

SACO WATERSHED COLLABORATIVE | Alignment of Action Plan with Accomplishments

2021 is the 5th year of the Saco Watershed Collaborative! Throughout these past five years, we have accomplished so much, all the while trying carefully to ensure that our priorities + accomplishments align with our Action Plan that was drafted + finalized in 2018. Annual updates to the Action Plan have included summaries of accomplishments in each year. However, in 2021, we are aligning our collective accomplishments with the Action Plan.

Alignment of the ACTION PLAN with:

- Base funding tasks (i.e., Emily + Robyn’s tasks to support the Collaborative)
- Committee resolutions + activities
- Partners’ annual plan of work, regular + special programs, efforts + achievements, future + planned strategies, plans, studies, etc.

The activities in the [ACTION PLAN of the Saco Watershed Collaborative](#) are organized within four (4) Action Strategies, which are summarized below. How each activity is being addressed through the Saco Watershed Collaborative is also indicated as follows:

- “BASE” indicates that the activity is being addressed through base funding tasks by Collaborative staff (i.e., either by Emily Greene, Outreach Coordinator, or Robyn Saunders, Project Manager) who are responsible for:
 - Convening the Collaborative (3-4 times per year) + the four (4) committees as needed
 - Supporting the work of the Collaborative + its committees
 - Planning field trips 3-6 times per year
 - Communicating regularly with partners directly through email, phone calls, in-person/zoom meetings + indirectly through social media, website, basecamp, etc.
 - Conducting outreach to potential partners (e.g., municipalities, landowners, businesses, etc.)
- “DAC” indicates that the activity is being addressed through efforts undertaken by the Data + Analysis Committee (DAC) of the Collaborative
- “EOC” indicates the activity is being addressed by the Education + Outreach Committee (EOC) of the Collaborative
- “SUST” indicates the activity is being addressed by the Sustainability Committee of the Collaborative
- “STEW” indicates the activity is being addressed by the Stewardship Committee of the Collaborative

A summary of the base funding tasks + each committee of the Saco Watershed Collaborative is included as an attachment to provide additional information on the time commitment associated with the base funding tasks + the charge of each committee.

Action Strategy #1

Engage + inspire governments, organizations, community members to take action to sustain water in the Saco Watershed

Protecting sources of clean and safe drinking water is the common goal for members of the Saco Watershed Collaborative. Effective actions transcend political boundaries and require the work of a diverse group of professionals, organizations, citizens. The Saco Watershed Collaborative will continue to share information and pursue opportunities for cooperation and collaboration in support of common goals.

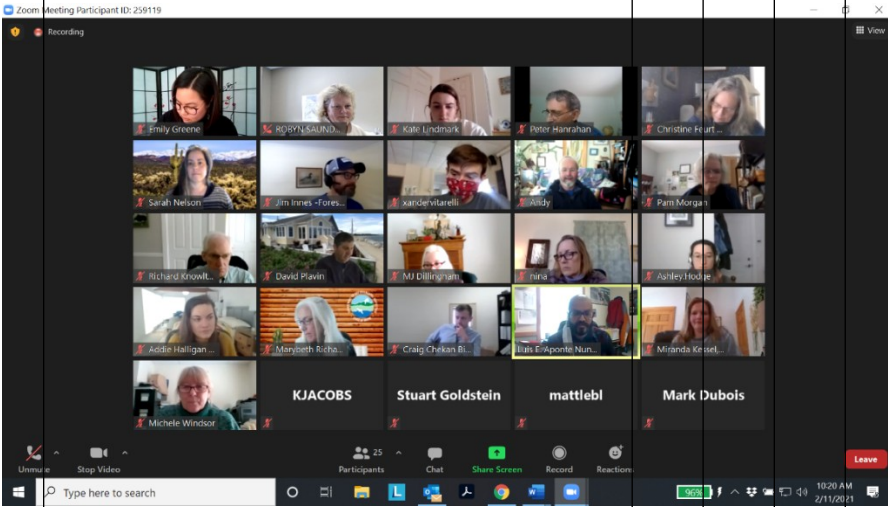
ACTION STRATEGY #1 - Engage + inspire governments, organizations, community members to take action to sustain water in the Saco Watershed		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
1	Identify and share approaches for watershed stewardship that are effective and efficient	X				X	<ul style="list-style-type: none"> Sharing stewardship approaches is included in each Steering Committee meeting Founding principle of Stewardship Committee Engaging in the Regional Conservation Partnership (RCP) Network convened by Highstead Foundation
2	Distribute high quality water quality monitoring data from the headwaters to the sea.		X				<ul style="list-style-type: none"> Combining an immense amount of multi-state water quality data, using QA/QC methods + tracking, in a commonly accessed software platform
	Collect and publish information about water quality and quantity		X				<ul style="list-style-type: none"> Requesting a UNE intern to inventory the available and new data for all metrics throughout the watershed <p>TO DO: seek funding support to supervise the UNE intern(s), either by staff, a committee, or by a UNE professor</p>
	Establish standard monitoring guidelines for water quality		X				<ul style="list-style-type: none"> Developing parameters for reporting trends in water quality since water quality data is already being collected by, NHDES, MEDEP using existing standard protocols with QAPP
	Develop strategies for sharing water quality results and trends		X				<ul style="list-style-type: none"> Establishing criteria for identifying trends in water quality data to incorporate into science-based messages <p>TO DO: develop science-based messages in 2021-2022 plan of work</p>

ACTION STRATEGY #1 - Engage + inspire governments, organizations, community members to take action to sustain water in the Saco Watershed		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
3	Engage municipalities, youth conservation organizations, and other stakeholder groups in data collection and distribution of results	X	X				<ul style="list-style-type: none"> Continually searching for groups that are engaging in data collection within the watershed, primarily rolled into the merger of ME + NH water quality data led by USEPA/Ted Lavery Coordinating data-driven information, communication, and outreach efforts within the communities of the Saco
	Link active community conservation and engagement to a healthy watershed	X		X		X	<ul style="list-style-type: none"> Using #standupforforests marketing collateral to align outreach messages with stakeholders, partners, etc. <p>TO DO: develop a communications plan for 2021 + beyond</p>
4	Recognize and support economic activity and watershed livelihoods dependent upon clean water	X		X			<ul style="list-style-type: none"> Keeping in touch with Maine Brewshed Alliance + breweries within the watershed, especially Banded Horn Brewing in Biddeford (ON HOLD due to COVID restrictions) Participating in Fryeburg Recreation Economic Development Plan with USEPA, USFS, and other organizations Partnering with WNERR CTP to provide municipal officials with important training to protect watershed ecosystems
	[Livelihoods include] agriculture, canoe liveries, breweries, local businesses, water utilities, academic institutions, federal, state, NPOs	X		X			<ul style="list-style-type: none"> Maintaining existing relationships with a broad range of sectors in our partnership base Leveraging relationship with NRCS to reach landowners contemplating conservation Using new watershed brochure as marketing collateral to partner with NRCS + land trusts to maximize conservation within the watershed <p>TO DO: include on-going outreach to partners that profit from the watershed's good health in 2021 plan of work</p>
	Increase awareness of the connection between clean water and job investments in communities			X			<ul style="list-style-type: none"> Incorporating into outreach material <p>TO DO: develop a communications plan for 2021 + beyond that includes these messages</p>

ACTION STRATEGY #1 - Engage + inspire governments, organizations, community members to take action to sustain water in the Saco Watershed		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
5	<i>Develop a clean water score/report card/green certification programs that synthesizes key elements into community-specific assessment demonstrating the condition of the watershed</i>	X	X		X		<ul style="list-style-type: none"> Identifying this as only orphaned activity in the Action Plan Searching for grant opportunity and/or funding source for this activity <p>TO DO: seek funding and/or identify a grant opportunity for this orphaned activity</p>

The 2021 annual plan of work will consider and/or incorporate each of these outputs, outcomes, and metrics.

MEASURING PROGRESS						
	<i>OUTPUTS</i>					
	<i>Monitoring reports on water quality and quantity</i>					<ol style="list-style-type: none"> 1) Data merge with USEPA – what other info (+ how) to communicate; “feed the data machine” ~Rick Knowlton 2) UNE would be best place for data repository; efforts continue to include student engagement with the data set
	<i>Trainings and workshops provided by Saco Watershed Collaborative volunteers or partner organizations</i>					<ol style="list-style-type: none"> 1) WNERR provides workshops + training virtually that relate to goals of SWC + MCAP; 2) SWC Outreach Coordinator engages UNE professors + students in UNE classes each semester
	<i>Website and other sources of social media as public resources</i>					www.sustainthesaco.org was developed + launched in late 2019 Emily (+ interns) provide social media presence on (1) Facebook, (2) Instagram; (3) LinkedIn; and (4) other networks
	<i>Organize partnership outreach workshops to advance water protecting goals in the Saco Watershed</i>					<ol style="list-style-type: none"> 1) WNERR provides workshops + training virtually that relate to goals of SWC + MCAP;
	<i>Develop a shared clean water marketing message</i>					Emily + Robyn developed a marketing report in 2019 for SWC
	<i>Email newsletter</i>					TO DO: UNE intern(s) needed for newsletter
	<i>OUTCOMES</i>					
	<i>Increased collaboration among groups, organizations, and towns within the Saco Watershed</i>					TO DO: revisit + update the list of groups, organizations, municipalities, etc. that join each year
	<i>Expanded knowledge about healthy watersheds and source water protection in the Saco Watershed</i>					Posters + brochures developed in 2020, distributed in 2021 to: <ul style="list-style-type: none"> • Classrooms within the watershed (posters) • Landowners contemplating conservation (brochure) • Partners helping to expand knowledge about healthy watersheds + source water protection in the Saco
	<i>Program assistance to protect water quality increases in the Saco Watershed</i>					<ol style="list-style-type: none"> 1) OCSWCD’s Demonstration Forest (Brownfield) to promote forest stewardship/management as an integral part of healthy watersheds 2) USDA assistance through NRCS outreach + best practices
	<i>METRICS</i>					

<p>Number of outreach events/workshops presented each year</p>				<p>TO DO: Identify the events, including virtual workshops conducted in 2020, during the global pandemic; Resume in-person events + workshops in consideration of CDC guidelines</p>
<p>Water quality data communicated to residents and community leaders</p> <p>Action Strategy #1 was reviewed + tracked during the Steering Committee meeting on 2/11/2021. A screen shot of the Steering Committee is provided below.</p> 				<ol style="list-style-type: none"> 1) Efforts in 2019 + 2020 focused on inventorying available data of all types, but primarily ensuring the water quality data set was compiled (across municipal, county, State boundaries), reviewed for quality control by USEPA, accessed through a non-proprietary database platform to make the data set as readily available as possible for students – and eventually the general public 2) Efforts in 2021 focused on overcoming barriers for UNE professors to communicate the Collaborative’s water quality data set through student engagement 3) Future efforts might include tracking the number of: <ul style="list-style-type: none"> • Professors using the water quality data set in their academic curricula • Students using the water quality data set as a real world learning tool for analyzing + communicating science-based information about the Saco River watershed • Partner organizations referencing or relying on the water quality data set to inform their own outreach efforts + communications • Community leaders helping to communicate water quality data to residents, inform policy (e.g., resiliency, land use management, etc.), and guide decision making • Members of the general public, especially residents within the watershed, that receive + help to communicate water quality data + science-based messages/practices throughout the watershed

Action Strategy #2

Protect water quality through pollution prevention (P2) and restoration of degraded waters in the Saco Watershed

Public drinking water sources are vulnerable to contaminants by easily identifiable "point" source pollution (for example, landfills, junkyards, waste storage lagoons, leaking underground storage tanks) as well as "non-point" sources pollution such as runoff from parking lots, roads, fertilized lawns, and farms. Potential contamination source inventories are often conducted to assess potential threats from point sources. These inventories serve as a critical element of a source water protection plan. Additional land use analysis and field surveys can identify additional point and non-point source pollution areas that may contribute to pollution in drinking water sources.

ACTION STRATEGY #2 - Protect water quality through P2 + restoration of degraded waters in the Saco Watershed		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
1	<p>Pursue cleanup activities at identified contamination sites to prevent degradation of groundwater and surface water</p> <p>ROLES:</p> <ul style="list-style-type: none"> DAC = technical review EOC = outreach messaging SUST = grant writing STEW = targeted landowner outreach 		X	X	X	X	<ul style="list-style-type: none"> Developed story map identifying past + potential sites that are vulnerable to contaminating the soils or waters of the watershed, due to oil + hazardous materials being stored, handled, released, etc. within a mile corridor of the Saco River (main stem) - by SMPDC + GPCOG effort <p>TO DO: Expand the story map beyond the 1-mile corridor of the main stem through: (1) funding from partners, like Maine Water Company; (2) UNE student-professor involvement; (3) guidance from WNERR on applicable resiliency concepts of the Maine Climate Action Plan</p>
2	<p>Conduct watershed surveys to document and assess sources and potential sources of contamination and illicit discharges to groundwater or surface water</p> <p>ROLES:</p> <ul style="list-style-type: none"> DAC = technical review EOC = outreach messaging SUST = grant writing STEW = targeted landowner outreach 		X	X	X	X	<ul style="list-style-type: none"> Implementing the EPA-approved watershed management plan (WMP) for Thatcher Brook, by continuing to seek NPS grant funded project with partner support from SWCDs, DEP, City of Biddeford, Biddeford community grounds <p>TO DO: meet with DEP to review other potentially threatened subwatersheds in ME within the Saco River watershed; follow up with sister organizations in NH (e.g., SWCDs, NHDES, etc.)</p>
3	Reduce and mitigate non-point source pollution		X	X		X	<ul style="list-style-type: none"> Developing a list of speakers who could speak to the potential

ACTION STRATEGY #2 - Protect water quality through P2 + restoration of degraded waters in the Saco Watershed		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
							<p>NPS pollution sources + best practices to reduce or mitigate stormwater runoff + other NPS pollution sources (i.e., DEP, SWCD, NRCS)</p> <p>TO DO: develop a plan to mitigate/reduce NPS for sites + sources identified above</p> <p>TO DO: Wells Reserve is working with John McClaine (Maine DEP) and Peter Hanrahan to develop and deliver trainings related to stormwater pollution, erosion control, living shorelines</p>
	<i>Prioritize sites for restoration</i>						
	<i>Improve watershed habitat and biodiversity</i>						
4	<p>Identify, conserve, and restore aquatic habitat in the Saco Watershed</p> <p>ROLES:</p> <ul style="list-style-type: none"> • DAC = technical review • EOC = outreach messaging • SUST = grant writing • STEW = targeted landowner outreach 		X	X	X	X	<p>Consider including the Maine Stream Habitat Viewer layers on the Saco Watershed story map to identify the stream crossings that might be good candidates for culvert replacement through Stream Smart program, Maine Water Bond opportunities, infrastructure recovery funding, etc.</p> <ul style="list-style-type: none"> •
5	<p>Provide information to private landowners through technical assistance on Best Management Practices and sustainable forestry and farming</p> <p>ROLES:</p> <ul style="list-style-type: none"> • BASE = support EOC in developing framework + STEW in distributing info • EOC = develop framework • STEW = deliver info to landowners 			X		X	<p>NRCS in ME + NH are the leading partners that provide technical + financial resources to eligible producers (e.g., farmers of crops, livestock, etc.; forested landowners, etc.)</p> <p>TO DO: develop a framework for assisting non-eligible landowners that includes SWCDs, NPOs, municipalities, and other partners</p>
6	<p>Collect and distribute high quality monitoring data from the headwaters to the sea</p>		X	X		X	<ul style="list-style-type: none"> • Developing a non-proprietary, publicly-available database for water quality monitoring data
	Collect and publish information about water quality and quantity		X	X		X	<ul style="list-style-type: none"> • Distributing posters + brochures on sustaining the Saco
7	Conduct floodplain vulnerability assessment to						TO DO: Include floodplain mapping on the Saco River story map to

ACTION STRATEGY #2 - Protect water quality through P2 + restoration of degraded waters in the Saco Watershed	BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES						
	guide restoration and conservation of riparian areas vulnerable to increased frequency and intensity of floods					begin the discussion within the Collaborative; add floodplain mapping to scope of work for 2021-2022 GIS intern

MEASURING PROGRESS						
	<i>OUTPUTS</i>					
	Identification and prioritization of existing sources and potential sources of surface water and groundwater contamination/illicit discharges					MS4 program (in Saco + Biddeford)
	Identification and prioritization of existing erosion areas within the Saco watershed					NRCS with agricultural + forestry site.
	Mapping + prioritization of flood plain vulnerability and conservations strategies to protect communities and water					Mapping + culvert replacement in headwaters (Conway is active with aquifer protection - Saco Headwaters Alliance) Town of Hart's Location: floodplain mapping
	Education + outreach programs to prevent pollution					YCSWCD, The Ecology School, UNE, Brookfield Renewables, DEP, WNERR
	Inventory of flood risks + culvert assessments done by towns					Municipalities CIP? Denmark applied for culvert replacement; Biddeford applying for grant funding for culvert replacement; USFS is addressing culverts on a regular basis thru Great American outdoors Act funding (30 culverts in the future);
	<i>OUTCOMES</i>					
	Non-point source pollution reduction + mitigation demonstration projects in source water protection areas					Bridge on Sawyer R road that historically washes out culvert. Rocky Branch tributary (former field trip site) demonstrates future resiliency needs
	Adequate supply of safe drinking water to communities in southern Maine + the Saco watershed					Maine Water Company continues to provide safe + clean drinking water to 40,000 people in the watershed.
	Reduction of erosion + flood damage					
	Policy changes					New FHWA bridge policy (at 100 floodplain plus 3') makes bridge extremely long + expensive - problem for snowmobile clubs. OUTCOMES: Policies should strike a balance on economic viability + environmental sustainability (who can pay for all the changes? Otherwise we need a moderate approach to move forward in a reasonable manner)
	<i>METRICS</i>					
	Annual water quality report					

	Progress made in Thatcher Brook watershed - how has it changed						A story map was also created by a UNE student about the Thatcher Brook Watershed project
--	--	--	--	--	--	--	--

Action Strategy #3

Support land conservation + stewardship to protect water quality in the Saco Watershed

The Saco Watershed Collaborative supports the conservation + stewardship of land that produces clean + safe drinking water.

ACTION STRATEGY #3 - Support land conservation + stewardship to protect water quality in the Saco Watershed	BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES						
1	Create + implement source water protection plans for public water systems and other significant water withdrawals					Maine CDC – Drinking Water Program
2	Identify source water protection areas for public drinking water supplies + significant springs as priority areas to protect + sustain through land conservation.					<p>New law requiring septic inspections on lakefront + riverfront lots – more motivation to address issues</p> <p>NRCS – Every state has identified priority drinking water /source water protection areas</p> <ul style="list-style-type: none"> • List of BMPs for source water protection with higher cost share opportunity for funding • Working on meeting with Matt Walker/ME Conservations <p>Maine Drinking Water Program – Ashley Hodge, source water protection may be sensitive information (public restricted)</p> <ul style="list-style-type: none"> • https://www.maine.gov/dhhs/mecdc/environmental-health/dwp/pws/maps.shtml <p>USGS Sand + Gravel Aquifer maps</p> <p>Karl H/USFS – Forest to Faucets 2.0 recently upgraded for public viewing (HUC 12 level – with threats identified)</p> <ol style="list-style-type: none"> 1. ID source water protection areas: I mentioned our new product Forests to Faucets 2.0. Complete details can be found here: https://www.fs.fed.us/ecosystemservices/FS_Efforts/forests2faucets.shtml 2. Publicize significant land conservation activities: Our Forest Legacy Program has conserved thousands of acres in NH and ME: Forest Legacy US Forest Service (usda.gov). No new acquisitions in FY21 but here is a web map where all past projects can be reviewed: Forest Legacy Interactive Map (arcgis.com)

ACTION STRATEGY #3 - Support land conservation + stewardship to protect water quality in the Saco Watershed		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
							TO DO: Include source water protection areas (public drink water supplies + significant springs) in scope of work for 2021-2022 GIS intern
3	Identify critical habitat or species protection areas that overlap with source water protection						Beginning with Habitat maps TO DO: Include critical habitat + species protection areas in scope of work for 2021-2022 GIS intern
	<i>Critical habitat</i>						
	<i>Species protection areas</i>						
4	Promote voluntary BMPs with private working land conservation, sustainable forestry + agricultural practices with landowners						Use NRCS's BMP list for source water protection areas BMP manual's for forestry service, DEP - land use management BMPs Relay info on website under resources (web links) SWC partners that do this work include: <ul style="list-style-type: none"> • USDA-NRCS in ME + NH • Tom Gilbert at Maine Forest Service (BMP training programs + Maine Sustainable Forestry Initiative = third party certification program) • USFS in ME + NH • Maine Farmland Trust • USM - New England Environmental Finance Center (Region 1) • Source water protection (funding + programs) - Susan Breau TO DO: develop a framework for assisting non-eligible landowners that includes SWCDs, NPOs, municipalities, and other partners (DUPLICATIVE RECOMMENDATION: Action #2)

ACTION STRATEGY #3 - Support land conservation + stewardship to protect water quality in the Saco Watershed		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
5	<p>Publicize + celebrate significant land conservation activities in the Saco watershed.</p> <p>Centralize web resources.</p>	X					<p>QUESTION FOR STEERING COMMITTEE 9/21/2021:</p> <p>What land conservation accomplishments should be publicized + celebrated in 2021?</p> <p>Saco Headwaters Alliance – significant conservation efforts (William Abbott)</p> <p>Any land conservation that includes public access would be important</p> <p>Forest Legacy Program with USFS = funding mechanism for land acquisition (Karl to report back)</p> <p>The Conservation Fund?</p> <p>OCSWCD 10-mile demonstration forest between Hiram + Brownfield – do conservation activities + develop more trails for the public, may be worth celebrating</p> <p>AMC through GOAO to recognize LWCF-funded projects in the watershed</p> <p>Publicize SFI or SFC certifications on paper products</p>
6	<p>Deliver USDA conservation programs by implementing on the ground conservation practices to improve soil + water quality.</p>						
	<p>Provide farm bill programs that protect wetlands, tributaries, uplands, and wildlife that use private lands</p>						NRCS
	<p>Mapping land trusts in watershed</p>						TO DO: Include mapping land trusts in scope of work for 2021-2022 GIS intern

ACTION STRATEGY #3 - Support land conservation + stewardship to protect water quality in the Saco Watershed		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
7	Provide outreach + technical assistance to municipalities to help them adopt local regulations that maintain substantial buffers of natural vegetation along streams + waterways.						<p>Pete Hanrahan with SWC offering 3 workshops at UNE, Conway + UNE along the River (on the WNERR website + SWC)</p> <p>USEPA exploring American Recovery Plan is being used for stormwater + wastewater + drinking water protection</p> <p>ENGAGE BONNIE OR OTHERS TO FULLY TAKE ADVANTAGE</p> <p>A grant application (scope of work + budget) drafted for using “UNE as a Living Laboratory” for municipal officials + decision makers to advance the conversation of local participation.</p>
8	Conduct floodplain vulnerability assessment to guide restoration + conservation of riparian areas vulnerable to increased frequency + intensity of floods.						<p>UNH professor/program</p> <p>FEMA maps (controversial revisions)</p> <p>USGS</p> <p>Association of Flood Plain Managers</p>

The annual plan of work will consider and/or incorporate each of these outputs, outcomes, and metrics for Action Strategy #3.

MEASURING PROGRESS		BASE	DAC	EOC	SUST	STEW	
	<i>OUTPUTS</i>						
	<i>Priority land protection areas integrated into land trust, water suppliers, and municipal conservation plans.</i>						
	<i>Outreach to local decision makers through workshop ambassadors that focuses on the highest priority conservation + maintenance areas</i>						<ul style="list-style-type: none"> • RCP Network monthly participation in Coordinator Leader’s Calls. • US Forest Service workshops.

MEASURING PROGRESS		BASE	DAC	EOC	SUST	STEW	
	NH DES GIS data to add?						
	OUTCOMES						
	<i>Protection and/or maintenance of lands that incorporates highest priority drinking water source protection areas with local + regional conservation priorities</i>						
	<i>Well-managed sustainable forests</i>						
	<i>Recognition that the Saco as a shared resource with multiple + compatible users</i>						
	<i>Funding for land conservation groups within the Saco Watershed</i>						
	<i>Sustain the environmental, recreational + economic stability of our region as related to water quality</i>						
	<i>Private landowners engage in conservation programs + activities</i>						NRCS actions Local land trust actions intern project may be a way to get an idea of local land trust in the region or working with MLTN
	<i>Target forestry programs to educate + promote landowner participation in the Saco Watershed</i>						
	IMPLEMENTATION METRICS						
	<i>Source water protection areas that are protected through land ownership, conservation easement or ordinance</i>						
	<i>Municipalities that have adopted a groundwater protection ordinance</i>						
	<i>Number of residents, agencies, groups, non-governmental organizations, units of government in Saco Watershed that participate in outreach workshops</i>						

MEASURING PROGRESS		BASE	DAC	EOC	SUST	STEW	
	<i>Conservation practices + activities on the ground that enhance + improve natural resource protection across the Saco Watershed</i>						

Action Strategy #4

Promote + enforce low impact development (LID) strategies, stormwater + wastewater best management practices (BMPs), and land use development that protect water.

As population + development increase in the region, the adoption of LID technologies, stormwater + wastewater BMPs will help protect the quality + quantity of drinking water by reducing the volume of stormwater + pollution leaving a given site. There are on-going efforts with the Saco Watershed to promote + install LID technologies, stormwater + wastewater BMPs as the current standard practice for new development + re-development projects. Improved local land use development regulations that require + incentivize LID practices are a top priority for preventing water pollution as the region becomes more developed.

ACTION STRATEGY #4 – Promote + enforce LID strategies, stormwater + wastewater BMPs, and land use development that protect water		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
1	Conduct + sponsor field trips + trainings to showcase examples of LID + stormwater + wastewater BMPs in the Saco River Watershed.	X					At least four (4) field trips are planned each year by the SWC Outreach Coordinator, most of which these strategies. Wells Reserve (WNERR) includes many trainings on these strategies, including in 2021 living shorelines (i.e., BMP, LID strategies, and engineered solutions using natural materials to protect + stabilize coastal lands)
2	Develop + communicate LID model ordinances + regulations.						
3	Support public water systems on projects to build + renovate infrastructure, and implement source protection activities.						
4	Maintain + enhance fisheries + water quality.						SWC partners that do this work include:
	<i>Maintain + enhance fisheries</i>						<ul style="list-style-type: none"> Saco Salmon Restoration + Hatchery (SSRAH) maintains a fish hatchery program in Biddeford that raises + stocks fish to the Saco River Brookfield Renewables maintains several dams along the River; the permit requirements for these dams include restoring fish passage along the River.
	<i>Maintain + enhance water quality</i>						
5	Promote + enforce land use regulations that						USDA-NRCS, USFS, DEP, USEPA and other SWC partners work

ACTION STRATEGY #4 - Promote + enforce LID strategies, stormwater + wastewater BMPs, and land use development that protect water		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
	maintain + protect water quality.						to promote + enforce sound land use management techniques in their daily work. TO DO: conduct municipal outreach in 2022 to sit-down with, or survey, municipal staff to identify each municipality's success stories for land use management strategies.
6	Promote BMPs + innovation in stormwater management						UNE, the fiscal agent + backbone organization for the Saco River Collaborative, has proactively installed many BMPs + innovative stormwater measures to maintain + protect water quality. A full proposal (scope of work + budget) have been developed + submitted to grant funding opportunities, including the Maine Climate Action Committee in 2021. TO DO: conduct municipal outreach in 2022 to sit-down with, or survey, municipal staff to inventory each municipality's assets + contributions to sustaining the Saco River: <ul style="list-style-type: none"> • BMPs + innovative strategies (ordinances, incentives, etc.) to encourage land use development that protect water • Public water supplies (surface + groundwater sources) + other water-bearing features (e.g., aquifer protection zones, etc.)
7	Promote BMPs + innovation in wastewater treatment.						Municipalities, like Conway, Biddeford + Saco, operate wastewater treatment facilities to control pollution to the Saco River. TO DO: include mapping wastewater treatment plants in the scope of work for the 2021-2022 GIS intern TO DO: conduct municipal outreach in 2022 to sit-down with municipal staff to inventory their assets/contributions to sustaining the Saco River: <ul style="list-style-type: none"> • BMPs + innovative strategies (ordinances, incentives, etc.) to encourage land use development that protect water

ACTION STRATEGY #4 - Promote + enforce LID strategies, stormwater + wastewater BMPs, and land use development that protect water		BASE	DAC	EOC	SUST	STEW	ACTIONS OF THE SACO WATERSHED COLLABORATIVE
ACTIVITIES							
							<ul style="list-style-type: none"> Public water supplies (surface + groundwater sources) + other water-bearing features (e.g., aquifer protection zones, etc.)

The annual plan of work will consider and/or incorporate each of these outputs, outcomes, and metrics for Action Strategy #4.

MEASURING PROGRESS		BASE	DAC	EOC	SUST	STEW	
	<i>OUTPUTS</i>						
	<i>Outreach campaign to municipal staff, boards, and developers on adopting LID technologies + stormwater BMPs</i>						
	<i>Stormwater utility feasibility studies</i>						
	<i>List of LID practitioners that work within the watershed</i>						
	<i>Outreach + technical assistance to local decision makers + communities in the watershed on adopting regulations / ordinances for drinking water protection</i>						
	<i>OUTCOMES</i>						
	<i>Prevention of pollution loading into the Saco River Watershed</i>						
	<i>Adoption of LID technologies + stormwater BMPs in each municipality</i>						
	<i>Improved local development regulations that require + incentivize the use of LID + stormwater BMPs</i>						
	<i>Land being developed with minimal impact to water quality</i>						
	<i>Local government adoption of regulations for</i>						

MEASURING PROGRESS		BASE	DAC	EOC	SUST	STEW	
	<i>drinking water protection + protection of healthy stream corridors</i>						
	IMPLEMENTATION METRICS						
	<i>Partners identify + share measurable units + report to collaborative milestones database</i>						