Winter 2021

Black River Initiative

Black River Trail.
Photo by Emily Fell.

Accomplishments and Challenges of 2021

In 2021, watershed stakeholders eased into a "new normal" for watershed coordination and found opportunities to continue advancing progress despite the myriad of challenges faced during the pandemic. Virtual connections substituted for past in-person meetings; outdoor meetings replaced conference rooms; and, collective individual actions have been shared as part of group efforts. Through our ability to adapt, progress was able to continue towards meeting the ambitious goals of the Black River Initiative, and advance additional recommendations as identified in the 10 Year Progress report released by the Tug Hill Commission and New York State Department of Environmental Conservation's (DEC) Great Lakes Program in 2020. The continued progress made in 2021 to sustain the Black River watershed land and water resources are highlighted in this newsletter. Please take a moment to reflect on this year's accomplishments and challenges, and consider what we can do by working together in 2022. We thank you all for your involvement and support of the Black River Initiative, and hope to see you soon! Happy New Year!

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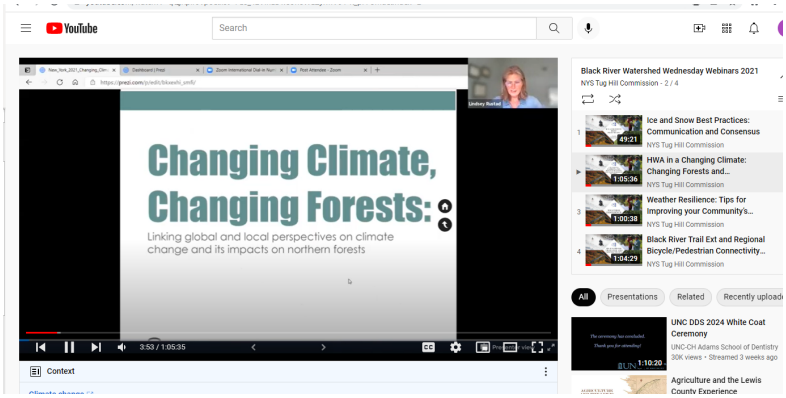
Black River in Watson. Photo by Emily Fell.

Virtual Black River Watershed Conference

The 2021 Black River Watershed Conference was held virtually to continue to follow CDC guidance.



Presentations during the 2021 virtual conference were given on Wednesdays as part of a series titled "Black River Watershed Wednesdays". Topics varied based on local interests and included:

- Ice and Snow Best Practices
- Hemlock Wooly Adelgid in A Changing Climate
- Weather Resilience: Tips for Improving your Communities Ability to Respond to Extreme Weather
- Black River Trail Extension and Regional Bicycle/Pedestrian Connectivity
- OUTSTEPS Community Platform

More information on conference presentations is available at: www.tughill.org/black-river-watershed-wednesdays-2021/, or watch the presentations on the Tug Hill Commission YouTube Channel.

Questions? Contact Jennifer Harvill at: jennifer@tughill.org

Stay tuned for details on the 2022 Black River Watershed Conference.
Hope to see you there!

Black River Trash Bash in the COVID Era

In 2021, Lewis County and Jefferson County Water Quality Coordinating Committees and Lyons Falls Alive held Black River Trash Bash cleanup events, with 23 volunteers participating at three locations. Participants cleaned up 219 pounds of trash from the shorelines at Eatonville Falls, Marble St. Park in Watertown, and Lyons Falls. While these volunteers didn't meet any records for amount of trash cleaned up, they enjoyed coming together in person and sharing this experience of cleaning up the river and places they love. This year, Tug Hill Commission partnered with Alliance for the Great Lakes Adopt a Beach Program to collect and share data from the trash cleanups. For more on the collaboration across the Great Lakes, and to get involved in next years cleanup, visit: www.greatlakes.org/2021/11/over-200000-volunteers-and-8282807-pieces-of-litter/

Lewis County WQCC Trash Bash at Otter Creek State Forest. Photo by Emily Fell.

Black River Trail Feasibility Study Complete

SLELO PRISM and OPRHP staff conduct Black River Trail Feasibility Study. Photo by Megan Pistolese.

The Black River Trail is a 3.5-mile nature trail that follows the Black River beginning in Watertown and ending in the Village of Black River. There are many invasive species present along the trail that compromise native vegetation and the overall health of the ecosystem. To learn where the biggest invasive species problems were located, a feasibility survey was conducted in 2020-2021 by the St. Lawrence-Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM) Early Detection Team, in collaboration with the Office of Parks Recreation and Historic Preservation (OPRHP). During the study, the trail was divided into 29 compartments and data was collected, including, plant species composition and abundance and location of culverts and tributaries. Analysis of the data resulted in a prioritization score for each compartment.

This score was based on floristic quality and can be used to manage portions of the trail according to resource limitations. These scores along with many additional statistics, are included in the newly completed Black River Trail Feasibility Study Report.

The report concluded that invasive species management and restoration is feasible if resources are designated according to the compartment prioritization scores outlined in the Feasibility Study. Other recommendations of the study include the use of mechanical/manual methods of control; prioritizing restoration in treatment areas or areas that lend themselves to an ecological opportunity; utilizing resident native plant species found on the trail during restoration—the use of resident native plant species can enhance suitable habitat for native fauna while reducing the potential for erosion along the Black River.

The approach and prioritization system used during the Black River Trail Feasibility Study is a helpful strategy that can be applied to other management initiatives. The compartmentalization of this strategy allows work to be conducted on the highest priority sections which is helpful because limited budgets are often a barrier for management and restoration initiatives. To learn more about the study please reach out to the SLELO PRISM Terrestrial Restoration and Resiliency Coordinator, Robert Smith at robert.l.smith@tnc.org.

Virtual Hike Challenge in the Black River Watershed

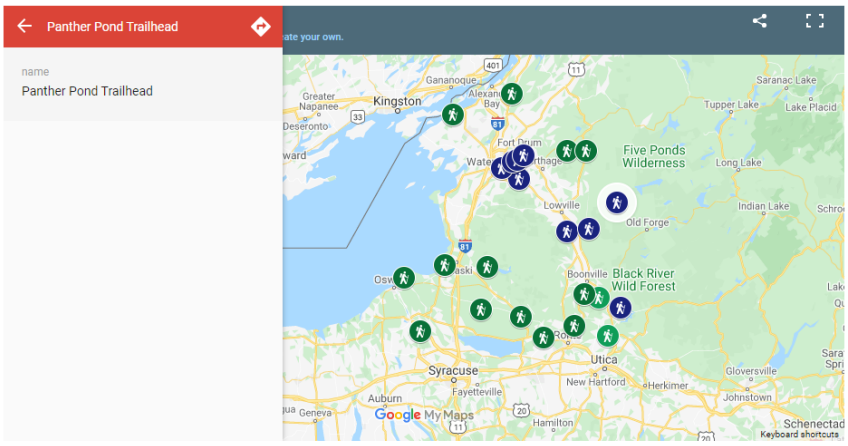
Take a hike in the Black River Watershed from November 2021 through March 2022 and report your observations of hemlock trees to be entered to win a prize!

Hemlock trees in Jefferson County Forest at Felts Mills. Photo by Emily Fell.

SLELO PRISM is holding their second annual #VirtualHikeChallenge! The challenge encourages hikers to visit local hiking trails to check hemlock trees for the presence of hemlock wooly adelgid (HWA). HWA is an invasive forest pest that harms and eventually kills our ecologically important hemlock trees. The loss of hemlock trees in the watershed could be devastating for fish, such as trout, that depend on the cooling effect that the shade of hemlocks provide, as well as, other wildlife that depend on lush hemlock forests for nesting and foraging. Hemlocks also help filter runoff and protect our waterways.

You can help prevent HWA impacts by taking the #VirtualHIkeChallenge: visit www.sleloinvasives.org/virtualhikechallenge to learn how to recognize and report this forest pest. The webpage also shows an interactive map that showcases forested trails located within the Black River Watershed along with other local public trails with hemlocks known to be near the path.

Hemlock stands located on trails indicated by blue icons are directly benefiting the Black River Watershed.



How to Search for Hemlock Woolly Adelgid

When you approach a hemlock tree, check the underside of low-lying branches for white woolly masses. The presence of white masses may vary to a single or many masses on a branch. Check several branches from each side of the tree. *Tip: Bring a hiking pole to pull down high branches, also check branches you find on the ground.*

Trails in the Black River Watershed that are known to have hemlock trees are marked with blue icons, and include:

NYS Parks Black River Trail

Poor's Island in the Village of Black River

Jefferson County Forest at Felts Mills

Black River Trail at Great Bend

Whetstone Gulf State Park

Otter Creek State Forest

Panther Pond at Independence River Wild Forest

Tree Watertown Planting at Bicentennial Park

More than 50 volunteers from local schools, community organizations, and the city of Watertown showed up on a rainy Saturday in November to plant 50 trees at Bicentennial Park.

Volunteers learn about tree planting at Bicentennial Park. Photo credit: Emily Fell.

The trees selected will help improve the park as many of the mature trees in the park are experiencing various stages of decline with future tree removal phases expected in the coming years. Trees planted will protect the park's canopy in the face of changing weather trends. New plantings will diversify the forest canopy, filter polluted runoff, improve the parks aesthetics, and foster a sense of place for volunteers and visitors. The tree planting was made possible by funding through the Environmental Protection Agency's (EPA) American Rescue Plan Act (ARPA) grant.

Long term care and maintenance of the trees (including watering, mulching, and pruning) will begin in the spring of 2022 as all 50 trees will receive 20 gallons of water each week during the months of May - August by the city's Summer Urban Forestry Assistant to ensure their establishment and survival through the hotter summer months. The new trees will be placed on the city's rotational Young Tree Training Program and receive structural pruning once every three years until their diameter at breast height reaches nine diameter inches. Over time structural defects and potential weaknesses are minimized and/or eliminated, ultimately creating healthier, longer lived, more resilient trees. Any concerns about damages to recently planted trees can be directed to the city of Watertown's Planning and Community Development Office by emailing: planning@watertown-ny.gov

To learn more and get involved with Tree Watertown, visit: www.watertown-ny.gov/departments/PlanningandZoning/StreetTreeAdvisoryBoard

DEC Water Quality Improvement Funding

DEC announced funding for 2022 under the Water Quality Improvement Project (WQIP) grant program for projects that reduce pollutant and nutrient loading to waterways used for drinking source waters and advance the Black River Nine Element Watershed Plan.

Communities in the Black River watershed were awarded $7.8 million dollars for 15 projects including wastewater treatment improvements that will disinfect effluent to reduce bacteria and pathogens discharged to waterways, and the Jefferson County Stormwater Coalition vacuum truck, that will reduce stormwater runoff to the river. More information on WQIP awards is available at: www.dec.ny.gov/pubs/4774.html

Reducing Agricultural Runoff in the Watershed

Lewis County Soil and Water Conservation District (SWCD) has recently been awarded $1,198,859 in funding from the NYS Department of Agriculture and Markets (NYSAGM) Round 27 Agricultural Non-Point Source Abatement and Control Grant Program to assist three farms in the Black River Watershed. District staff will assist these farms with implementing agricultural best management practices that will reduce runoff to the Black River watershed, protect drinking water resources, and improve water quality for fish and other aquatic life.

Manure storage photo from Lewis County SWCD.

Practices to be implemented include installing a covered barnyard, installing a manure storage facility, and planting 2,000 acres of cover crops. These efforts support reducing sediment, nutrient, and phosphorus loading as described within the Black River 9E Plan.

Planting cover crops on 2,000 acres within the watershed will not only improve soil health, but will also reduce annual loading for phosphorus by 200 pounds, will reduce annual nitrogen loading by 21,000 pounds, and will reduce annual sediment loading by 152,400 pounds.

More information about this years NYSAGM Round 27 Agricultural Nonpoint Source Abatement and Control Program project awards is available at: www.agriculture.ny.gov/system/files/documents/2021/11/agnps_round27_projectdescriptions.pdf

DEC Completes Fishing Access at Black River-Deer River Confluence

DEC recently announced the completion of a new, Americans with Disabilities Act accessible fishing access site in the town of Denmark that was completed using Marks Farm Natural Resources Damages Assessment Funds.

The new access site will enable recreation for all users, including fishing, canoeing and kayaking, with improved access along 3.5 miles of Deer River and .66 miles along the Black River. To access the full press release, visit: www.dec.ny.gov/press/124197.html

Boat Launch in Town of Denmark.

Lewis County Fairgrounds Green Infrastructure

Members of the Lewis County Water Quality Coordinating Committee came together in September of 2021 to learn about and tour the green infrastructure practices at Lewis County Fairgrounds.

Nichelle Swisher with the Lewis County SWCD led the tour of the practices that were installed, which included porous pavement, rain gardens, bio-retention basins, and a stormwater capture and reuse system. These practices were implemented under a NYS Environmental Facilities Corporation Green Innovation Grant Program grant awarded in 2019.

Stormwater collection tanks, pervious pavers, and rain garden at the fairgrounds. Photo by Lewis County SWCD.

Discussions during the tour included the types of plants that were selected, maintenance plans for the project, and outreach and education to promote the multiple benefits of the project. Educational displays throughout the fairgrounds were installed for fairgoers and visitors to learn about the benefits of green infrastructure. Questions about the projects can be directed to: nichelleswisher@lewiscounty.ny.gov

Septic System Replacement Funding for Beaver River

In 2021, the NYS Environmental Facilities Corporation announced that residents within the Beaver River Watershed are eligible for the Septic System Replacement Fund.

The Septic System Replacement Fund Program provides funding to counties to help homeowners replace cesspools and septic systems. Participating counties, including Lewis County, provide grants to reimburse property owners for up to 50% of the costs (up to a maximum of $10,000) of their eligible septic system projects. Funding considerations for projects include the properties location in relation to a waterbody and the condition of the septic system.

Eligible projects under this program include:

- Replacement of a cesspool with a septic system; or
- Installation, replacement or upgrade of a septic system or septic system components; or
- Installation of enhanced treatment technologies, including an advanced nitrogen removal system.

Interested property owners are encouraged to contact Lewis County Planning by reaching out to Casandra Buell at: casandrabuell@lewiscounty.ny.gov

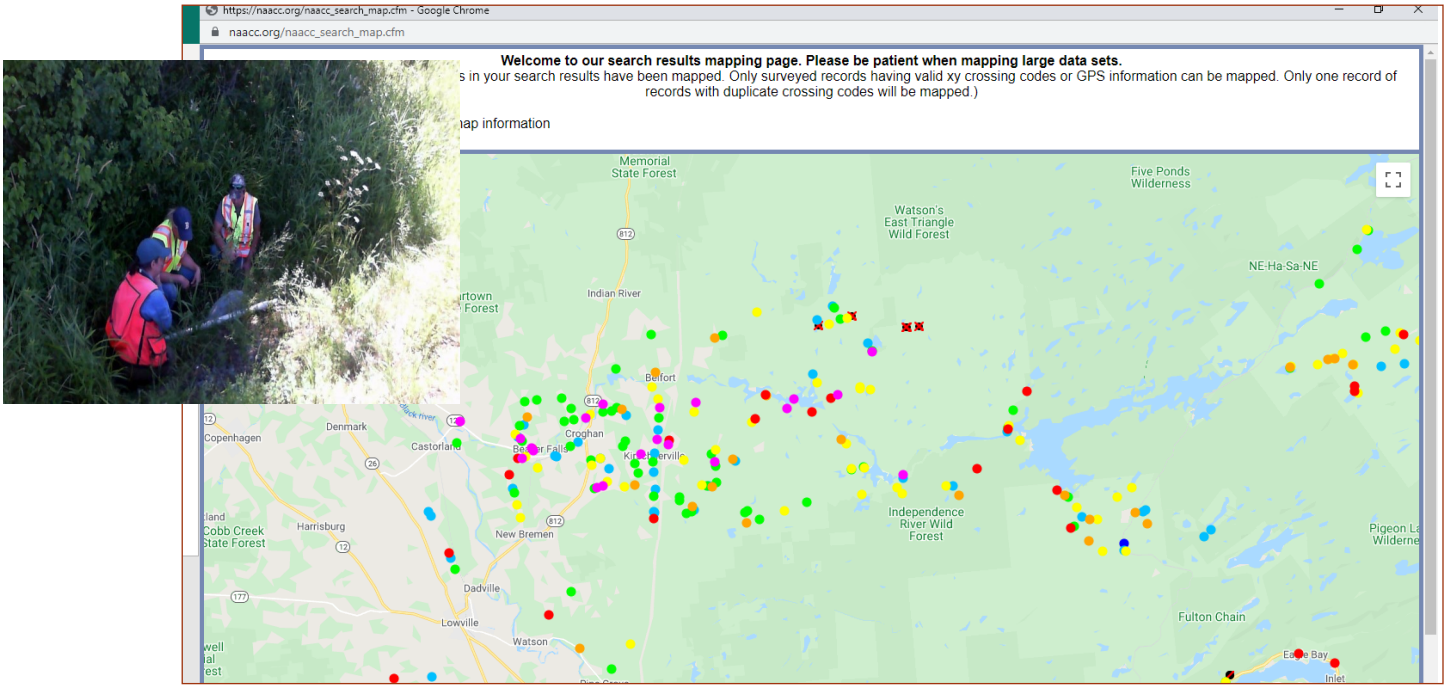
More information on the Septic System Replacement Fund is available at: www.efc.ny.gov/septic-replacement

Trout Unlimited Completes Initial Culvert Prioritization Work in the Beaver River Watershed

The Beaver River Advisory Council awarded funding to Trout Unlimited in 2021 to complete watershed assessments, culvert surveys, prioritization work, and progress two projects through survey and initial design phases. Watershed assessments were completed initially, for the 10 sub-watersheds within the larger, Beaver River Watershed. These assessments identified landscape connectivity as the most significant impairment throughout the watershed. Through the summer, Sam Levine and Laura O'Brien completed over 300 culvert assessments in the Beaver River watershed using the North Atlantic Aquatic Connectivity Collaborative (NAACC) Protocols. Data collected through these assessments is available through www.streamcontinuity.org.

With a more comprehensive database of road-stream crossings, a prioritization process was completed to narrow prospective replacement projects down to 5 crossings. After consulting with the local towns and visiting the sites, Jo-Anne Humphreys (NY Stream Restoration Specialist for Trout Unlimited) completed surveys and conceptual design work for the Brewery Rd crossing of an unnamed tributary to Black Creek, in the Town of New Bremen, and the Long Pond Rd crossing of Warner Creek in the Town of Croghan. These conceptual designs will be used to leverage other sources of funding to replace the existing, inappropriately sized culverts, with fully passable, flood-resilient structures.

To connect with Trout Unlimited and learn more contact: Jacob.Fetterman@tu.org



Field monitoring and interactive map with assessment information, with red identifying severe barriers to aquatic connectivity. Available from www.streamcontinuity.org

JCC Green Campus Entryway Project Update

The NYS Environmental Facilities Corporation awarded $880,000 to Jefferson Community College (JCC) in 2019 for Phase II of a Green Campus Entryway project. The project worked with BCA Architects and Engineers to install green infrastructure practices including bio-retention basins and medians that use vegetation to capture and filter runoff, as well as porous pavement that filters runoff in the campus entrance way.

Drone imagery of the green infrastructure practices installed at JCC. Photo credit: BCA Architects and Engineers.

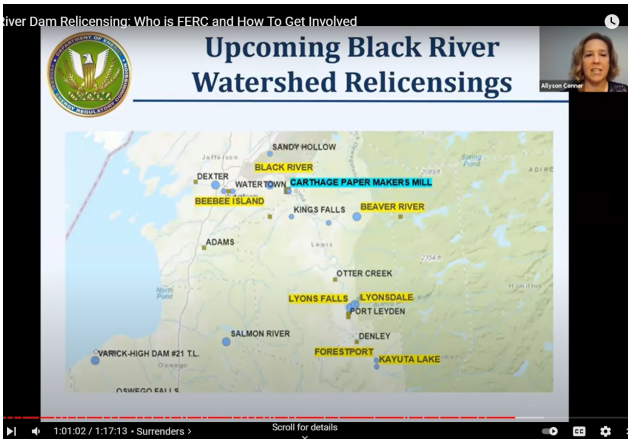
The NYSEFC funding covered phase 2 of a 3 phase project that aims to capture 278,299 gallons of stormwater annually and reduce annual phosphorus loading to the Black River by 10.4 pounds. JCC is currently pursuing funding for phase 3 of the project and plans to implement additional practices in 2023.

JCC students will benefit from using the green entryway as a living laboratory, and will help monitor the site and evaluate benefits to water quality in the Black River. JCC maintenance staff will also work with the Jefferson County Highway Department to maintain and vacuum the porous pavement and prevent clogging, and will regularly clean out the bio-retention basins.

For more information on the project and phase 3 plans, contact JCC at 315-786-2405.

Black River Hydroelectric Facility Relicensing Projects

Obtaining a new license (relicense) from the Federal Energy Regulatory Commission for the continued operation (30 to 50 years) of a hydropower facility is a complex multi-year regulatory process that requires impact studies and reviews by federal and state regulators, Indian tribes, and the public. A total of 6 projects were due for relicensing in 2021, including Beebee Island, Carthage Paper Makers Mill, Beaver River, Lyonsdale, and Lyons Falls. A presentation was given as part of a NYS Tug Hill Commission webinar which is available at: www.youtube.com/watch?v=NrzIvk5VhkE
Additional information on the relicensing process and opportunities for input is available at www.ferc.gov



Black River Initiative

The Black River Initiative is a multi-pronged approach to protect and improve the water quality, recreational opportunities and communities along the Black River. The Black River Watershed Management Plan (2010), Black River 9 Element Plan (2016) Black River Blueway Trail Plan (2007) and Black River Trail Scenic Byway Corridor Management Plan (2012) provide the foundation to advance existing efforts and new projects that enhance and improve all aspects of the Black River. This annual newsletter highlights recent developments in the Black River Initiative, connects with stakeholders, and promotes collaborative, ecosystem based management efforts to achieve goals. For more information, visit: www.tughill.org/projects/black-river-projects/

Black River Watershed boundary.
Graphic courtesy of Bergmann and Associates.

Thank you to all of the organizations that contributed to this newsletter!

For more Information on the Black River Initiative Contact:

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Tug Hill Commission jennifer@tughill.org

Emily Fell; Eastern Great Lakes Watershed Coordinator
DEC Great Lakes Program, in Cooperation with Cornell Water Resources Institute emily.fell@dec.ny.gov

Coordination for this newsletter supported by the NYS Environmental Protection Fund; Ocean and Great Lakes Ecosystem Conservation Act.

Black River Canal in Boonville. Photo Credit: Emily Fell.

Algers Falls in Lyonsdale. Photo credit: Emily Fell.

Information on recreation in the Black River is available at www.blackriverny.com