Winter 2019

Black River as seen from Factory Street, Watertown. NYSDEC Photo

Black River Initiative

Fighting the Good Fight to Protect Water Resources

Organizations, municipalities, and other key partners throughout the Black River watershed continue to fight the good fight towards sustaining our Black River land and water resources.

Under the Black River Watershed Management Plan and Black River 9 Element Watershed Plan, these actions include implementing agricultural, stormwater, and wastewater treatment best management practices.

The Consolidated Funding Application (CFA) awards announced in December 2019 included the following projects totaling $1.8M in the watershed that continue to implement these important actions:

- Lowville Wastewater Treatment Plant Improvements - $1.6 million
- Town of Champion Salt Storage - $150,000
- Lyons Falls Wastewater Treatment Plant Study -$20,833
- Constableville Wastewater Treatment Plant Study - $20,833
- Wilna Wastewater Treatment Plant Study -$20, 833
- Forestport Wastewater Treatment Plant Study - $19,960

Thanks to the efforts of these communities and their partners, momentum has been maintained towards the collective actions to protect Black River drinking water, conserve fish and wildlife habitats and populations, and improve quality of life in the region. We can all look forward to seeing and enjoying the fruits of these labors.

A fishing access off Route 3, Watertown. NYSDEC photo.

Inside this issue:

2019 Black River Watershed Conference

The 2019 Black River Watershed Conference was held at the rustic Camp Aldersgate on the shore of Pleasant Lake in Greig, NY, attracting over 80 attendees.

Presentations included an update on the Jefferson County Stormwater Coalition activities by Christine Watkins, Research on Road Salt Pollution from Dr. Dan Kelting, A Review of Hydro-electic projects in the Watershed by John Wiley, the Geologic History of the Upper Black River Watershed from Dr. Chris Ebey, and Research on the Ecological Impacts of Plastics from Dr. Eric Hellquist. The keynote speaker for the conference this year, Peter Annin, reviewed the history and purpose of the Great Lakes St. Lawrence Water Resources Compact, which regulates water resource use in the basin to benefit Great Lakes communities.

More information on conference presentations is available at: http://www.tughill.org/projects/black-river-projects/black-river-watershed-conference/

Questions? Contact Jennifer Harvill at jennifer@tughill.org

Peter Annin, author of *Great Lakes Water Wars*, presents on the history of water withdrawals and regulations to conserve Great Lakes water supplies.

Stay tuned for details on the 2020 Black River Watershed Conference

Hope to see you there!

Black River Trash Bash Sets Records in 2019

In the tenth year of the Black River Trash Bash, a record 82 event participants (many participants attended more than one event) representing six groups collected a record 1,000 pounds of trash from 11 locations along the waterways and shorelines of the Black River Watershed.

Participating groups included Lyons Falls Alive, Adirondack Communities Advisory League, the Lewis County and Jefferson County Water Quality Coordinating Committees, Jefferson Community College and the Haderondah 4H Club. Many participants included school-aged kids and college students.

The Black River Trash Bash is an annual watershed-wide event to clean up along the river and document what litters its shores, in coordination with the International Coastal Cleanup. The event seeks to increase public participation in solving the problem of litter and pollution and to increase public awareness and appreciation of the river. If you or your community group are interested in participating in next year's event, please contact Jennifer Harvill at jennifer@tughill.org or toll-free at (888) 785-2380.

Over 30 JCC students participated in this year's trash bash. Chris Ebey, JCC

New Staff Connecting with Communities to Combat Invasive Species

Under a newly awarded state contract, the St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM) hired two new full time staff to enhance invasive species initiatives in the region. SLELO's Restoration and Resiliency Coordinator, Robert Smith (terrestrial), and Brittney Rogers (aquatic) are working on ways to enhance the health and resiliency of our lands and waters and want to engage with community members in the Black River Watershed.

Robert Smith

Robert Smith holds a Master of Science from SUNY College of Environmental Science and Forestry (ESF) and can assist communities with terrestrial invasive species identification and management including ecosystem restoration. Robert is leading efforts to protect terrestrial priority conservation areas, such as the Black River and Tug Hill, from the impacts of invasive species through early detection and rapid response efforts. He is coordinating the Eastern Lake Ontario Swallowwort Collaborative to connect researchers and land managers to implement best management practices to control swallowwort. Robert is also developing an urban forest sustainability initiative and community guidance to enhance the resiliency of urban forests in the wake of invasive forest pests, such as emerald ash borer and spotted lanternfly, and a changing climate.

Please reach out to Robert if you have questions or are working on projects related to the prevention or management of terrestrial invasive plants and animals at robert.l.smith@tnc.org; 315-387-3600 x7723.

Brittney Rogers

Brittney Rogers also holds a Master of Science from SUNY ESF and can assist communities with aquatic invasive species identification and management, and can help boat launches with using New York States Watercraft Inspection Steward Program to prevent boaters from introducing aquatic invasive species. The program will be expanding to 20 sites throughout the region in 2020.

Communities in the Black River Watershed can connect with Brittney to protect aquatic priority conservation areas, including the Black River and Whetstone Reservoir, from the impacts of invasive species through early detection and rapid response efforts. Brittney can help communities in the Black River connect with Cornell University's Atkinson Center for a Sustainable Future to use environmental DNA (eDNA) to detect the presence of invasive species such as tench, snakehead and Asian carp in the Black River and other regional waterways. Brittney can also help interested volunteers and communities understand how water chestnut is best managed, and how hand pulling can help reduce nutrients in waterways, under her work with Cornell's Nutrient Analysis Lab (CNAL).

If you are interested in collaborating on aquatic restoration projects, would like to volunteer with water chestnut pulls, eDNA sampling or the watercraft inspection steward program, or if you just want to know what that weird plant is in your pond, please reach out to Brittney at Brittney.rogers@tnc.org;

Are You Ready for Emerald Ash Borer?

With emerald ash borer (EAB), an invasive wood boring beetle, recently confirmed in Clayton and Watertown, municipal leaders and community members have reason for alarm as this invasive forest pest will kill the ash trees lining our streets, shading our homes and beautifying our parks. Not only will EAB kill our ash trees—as EAB disrupts the tree's nutrient flow and can cause tree limbs to become weak and fall into streets and damage property or harm people. EAB also creates a liability for municipalities and homeowners who are responsible for the removal or treatment of trees infested by the insect.

The city of Watertown has prepared a Tree Management Plan to remove, treat and replace ash trees that are growing on city owned land. Landowners who have ash trees growing on their property are encouraged to take action and reach out to their local Department of Environmental Conservation to learn of management options.

Further guidance is available through the St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (www.sleloinvasives.org) website, dedicated to EAB management options.
Workshops are routinely offered, and are posted at: https://www.sleloinvasives.org/events/

The disastrous emerald ash borer (EAB).

Jefferson Community College Receives Funding for Green Infrastructure Project

Groundbreaking to take Place Summer of 2020

In January 2019, Jefferson Community College (JCC) was the only community college to receive a Green Innovation Grant Program (GIGP) totaling $880,000 from Governor Cuomo's New York State Regional Economic Development Council funds to complete a major overhaul of the main entryway to campus for environmental and safety benefits. Currently, storm-water flows along impervious surfaces throughout campus directly into the Black River.

The main entryway to campus will be transformed with bio-retention medians, porous roadway shoulders and educational signage with ongoing monitoring. It will serve as a living laboratory for students, improve campus aesthetics, reduce JCC's environmental impact, slow traffic, support public transportation and create a green corridor to other storm-water management projects.

In mitigating an environmentally damaged water source, the project will serve as an example of different techniques that can be used to control and treat runoff. Work to transform the campus entryway will begin summer 2020.

Entrance to JCC campus. Pamela Dixon, JCC

Lessons Learned from Working with Municipalities on a Great Lakes Restoration Grant

In 2019, Jefferson County Soil and Water Conservation District (JCSWCD) closed out a Great Lakes Restoration grant with the US Forest Service to implement Green Infrastructure in the lower Black River Watershed, in collaboration with Jefferson County and 8 community members of the Jefferson County Stormwater Coalition.

Rain garden and educational signage about its benefits at the Black River Village Office. NYSDEC photo.

JCSWCD worked with municipal partners to plant 1279 trees, 1 bio-swale, and 2 rain gardens throughout the 8 communities at public areas. Trees were planted in each community along riparian corridors and areas of high stormwater runoff. They also installed educational signage, and educated the public about the benefits of green infrastructure. The grant amount was 148,142, with approximately 48,000 in local match. It is estimated that the trees planted intercept over 230,000 gallons of rainfall annually.

Some of the lessons learned from the experience included:

- Installation of the procured trees by a nursery/landscaper provided a one year guarantee on the establishment of the trees
- Municipal staff needed training on operation and maintenance procedures for planted areas
- A maintenance fund is necessary after the grant is closed out
- Planting on public property provides not only stormwater benefits, but community benefits such as open space and resiliency.

For communities interested in green infrastructure and other Great Lakes Restoration projects in Jefferson County, can reach out to JCSWCD staff at: admin@jeffersoncountyswcd.org

Tree Inventory at JCC Completed

Jefferson Community College is home to more than 1,500 trees now accounted for in the College's tree inventory.

The tree inventory was funded by a NYS Department of Environmental Conservation Urban and Community Forestry Grant to manage urban forests against threats such as invasive species.

A tree management plan for the campus is under development.

JCC's Tree Inventory is growing. These oak trees are near a parking lot on campus. NYSDEC photo.

Water Quality Committees Tour WWTP

Members of the Jefferson County and Lewis County Water Quality Commitees came together in June of 2019 to learn about how Watertown's Wastewater Treatment Plant (WWTP) is designed to protect the water quality of the Black River.

Mark Crandall, the treatment plant operator, walked everyone through the plant and described the processes that sewage water goes through to get clean, and the testing and quality assurance processes in place to ensure that all treated discharge meets DEC and Clean Water Act standards. These processes are highly effective during normal weather at ensuring that the discharged waters are clean.

During wet weather, Watertown still has several combined sewer overflows where wastewater coming in from stormwater and sewers exceeds the capacity of the treatment plant to treat it, and mainly untreated stormwater, as well as some sewage water, is discharged to the Black River.

Information on these discharges is available from DEC under the Sewage Pollution Right to Know Law at: https://www.dec.ny.gov/chemical/90315.html

For more information on the city of Watertown's Wastewater Treatment Plant, visit: https://www.watertown-ny.gov/index.asp?NID=684

Lewis County SWCD and Farmers Reduce Nutrient Loading

Staff at the Lewis County Soil and Water Conservation District (SWCD) have been successful in 2019 working with farmers to implement cover crops on croplands in the Black River Watershed. This year, under the NYS Agricultural Non Point Source Abatement Control grant program that is funded annually by the NYS Department of Agriculture and Markets, Lewis County was awarded $172,968 to work with 5 farms throughout the watershed. Lewis County is working with these 5 farms to implement 980 acres of cover crops.

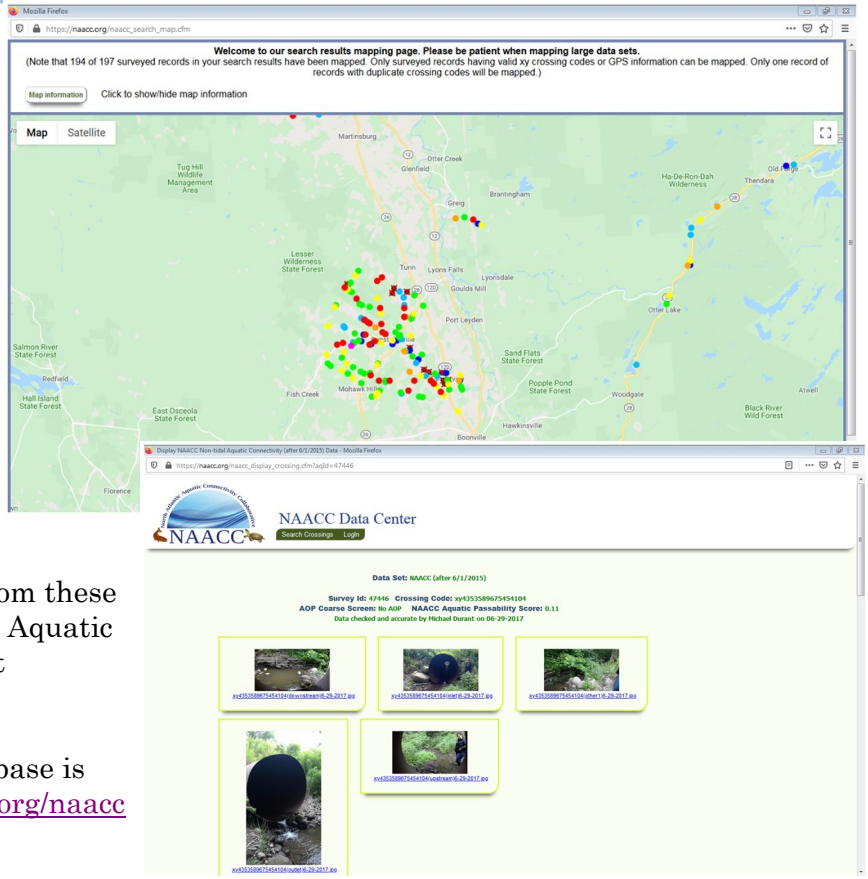
The Black River Watershed 9 Element Plan identifies cover crops as a best management practice for reducing phosphorus and nitrogen loading in the watershed, and this years cover crops will reduce phosphorus loading by 44 kg/yr, and nitrogen loading will be reduced by 4,630 kg/yr. food products

More information on this years Ag Non Point Source Abatement Projects is available at: https://agriculture.ny.gov/system/files/documents/2019/11/agnpsround25projectdescriptions.pdf

Cover crops in Lewis County help soils retain nutrients while reducing agricultural runoff. Lewis County SWCD Photo.

Culvert Assessments Identify Severe Barriers

Planners, local municipalities, and other interested residents can use the North Atlantic Aquatic Connectivity Collaborative database to identify locations where culvert enhancements and improvements to road stream crossing infrastructure is needed, to benefit people and wildlife.



DEC, NYS Department of Transportation, and County Soil and Water Districts have been assessing road stream crossings using protocols that assess these structures for condition, aquatic habitat, and hydrology, to determine where critical replacements are needed. Information from these assessments is used in applying for DEC Aquatic Habitat Restoration and Federal Habitat Restoration grants.

More information and access to the database is available from: https://streamcontinuity.org/naacc

Regional Workgroup Discusses Habitat Restoration Needs

In November 2019, interested organizations and members of the public gathered in West Carthage to learn about collaborative actions and opportunities to achieve water quality, natural resource and resiliency goals in the Black River and St. Lawrence River Watersheds.

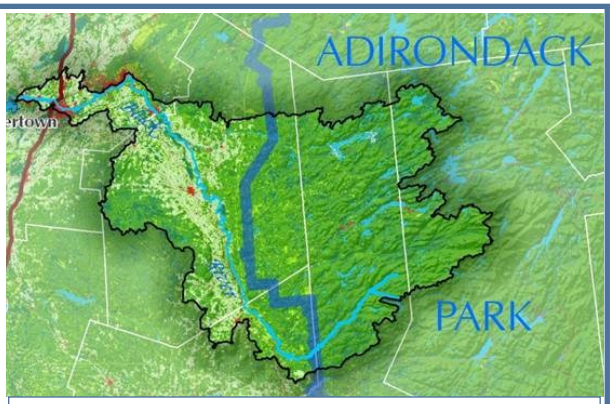
The group discussed aquatic habitat restoration and watershed management needs for the Black River. Top actions identified included streambank stabilization projects, culvert enhancements, and removal of hazardous structures from the old canal operations that impact navigation and habitat.
To learn more and get involved, visit: https://www.dec.ny.gov/lands/91881.html

Communities and organizations in the Black River watershed are also encouraged to apply to NY Sea Grant's/DEC's Great Lakes Basin Small Grants Program to plan and implement projects: https://seagrant.sunysb.edu/articles/t/new-york-s-great-lakes-basin-small-grants-program-home

A small grant program for research projects can also be used to help communities and organizations better understand the Black River Watershed– more information is available at: https://www.esf.edu/glrc/

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: http://www.tughill.org/projects/black-river-projects/watershed-initiative/ Thank you to all of the organizations that contributed to this newsletter!



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

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Village of Dexter Boat Launch. NYSDEC photo

Poor's Island in Black River Village.
NYSDEC photo

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