

Baker Cove Watershed Committee (Bacwac)

Updated December 2021

Plan of Work - 01/01/2020 to 01/01/2022 (Adopted 02/05/20) 'A Living Document'

Overarching Goal: To improve water quality in Baker Cove by implementing recommendations from the Baker Cove Abbreviated Watershed-Based Plan (WBP) to reduce or eliminate non-point sources of pollution

[Baker Cove WBP](#)

Take management objectives from BC WBP - pgs 50-52 for goals and Table 7 (pgs 38-44) for Management strategies for specific areas of concern

Priority *

Partners

Status

Goal:	Build public awareness of NPS, including sources of nonpoint source pollution and management practices through outreach and education.	1	ECCD, CT DEEP, Municipalities, Shellfish Commissions, DABA, TNC, Uconn Avery Point, LISS, Volunteers, Residents	3-5 yrs
	<i>*educate stakeholders about the Baker Cove Watershed and watershed management</i>			
Activities:	Maintain a section on the ECCD website for meeting agendas, minutes, ppts and educational information	M	ECCD	ongoing
	Conduct regular meetings of the Baker Cove Watershed Committee	H	ECCD, Bacwac	ongoing
	Recruit new committee members	M	ECCD, Bacwac	ongoing
	Identify target audiences for educational materials	H	Bacwac, Municipalities land-use staff	ongoing
	Compile list of events and attend Town/City events with educational materials table: August - Groton City Day, UCONN EcoHuskies Earth Day Celebration, National Public Works week	M	Bacwac, Cons. Comm, Municipalities	stakeholders tabled 3 events - summer 2021
	Gather existing educational materials & Create new educational materials as needed	H	Bacwac, ECCD	
	Increase stakeholders' level of knowledge about bacteria & nutrient loading and the health of Baker	H	ECCD	
	Increase stakeholder awareness about the link between shellfish closures and sources of bacterial pollution in Baker Cove watershed	H	ECCD, Shellfish Commissions, DABA	
	Distribute materials to residential and urban watershed residents	H	Bacwac, municipalities	July/Aug. 2021 - 2 mailings to select residents & businesses, pre-educ. survey
	Conduct workshops focusing on non-point source issues	L	Bacwac, ECCD	
	Continue to encourage non-migratory Canada Goose flock reduction	M	Bacwac, municipalities, residents	ongoing
	Partner with other organizations to conduct outreach	M	Bacwac, other orgs	
	Conduct or support stream and waterside clean-ups - Big Y Parking Lot	L	GOSA, Bacwac, municipalities, high schools	Initial site visit completed, on hold - Covid-19
	Conduct riparian buffer & Non-migratory Canada Goose outreach and education for homeowners	H	Bacwac, municipalities	
	Maintain awareness of and comment on any large development proposals in watershed (such as EB Parking Lot)	H	Bacwac	
	Fertilizer usage study	H	UConn student	Syma Ebbin can give talk
	Participate in LISS Fertilizer Behavior Change Campaign	M	Bacwac, local partners, TNC, UConn, LISS, CT DEEP	
	Conduct Rain Garden Initiative	M	Bacwac, residents	
	Produce communications highlighting Bacwac activities and programs	H	Bacwac, ECCD	
	Storm Drain Stenciling	M	Municipalities, Volunteers - school	Callie, Project O, schoolyard assessments
	Conduct Small Farms BMPs outreach & workshop			
	Continue to support projects such as stormwater tree filter, infiltration & rain gardens installations	M		ongoing
	Put Bacwac project info (e.g. completed activities write-up) on GMTV -Town & City news	M	City, Town, ECCD, GMTV	April 2021 - ran intro series on GMTV on Cananda Geese & other bacteria sources.
	Social media: Post project updates & education to Facebook, Twitter & Instagram	M	ECCD	ongoing
Goal:	Address pollution from illicit discharges, sewer leaks, and/or failing septic systems	2	Municipalities, Sewer Authority (WPCA), Ledge Light Health District, property owners, Groton Utilities, Shellfish Commissions, CT Marine Trades Assoc.	2-5 years
	<i>*reduce bacteria loads from stormwater outfalls, runoffs and direct discharges</i>			
Activities:	Implement Illicit Discharge Detection and Elimination (IDDE) program (MS-4 permits)	H	Municipalities	36 buildings not connected to City sewer
	Work with Health District sanitarians to evaluate the residential septic systems in the priority areas as defined by the WBP	H	Rick Stevens - Groton Utilities, Ledge Light Health District	Health District can only investigate issues coming from City Sanitarian/complaints. All residential septic systems identified and upon sale will be hooked to City sewer.
	Identify potential funding sources for septic repairs	M	Bacwac	

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	Work with property owners to repair failing systems	M	Bacwac, municipalities, Ledge Light Health District	2019 - 2 Sewer line blockages reported & fixed. 5/2021 Sewer line bypass/grease blockage, between 1-5K gallons into BPC – remediation.
	Provide educational materials to property owners about septic system BMPs	H	Bacwac, municipalities, Ledge Light Health District	
	Conduct regular inspections of sewer force mains	H	WPCA	
	Make force main repairs as necessary	H	WPCA	
	Support pumpout boat program	M	Harbor Mgmt and Shellfish Commissions	
	Support Clean Marina program	M	Harbor Mgmt, Shellfish Commissions, CT Marine Trade	
Goal:	Establish riparian buffers <i>*preserve and restore critical wetland and watercourse vegetative buffers</i>	3	Municipalities, ECCD, private land owners, Groton Utilities	
Activities:	Vegetative Surveys - Evaluate and identify priority areas for buffer establishment or invasive species removal	H	Rick Stevens - Groton Utilities and Bacwac	ECCD appl. for 2020 LISFF grant not funded. Received award letter from LISFF. Waiting on contract.
	Select sites, contact landowners (if private property) to determine level of interest and cooperation	H	Bacwac	
	Identify and obtain funding	H	Bacwac	
	LISFF 2021 grant - pollinator pathways including rain gardens, riparian buffers and educational workshops	H	ECCD, City/Town of Groton, Ledyard, Preston, Stonington	
	Develop site design	M	Bacwac, landowner, local partners	
	Conduct buffer planting and/or invasive species removal	L	Municipalities, Bacwac, local partners	
	Conduct pre- and post-planting water quality monitoring	M	ECCD, Bacwac	
Goal:	Implement on-going water quality monitoring program, especially in bacteria “hot spots”	4	Groton Utilities, ECCD, CT DEEP, Municipalities, Groton Shellfish Commission	2-5 years, ongoing thereafter CT 2020 Integrated Water Quality Assessment
Activities:	Identify locations for monitoring, based on bacteria “hot spots”	M	ECCD, CT DEEP, Municipalities, Groton Shellfish Comm	WS Sampling Plan binder with past sample locations sampling select sites - ongoing
	Design water quality monitoring program	M	Rick Stevens, Kate Blacker - Groton Utilities, Bacwac	
	Obtain funding for training and equipment	H	Bacwac	
	Recruit and train volunteers	M	Bacwac, Groton Shellfish Commission	
	Conduct site monitoring	M	Groton Utilities	
	Report water quality results	H	Groton Shellfish Commission	
Goal:	Review and strengthen land use regulations pertaining to water quality	5	Municipalities, CT DEEP, NEMO	2-3 years
Activities:	Form regulation review team	M	Bacwac, municipalities, CT DEEP, NEMO	
	Review existing land use regulations, municipal ordinances, etc.	M	municipalities	
	Review sample/model regulations pertaining to water quality e.g. vegetative buffers to protect water quality (e.g. Riparian Buffer Ordinance)	M	municipalities	
	Work with land use staff and boards to develop revised regulations	H	municipalities	
	Adopt new regulations	H	municipalities	
Goal:	Promote good housekeeping practices among municipalities and property owners	6	Municipalities/DPW	3-5 years
Activities:	Review municipal Good housekeeping practices (GHP)	H	Bacwac, municipalities/DPW	ongoing by City/Town of Groton DPW's
	Adopt revised GHPs in priority areas as established by WBP	H	Bacwac, municipalities/DPW	
	Distribute information regarding GHPs in priority areas as established by WBP	H	Bacwac, municipalities/DPW	
Goal:	Implement structural measures to reduce bacteria and other NPS loading	7	Municipalities, ECCD, private land owners	2-5 years

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Activities:	Review and prioritize implementation sites	H	Bacwac, municipalities, ECCD	ECCD applic. to DEEP's 319 NPS grant prgm. Received award letter from DEEP. Waiting on contract. Received 2021 award letter from DEEP. Waiting on contract. Submitted Applic., in DEEP review
	Select sites, contact landowners (if private property) to determine level of interest and cooperation	H	Bacwac, municipalities, ECCD	
	Identify and obtain funding	H	Bacwac, municipalities, ECCD	
	Clean Water Act §319 Nonpoint Source grant 2018: Install stormdrain retrofits, tree filters, and rain gardens at Groton Estates (Avery Heights).	H	ECCD, City of Groton	
	Clean Water Act §319 Nonpoint Source grant 2021: Lake George wetland enhancement design/implementation project.	H	ECCD, City of Groton	
	Clean Water Act §319 Nonpoint Source grant 2022: Suite of Green Infrastructure BMP's to Benefit Baker Cove Watershed (permeable pavement, stormdrain filters, rain garden)	H	ECCD, City of Groton	
	Develop construction design for BMP implementation	H	Bacwac, municipalities, ECCD	
	Obtain necessary permits	H	Bacwac, municipalities, ECCD	
	Construct structural measures	H	Bacwac, municipalities, ECCD	
	Design and conduct pre- and post-construction monitoring program to assess practice effectiveness	H	Bacwac, municipalities, ECCD	
Completed Activities				
	Activity		Partner(s)	Status
	Create WBP Implementation Subcommittee to identify/pursue projects and funding	M	Bacwac	Created Feb. 2021
	Social media: Put a 'views counter' on ECCD watershed page to track outreach success through website	M	ECCD	Completed 9/3/20 - added Monster Insights (website analytics)
	Groton Councils - resolution to endorse the Baker Cove WBP	H	Groton City Council, Groton Town Council	City council adopted resolution 5/4/2020. Town council adopted resolution 7/7/2020.
	Fix Baker Cove Watershed map to include watersheds draining into Baker Cove (Poquonnock River) and name 'unnamed stream'	H	ECCD, Bacwac, CT DEEP, CT DABA	Completed
	Create 'public-friendly' watershed map for handouts and social media posting	H	Town/City of Groton DPW's, GOSA, ECCD, Bacwac	completed by 3/2021
	Create Logo, printed blow-up foamcore maps, tablecover and banner for outreach events	H	Town/City of Groton DPW's, GOSA, ECCD, Bacwac	completed by 6/2021
	Implement Illicit Discharge Detection and Elimination (IDDE) program (MS-4 permits)	H	UConn	Uconn CLEAR MS4 program hosted an MS4 update webinar on 6/16 to review tasks to complete by 6/30 and looking ahead to permit tasks in Year 4.
	Clean Water Act §319 Nonpoint Source grant: Baker Cove Non-Migratory Canada Goose Project - 1) Conducted riparian buffer & Non-migratory Canada Goose outreach and education workshop 2) Created & distributed Canada Goose educational materials 3) Created a management matrix for Canada Goose Management 4) Continued harassment of Geese at Town and City properties, Electric Boat, Pfizer, and Navy Submarine base. Groton-New London Airport - Continued harassment of Geese, deer/waterfowl fencing. At Groton Utilities - Egg addling, modified mowing practices on dams & signs. UConn – Eastern Point Road pond vegetative buffer & signs.		CT DEEP, City & Town of Groton, other local stakeholders	May 2017 - Sept. 2019
	Clean Water Act §319 Nonpoint Source grant: Installation of 7 tree filters at the City of Groton Municipal Complex and adjacent Washington Park.		ECCD, City of Groton	completed Sept. 2015
	Open space conservation of nearly 2,000 acres in Groton.		GOSA, City & Town of Groton	
	Clean Water Act §319 Nonpoint Source grant: Install stormdrain retrofits, tree filters, and rain gardens at Groton Estates.		ECCD, City of Groton	CT DEEP 319 application
	Applied for Lake George wetland enhancement design 319 NPS grant- not selected. Watershed Committee encouraged by CT DEEP to fine tune proposal, provide an endorsement, and resubmit in next 319 NPS grant round.		ECCD, Bacwac, City of Groton, CT DEEP	April 2019

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MS4 Activities: Town of Groton Public Works Department continues to distribute public outreach & stormwater education information via social media. Water Pollution Control Division discusses Point source and Non-point source pollution during presentations to students in local middle schools and when conducting tours of WPCF. Pet waste fact sheets distributed to licensed dog owners annually. Installation and maintenance of No Dumping signs at coastal access areas. Developed written Illicit Discharge Detection and Elimination (IDDE) Program Plan, MS4 stormwater outfalls & interconnections inventory is ongoing, completed citizen reporting program, and adopted ordinance establishing legal authority to prohibit illegal discharges. Addressing IDDE in areas with pollutants of concern is ongoing.			Town of Groton, DPW	Completed in 2018 & ongoing
MS4 Activities: City of Groton Public Works Department has a continuing program of public education and outreach including update stormwater webpage annually, post education on yard waste, pet waste, etc. on social media at least 3X annually, air DEEP clean water PSA on Cable access annually, pet waste fact sheets LISS brochure distributed to licensed dog owners annually, stormwater pollution education at Groton City Day, UCONN EcoHuskies Earth Day Celebration, Nat'l Public Works week and Girl Scouts. IDDE: Hold stormwater committee meetings annually, developed list and maps of all MS4 stormwater outfalls and written IDDE plans, no citizen reports for 2019, provided a record of illicit discharges, reported on BMP activities/progress for construction sites and pollution prevention / good housekeeping practices such as snow & leaf mgmt., pet waste, waterfowl, street sweeping, catch basin cleaning, park & open space maintenance (pesticides, herbicides, fertilizers). City DPW has a system to track projects that disconnect DCIA (Directly Connected Impervious Area). Total DCIA this year 0% / 3.4 % total since 2012. Dry weather screening of all high and Low priority MS4 outfalls are 30% complete. 2 Sewer line blockages were reported and fixed.			City of Groton, DPW	Completed 2017 - 2019 (some prior to 2017)

* Based on Committee ranking conducted on 12- 4-2019. Subject to periodic review and revision.

H - high priority activity M - medium priority activity L - low priority activity

Selected activities for 2021

Ongoing activities

Completed activities

[DABA = Department of Agriculture Bureau of Aquaculture](#)

[TNC = The Nature Conservancy](#)

[LISS = Long Island Sound Study](#)

[GOSA = Groton Open Space Assoc.](#)

[NPS = Non Point Source](#)

[NEMO = Nonpoint Education for Municipal Officials](#)

[MS4 = Municipal Separate Storm Sewer Systems](#)

WPCA = Water Pollution Control Authority

BMP = Best Management Practice