus retrofits)	acres this year / acres total - TBD
Retrofits completed	# - TBD
DCIA disconnected	% this year / % total since 2012 - TBD
Estimated cost of retrofits	\$ - TBD
Detention or retention ponds identified	0 # this year / # total - TBD

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

TBD

6. Pollution Prevention/Good Housekeeping (Section 6(a)(6) / page 31)

6.1 BMP Summary

BMP	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	Identified additional training materials for municipal staff related to spill response and illicit discharge identification and reporting	Implement training program for Town employees, building on the Town's current program	Public Works/R. Lamothe	Jul 1, 2017	July 1, 2017	
6-2 Implement MS4 property and operations maintenance	Ongoing	The Town maintains pet waste baggies and disposal receptacles Increased educational efforts	Maintain properties and facilities in accordance with the General Permit requirements	Land Use/M. Edwards Parks and Recreation/J. Miller Public Works/R. Lamothe	Jul 1, 2018	Anticipate completing by the deadline of July 1, 2018	
6-3 Implement coordination with interconnected MS4s	Not started	N/A	Coordinate with neighboring municipalities, institutions, and DOT regarding stormwater management program activities associated with the adjacent MS4s	Public Works/R. Lamothe	Not specified		
6-4 Develop/implement program to control other sources of pollutants to the MS4	Not started	N/A	Control through IDDE program, water quality monitoring, the Town's Discharge Limitations Ordinance, and targeted education and outreach to commercial, industrial, municipal, institutional facilities owners/operators	Public Works/R. Lamothe Land Use/M. Edwards	Not specified		
6-5 Evaluate additional measures for discharges to impaired waters*	Ongoing	Town staff have had preliminary discussions regarding impaired waters and bacteria	Implement the measures and procedures described in Section 7.2 including those measures to address stormwater pollutants of concern	Public Works/R. Lamothe Land Use/M. Edwards Parks & Rec J. Miller	Not specified		

6-6 Track projects that disconnect DCIA	Ongoing	The Town has begun to review files to track DCIA	Annually track total acreage of DCIA that is disconnected as a result of redevelopment or retrofits	Public Works/ R. Lamothe Land Use/ M. Edwards	Jul 1, 2017	Jul, 1 2017
6-7 Implement infrastructure repair/rehab program	Not Started	N/A	Repair, rehabilitate, or retrofit MS4 infrastructure (e.g., conveyances, structures, outfalls) as needed in a timely manner.	Public Works/ R. Lamothe	Jul 1, 2021	Anticipate completing by the deadline of July 1, 2021
6-8 Develop/implement plan to identify/prioritize retrofit projects	Not Started	N/A	Develop retrofit plan and list of priority sites	Public Works/ R. Lamothe	Jul 1, 2020	Anticipate completing by the deadline of July 1, 2020
6-9 Implement retrofit projects to disconnect 2% of DCIA	Not Started	N/A	Disconnect 1% per year of Woodbury's DCIA from the MS4	Public Works/ R. Lamothe	Jul 1, 2022	Anticipate completing by the deadline of July 1, 2022
6-10 Develop/implement street sweeping program	Complete	The Town currently sweeps all streets a minimum of one time per year, beginning in the spring, to remove winter road sand and other debris. This year 180 linear miles of paved roads were swept. Approximately 800 to 1,000 tons of material was removed from town streets during this process.	Continue to inspect and sweep all municipally-owned or -operated streets and parking lots annually in spring following the cessation of winter maintenance activities (i.e., sanding, deicing). Evaluate runoff reduction measures such as permeable pavement or other measures to promote sheet flow of stormwater for all new and redeveloped municipal parking lots	Public Works/ R. Lamothe	Jul 1, 2017	Jul 1, 2017
6-11 Develop/implement catch basin cleaning program	Ongoing	The Town of Woodbury continued a catch basin cleaning program utilizing a vacuum type truck to better clean catch basins. Approximately 431 catch basins were cleaned in 2017.	A. Inspect and clean catch basins a. 100% within Priority Areas b. 100% of MS4 B. optimize catch basin cleaning based on inspection findings, such that no catch basin is more than 50% full	Public Works/ R. Lamothe	Jul 1, 2020	Anticipate completing by the deadline of July 1, 2020

6-12 Develop/implement snow management practices	Complete	Woodbury continues to implement standard operating practices for the use, handling, storage, application, and disposal of deicing products such as salt and sand to minimize exposure to stormwater; and continues to implement standard operating procedures regarding snow and ice control to minimize the discharge of sand, anti-icing or de-icing chemicals and other pollutants.	Implement practices for deicing material management and snow and ice control	Public Works/ R. Lamothe	Jul 1, 2018	February 2018
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6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

In conjunction with other communities within the NVCOG, the Town of Woodbury will participate in household hazardous waste collection days in Woodbury and neighboring communities. The program has been successful in removing household hazardous materials from the town’s waste stream for many years.

The Town will sweep all streets a minimum of one time per year, beginning in the spring, to remove winter road sand and other debris.

The Town will continue its catch basin cleaning program

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics

Employee training provided for key staff	Y (10/19/16)
Street sweeping	Y (annually)
Curb miles swept	180 miles
Volume (or mass) of material collected	800-1,000 tons
Catch basin cleaning	
Total catch basins in priority areas	431
Total catch basins in MS4	257
Catch basins inspected	431
Catch basins cleaned	431
Volume (or mass) of material removed from all catch basins	150 tons
Volume removed from catch basins to impaired waters (if known)	60 tons
Snow management	
Type(s) of deicing material used	Sodium chloride
Total amount of each deicing material applied	1,500 tons
Type(s) of deicing equipment used	Multi-purpose side

Lane-miles treated	dump spreader
Snow disposal location	194 miles
Staff training provided on application methods & equipment	N/A
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	Y (11/8/17)
Reduction in application of fertilizers (since start of permit)	N/A
Reduction in turf area (since start of permit)	N/A
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	Y (Agricultural)
Cost of mitigation actions/retrofits	N/A

6.4 Catch basin cleaning program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule.

The Town of Woodbury seeks bids for catch basin cleaning annually. With a total of 1,700 catch basins each year different areas are cleaned inspected with approximately a four (4) year rotation to complete all basins cleaned within budget restraints.

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. [Section to be completed for the 2019 Annual Report.]

N/A

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [Section to be completed for the 2019 Annual Report.]

N/A

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years. [Section to be completed for the 2019 Annual Report.]

N/A

Part II: Impaired waters investigation and monitoring [This section required beginning with 2018 Annual Report]

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 program 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.

2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

2.1 Screening data collected under 2017 permit

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?
N/A					

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?

3. Follow-up investigations (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment

4. Prioritized outfall monitoring (Section 6(i)(1)(D) / page 43)

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)

Part III: Additional IDDE Program Data [This section required beginning with 2018 Annual Report]

1. Assessment and Priority Ranking of Catchments data (Appendix B (A)(7)(c) / page 5)

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

2. Outfall and Interconnection Screening and Sampling data (Appendix B (A)(7)(d) / page 7)

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

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
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3. Catchment Investigation data (Appendix B (A)(7)(e) / page 9)

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
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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 than 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 than 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

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

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

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

Print name:

William J. Batters, Sr.

Signature / Date:

W. J. Batters, Sr. 3/16/18

Document Prepared by

Print name:

Margellen Edwards

Signature / Date:

M. Edwards 3/16/18

PRWC Outreach Log 2017 (Calendar Year)

Date	Topic / Program Title	Venue	Audience	# of Attendees	# of Programs
January 18, 2017	Watershed Based Plan – Presentation on Project Initiation at Joint Land Use Committee Annual Meeting	Woodbury Senior Center	Woodbury Land Use Commissions (Planning, Zoning, Historic District, ZBA, Conservation, Wetlands)	30	1
March 30, 2017	Water Watch	Flanders Nature Center Program held at Woodbury Public Library	Watershed Residents	20	1
March 31, 2017	Pre-Application Meeting – Nonnewaug High School	Woodbury Town Hall	Woodbury Land Use Commission Representatives and Consultant	20	1
April 22, 2017	Watershed Protection & Environmental Stewardship	Woodbury Earth Day Hollow Park, Woodbury	General Populous	6000	1
April 22, 2017	Rain Barrel Workshop	Woodbury Earth Day Hollow Park, Woodbury	Homeowners	30	2
May 3, 2017	Presentation to Planning Commission	Woodbury Town Hall	Planning Commission Members	12	1
June 4, 2017	Connecticut Trails Day Weekend: River Ramblers Hike	Nonnewaug Falls, Woodbury	Watershed Residents	15	1
Date	Topic / Program Title	Venue	Audience	# of Attendees	# of Programs
July 18, 2017	Youth Education Programs: Incredible Journey & Long Haul (each x2)	Woodbury Parks & Recreation Summer Camp, Mitchell Elementary School	Summer Campers	40	4
August 1, 2017	Watershed Protection & Environmental Stewardship, RiverSmart, Bioswales, and Invasive Plant Removal	New Morning Market, Woodbury	Watershed Residents	45	1
August 6, 2017	River Ramblers Hike	Oreanaug Tower & Three Rivers Park, Woodbury	Watershed Residents	12	1
October 1, 2017	River Smart & Watershed Protection	Woodbury Fall Festival	Woodbury and area residents	100 <i>(direct contact)</i>	1
October 7, 2017	Woodbury Conservation Commission: Fall Clean Up Day (cross promoted by PRWC)	Roadsides in Woodbury	Woodbury Residents	30	1
October 11, 2017	Woodbury Reservoir Field Trip: Pre-Trip Assembly at School	Children’s Community School, Waterbury	3 rd , 4 th , and 5 th grade students from Children’s Community School of Waterbury	45	1
October 12, 2017	Youth Education Programs: Long Haul (Water Use & Conservation) & Water Filtration (3x	Woodbury Reservoir	3 rd , 4 th , and 5 th grade students from Children’s Community School of	45	6

	each program)		Waterbury		
October 14, 2017	Annual Macroinvertebrate Survey	Woodbury Library / Pomperaug Watershed – Southbury, Woodbury, and Bethlehem sites	Volunteer Monitors	10	1
October 20, 2017	Youth Education Program: Stormwater in a Jar	Make a Splash Day, Woodbury Middle School	Six classes of 7 th graders	150	6
Date	Topic / Program Title	Venue	Audience	# of Attendees	# of Programs
October 30, 2017	Water Watch: A Deeper Look at PRWC and Local Water Resource Management Efforts	PRWC Office, Woodbury	Western Connecticut Leadership Program Alumni	6	1
Various Dates: 3/3/2017, 4/21/2017 5/30/2017, 9/7/2017	Pomperaug Partners for Health Community Health Assessment	Southbury Town Hall/ Southbury Library	Oxford, Southbury and Woodbury Residents	15	4
Various Dates: July 20, 2017 October 5, 2017	Developing a Watershed Based Plan to address water quality impairments in the Pomperaug Watershed	Southbury Town Hall	PRWC Land Use Committee (including representatives of Woodbury, Southbury, and Bethlehem)	12	2
Various Dates: July-August 2017	Stormdrain Marking Project <i>(Project Details Attached)</i>	Roads throughout Watershed	Youth Conservation Corps Crew Members <i>(Watershed Residents reached counted in Mass Media hits below)</i>	6	1
Various Dates August – Dec 2017	Hollow Pond Ad Hoc Committee	Woodbury Parks and Recreation	Woodbury Parks and Recreation	6	4
Various Dates	Woodbury Trolley Bed Preserve Management Plan	Woodbury Parks and Recreation	Management Plan Committee Members	8	7

PRWC Participation in MS4 Related Trainings / Workshops / Conferences

Date	Activity	Venue / Host	Program Link
September 27, 2017	Illicit Discharge Detection and Elimination Workshop	Hosted by UCONN's Center for Land Use Education and Research at Newington Town Hall	http://nemo.uconn.edu/ms4/implement/idde.htm

PRWC Outreach through Mass Media

Date	Activity	Audience	# Reached
April 22, 2017	Woodbury Earth Day (hosted by PRWC)	Watershed Residents & Beyond	6,000 event attendees
October 1, 2017	Woodbury Fall Festival	Woodbury area residents	<u>5,000</u> event attendees (direct contact with 10%)

Ongoing	PRWC Website (www.pomperaug.org)	Watershed Residents and beyond	<u>2,816</u> unique users between 1/1/17 and 12/31/17
Biannual	PRWC Newsletter	Watershed Residents and beyond	~1900 each issue
Ongoing	PRWC Facebook, Instagram, and Pinterest Social Media Pages	Watershed Residents and beyond	858 Page Likes as of 12/31/17 (<i>up by 51 since 12/15/16</i>) MAX Daily Total Reach: <u>1,014</u> unique users AVG Daily Total Reach (7/15-12/30/17): <u>128</u> unique users
Ongoing	RiverSmartCT Facebook Page	Watershed Residents and Beyond	425 fans as of 12/31/17 (<i>up by 38 since 12/15/16</i>) MAX Daily Total Reach: <u>509</u> unique users AVG Daily Total Reach (1/1-12/31/16): <u>31</u> unique users
Ongoing	RiverSmartCT Pinterest Page	Watershed Residents and Beyond	30 followers (<i>up by 3</i>)
Ongoing	RiverSmartCT on Twitter	Watershed Residents and Beyond	74 followers (<i>up by 2</i>)
Ongoing	BeRiverSmart on Instagram	Watershed Residents and Beyond	55 followers (<i>up by 45</i>)
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	Press Releases in Newtown Bee	Watershed Residents and beyond	7,000 per issue
Ongoing	Press Releases in Litchfield County Times	Watershed Residents and beyond	5000 per issue
Ongoing	Stormdrain Markers	Watershed Residents	30,000
ADDITIONAL NO. OF PROGRAMS	14	ADDITIONAL NO. REACHED	135,698

** *May be overlap in persons reached.*

- Regular Press Releases and Letters to the Editor in Voices; Waterbury Republican American;
- Information at Public Libraries in Woodbury, Southbury, and Bethlehem and in the Barn at Audubon at Bent of the River;

STORMDRAIN MARKER PROJECT

Drain Markers Installed (2017): Approx. 380

Volunteers: 6 volunteers

Target Audience: 30,000 Watershed Residents



Approximately 2250 Storm Drain Markers have been installed throughout the Pomperaug Watershed towns since 2014.

Town	# of Markers	List of Roads / Locations*		
Woodbury	142	White Deer Rocks Rd. Sage Rd Terrell Rd Joshua Hill Rd Crane Rd Barbara Ln Park Rd	Hollow Rd** Streamside Ave Westside Rd Fairgrounds Rd Westwood Rd Stone Pit Rd Hoop Pole Hill Rd Rail Tree Hill Rd	Fieldstone Rd Essex Ln Inwood Ln Good Hill Rd Meadowbrook Ln Old Grassy Hill Rd Grassy Hill Rd

* See Map for Roads w/ Drain Markers Installed since 2014 with accompanying summary list of road names.

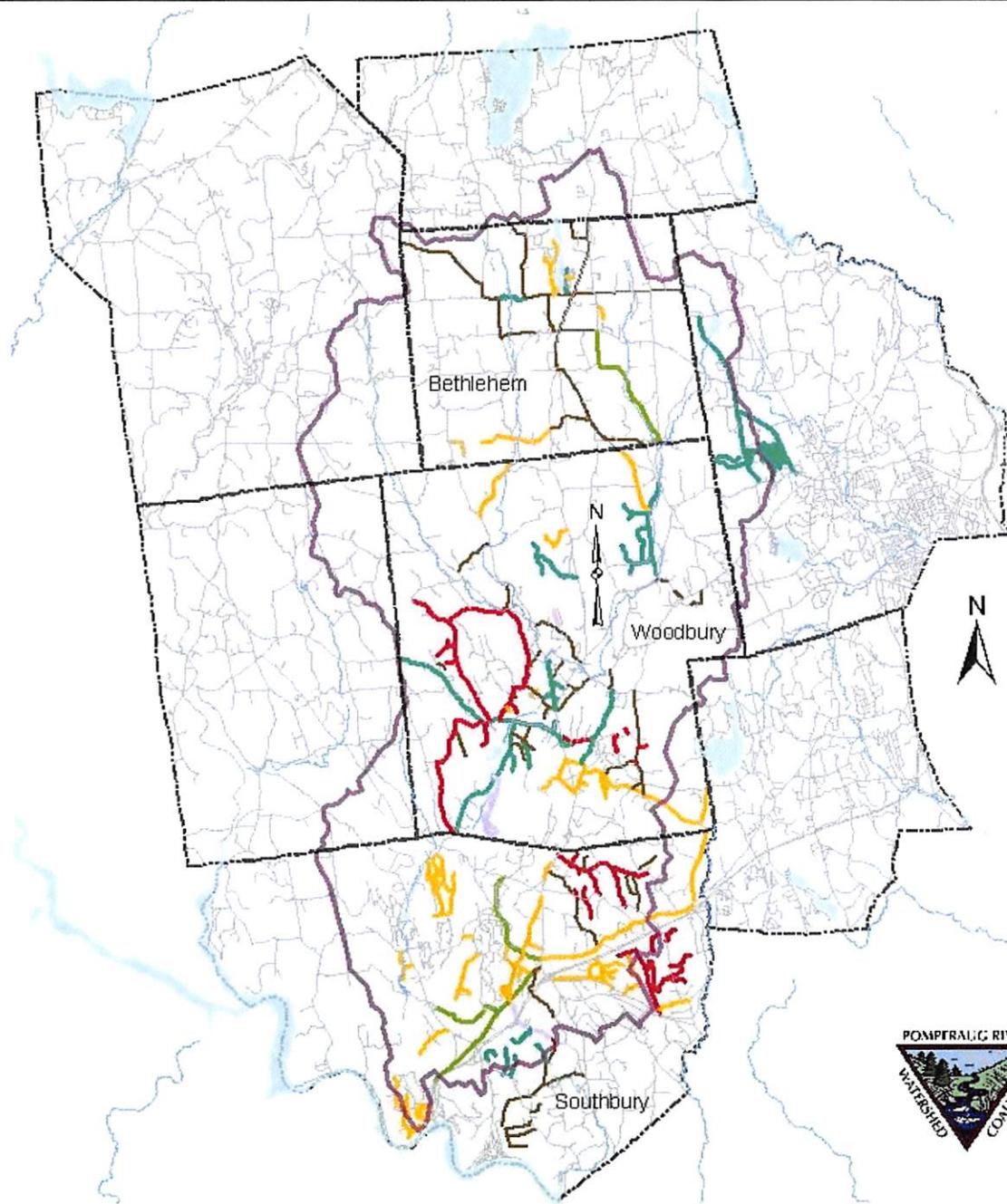
** Replacement markers installed

Stormdrain Marker Installations Pomperaug River Watershed Area



Legend

- Stream/River
- Town Boundary
- Pomperaug Watershed
- Roads - Stormdrain Marker Status**
- 2014 Installations
- 2015 Installations
- 2016 Installations
- 2017 Installations
- Unmarked Drains
- Marker Installation In Progress
- Markers to Be Installed



Town (Approx. Marker Count)	Year	List of Roads / Locations		
Woodbury (~605 Markers)	2017	White Deer Rocks Rd. Sage Rd Terrell Rd Joshua Hill Rd Crane Rd Barbara Ln Park Rd	Hollow Rd** Streamside Ave Westside Rd Fairgrounds Rd Westwood Rd Stone Pit Rd Hoop Pole Hill Rd Rail Tree Hill Rd	Fieldstone Rd Essex Ln Inwood Ln Good Hill Rd Meadowbrook Ln Old Grassy Hill Rd Grassy Hill Rd
	2016	Old Sherman Hill Rd**		
	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 Oreanaug 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 Weekepeemee Rd



2017 FIELD SEASON ACCOMPLISHMENTS

PRWC gainfully employed five YCC staff (1 crew leader, and 4 crew members) for a six-week field season. The crew was also joined a few days a week by PRWC's full-time summer intern. Over the course of their season, the crew was able to achieve the following quantitative outputs:

- 380 stormdrain markers installed along 40 roads in Woodbury and Southbury over the course of 2 days (details included above)
- Completed projects at 8 worksites:
 - River Buffer Invasive Plant Removal, Hollow Park, Woodbury (see supporting press clipping)
 - River Buffer and In-Stream Invasive Plant Removal, Cedarland Park, Southbury
 - Rain Garden Invasive Plant Removal, Manville Kettle, Woodbury
 - Trail/Bridge/Streamside Invasive Plant Removal, Swendsen Farm, Bethlehem
 - Bioswale Invasive Plant Removal & Community Outreach, New Morning Market, Woodbury
 - Stormdrain Marking, Town Roads, Woodbury
 - Stormdrain Marking, Town Roads, Southbury
 - Tree Rescue (fill removal around tree base), River Trail, Southbury
- Approximately 23,000 square feet (just over ½ acre) of land area cleared of invasive plants using only hand pulling methods (no chemicals)
- 175 bags (45 gallon bags) / 7,875 gallons / 40 cubic yards of invasive plant material removed
- 70+ plant species learned

Supporting Press Clipping:

Waterbury Republican American, July 26, 2017, pg 1B

Teen group helps keep watershed pristine

BY JOHN NESTOR
REPUBLICAN-AMERICAN

WOODBURY — The Pomperaug River Watershed Coalition has some extra hands this summer to help in its mission to use science and education to ensure there is high quality water in the Pomperaug Watershed communities.

This summer the coalition has its first Youth Conservation Corps crew thanks to an environmental program grant from the Connecticut Community Foundation. The grant has been used to create a program that employs young people to implement conservation measures.

Dana Dessereaux of Woodbury is crew leader. A recent graduate of Cornell University, Dessereaux was the coalition's intern last summer. Crew members are this year's intern, Josephine Purdy of Bridgewater, assistant crew leader, and members are Tim Tscheppe and Mathes Payne of Watertown, Kayla Kim of Southbury and Molly Galusha of Middlebury. The six-week program provides a paying job for crew members, who work four



JOHN NESTOR REPUBLICAN-AMERICAN

This is the first year that the Pomperaug River Watershed Coalition has had a Youth Conservation Corps crew. The pilot initiative employs young people to implement conservation measures. Formation of the Youth Conservation Corps was made possible through an environmental program grant from the Connecticut Community Foundation.

days a week.

Carol Haskins, outreach director for the coalition, said the group came up with an idea of a program that supports municipalities and applied for a grant to make it happen.

"It's a pilot program and we are seeing how it works out supporting municipalities and hiring a crew."

The crew has recently

spent time at Hollow Park, removing invasive plant species including those that are trying to take over the riverbank of the Pomperaug River, which runs through the back of the park. The project will improve the health and the look of the river at Hollow Park, but would be on the back burner without the summer crew.

"What is nice is these guys

are actually able to come in here and do the things we can't do because we are so limited with our manpower," said Mike Lodice, parks superintendent for Woodbury. "Reclaiming a river buffer, that's something that needs to be done but we just can't get to. The dent that they were able to put into it in just a couple days was astounding."

The crew started its summer at Cedarland Park in Southbury, where the coalition has created a model riparian buffer and safe access to the Pomperaug River by removing invasive plants and giving more beneficial native species a chance to take hold.

Other projects the crew will undertake this summer include working on the rain garden maintenance at Manville Kettle in Woodbury, invasive plant removal at Swendsen Farm in preparation for future installation of a boardwalk trail, and storm drain marking throughout the watershed.

"Our goal is to develop a program for area young people that fosters a sense of responsibility for natural resources and civic engagement," Haskins said.