

**The Watershed Center Grand Traverse Bay
Antrim County Annual Report
FY 2019-2020**



Adopt-A-Stream

- The Watershed Center continued our volunteer stream monitoring program that includes sampling several locations along the Rapid River, which are in fair to poor condition (<https://www.gtbay.org/wp-content/uploads/2020/03/Final-2019-Report.pdf>).
- As the mouth of the Rapid River continues to gain sediment, we are closely monitoring the macroinvertebrate population and assisting local efforts to determine and hopefully mitigate the source(s) of sediment.
- We also continued to work with Grass River Natural Area and Tip of the Mitt Watershed Council to collaborate on all volunteer-led stream monitoring efforts in the Elk River Chain of Lakes.

Beach Rangers

- The Watershed Center continued our volunteer avian botulism tracking program that includes monitoring several beach stretches along the east shore of Grand Traverse Bay (<https://www.gtbay.org/wp-content/uploads/2020/03/2019-Beach-Rangers-Annual-Report.pdf>).

Elk River Chain of Lakes (ERCOL) Water First Action Plan

- The Watershed Center was awarded a grant from the Council of Michigan Foundations through the Grand Traverse Regional Community Foundation to form a Water First Action Team in the ERCOL watershed.
- This initiative is part of the Great Lakes One Water Partnership, a binational collaboration among coastal community foundations aimed at supporting communities and partners in understanding and taking action on innovative water policies and green infrastructure solutions.
- We are addressing fragmented approaches to water policy and implementation by engaging communities and partners through Water First Action Teams that will build engagement and participation of organizations, municipalities, and individuals in a collaborative, regional initiative and conversations.
- The Watershed Center convened a stakeholder meeting where over 60 participants discussed high urgency and high impact issues facing water quality in the ERCOL watershed. As a result, seven issues were identified – water levels, septic systems, stormwater runoff, shoreline setbacks and buffers, algae, wetlands, and funding.
- We also formed a Water First Action Team to develop an action plan to support and enhance green infrastructure policies and projects throughout the chain of lakes. Using the ERCOL Watershed Protection Plan (see below) and the seven community-identified

priorities, the action team selected two priority areas of focus – shoreline protection and septic system management.

- We are currently forming subcommittees of the ERCOL Water First Action Team to focus on each priority area and begin development of the Action Plan. Efforts should be complete by the end of 2020, with implementation to follow.

Elk River Chain of Lakes (ERCOL) Watershed Coordinator

- Discussions between lake associations, environmental organizations, resource professionals, and community members in the ERCOL have reinforced the importance of addressing watershed-wide water quality issues through effective collaboration. We believe the solution is creating a Watershed Coordinator position that will focus The Watershed Center's successful model for community engagement, advocacy, and policy efforts specifically in the Elk River Chain of Lakes.
- In 2019, The Watershed Center initiated an effort to garner support and raise funds for an Elk River Chain of Lakes Watershed Coordinator. Letters of support and \$30,000 of committed and pledged funds were raised from half a dozen organizations, foundations, and individuals. Obtaining additional support and raising the remaining \$25,000 required was challenging as there was not wide-spread commitment to or understanding of this position's responsibilities and how that person would interact with the numerous groups and initiatives throughout the ERCOL.
- We continued to pursue support and raise funds for the ERCOL Watershed Coordinator position, an effort that will be enhanced by the process and outcomes of the ERCOL Water First Action Team (see above). Subsequently, our Grand Traverse BAYKEEPER® is uniquely qualified to begin building relationships with jurisdictions, organizations, and community members to better understand the strengths and challenges of the ERCOL watershed that will facilitate implementation of the ERCOL Action Plan, success of the ERCOL Watershed Coordinator, and protection of clean water.

Elk River Chain of Lakes Watershed Plan Implementation Team (ERCOL-WPIT)

- The Watershed Center has co-facilitated these bi-monthly meetings with Tip of the Mitt Watershed Council since November 2010.
- Collectively, this collaboration of lake associations, nonprofit organizations, local and state government, and interested citizens was formed to implement projects pertaining to the Elk River Chain of Lakes in the Grand Traverse Bay Watershed Protection Plan (www.gtbay.org/resources/watershed-protection-plan).
- This last year, group initiatives included:
 - Golden Brown Algae: several lake associations continued to work with Michigan State University and others to study the cause of golden brown algae blooms in the ERCOL. Three Lakes Association continues to collect samples, obtain aerial photographs, and assist with university research. They are currently working on a

removal and recolonization study with a student intern (<http://3lakes.com/golden-brown-benthic-algae-project>).

- Lake levels: an ERCOL-WPIT subcommittee worked closely with Antrim County and the U.S. Army Corps of Engineers to conduct a hydrologic and hydraulic study of the ERCOL. Survey data has been gathered and the report is currently being generated.
- Swimmer's itch: several lake associations published an informational rack card on swimmer's itch (<http://3lakes.com/wp-content/uploads/2019/08/Swimmers-Itch-2019-rack-card.jpg>). Three Lakes Association conducted comprehensive swimmer's itch assessments on Torch Lake and Lake Bellaire (<http://3lakes.com/swimmers-itch-assessments-2019/>), while several other lake associations paused their efforts to learn more about causes of swimmer's itch and current mitigation efforts that appear ineffective and/or potentially spreading swimmer's itch to merganser relocation sites.
- Water trail: Paddle Antrim designed and is currently installing educational and wayfinding signs throughout the Chain of Lakes Water Trail. ERCOL-WPIT is supporting their efforts through outreach, presentations, content for signs, letters of support, etc. (www.paddleantrim.com/water-trail).

Elk River Chain of Lakes Watershed Protection Plan

- The Watershed Center continued to work with Tip of the Mitt Watershed Council to finalize implementation tasks, the monitoring plan, and the information and education strategy to complete the Elk River Chain of Lakes Watershed Protection Plan.
- A draft of the plan was reviewed this spring, we anticipate Tip of the Mitt will submit a draft to the Michigan Department of Environment, Great Lakes and Energy by the end of 2020.

Grand Traverse Bay Watershed Protection Plan Update

- The Watershed Center continued updating the Grand Traverse Bay Watershed Protection Plan. The original plan approved in 2005 requires updating to reflect what has been accomplished, identify/update priorities for the next ten years, and outline new watershed protection goals. With subwatershed plans completed for the Elk River Chain of Lakes and Boardman River watersheds, the updated plan will focus on coastal areas and smaller tributaries to Grand Traverse Bay.
- The project Steering Committee met on a few occasions to discuss various aspects of the plan update process, as well as providing implementation tasks and monitoring efforts. Steering Committee members include representatives from local governments, environmental nonprofits, federal/state entities, as well as others.
- The Watershed Center gathered community input, collected and analyzed water quality and ecological monitoring data, and updated the narrative and implementation tasks to reflect the current status of the bay

- A draft of the updated plan will be submitted to the Michigan Department of Environment, Great Lakes, and Energy and the U.S. Environmental Protection Agency for approval by the end of 2020, with the anticipation of plan approval in early 2021.

Green Infrastructure in Elk Rapids

- The Watershed Center leveraged committed local funding sources to secure more than \$200,000 in grant funding from the National Fish and Wildlife Foundation and others to install green stormwater infrastructure within the Village of Elk Rapids.
- We completed site planning for numerous rain gardens along River Street and a bioswale at Edward C. Grace Memorial Harbor, secured a contractor, and work will begin after Labor Day.
- Additionally, The Watershed Center was successful in leveraging a Great Lakes Protection Fund grant through Michigan Sea Grant to install and monitor the effectiveness of green stormwater infrastructure at Great Lakes marinas. As a result, an additional bioswale will be installed at Edward C. Grace Memorial Harbor.
- Earlier this year, The Watershed Center received a \$400,000 grant from the Great Lakes Restoration Initiative through the Environmental Protection Agency to install additional green stormwater infrastructure in Elk Rapids. Site planning for underground infiltration under Cedar Street will begin this fall. We anticipate construction on this project to begin in fall 2021.

Outreach

- The Watershed Center gave numerous educational presentations to local groups (garden clubs, lake associations, realtor groups, etc.) and jurisdictions (planning commissions, trustees, etc.), as well as participated in several community discussions.
- We responded to water quality concerns from numerous citizens, business owners, and other organizations.
- We continued to monitor jurisdictions and permit applications for projects with the potential to impact water quality.
- We worked with several township, village, and county staff and elected officials to adopt or enhance ordinances, master plans, and other guiding documents that protect water quality (stormwater ordinances, setback/buffer ordinances, parks and recreation master plans, etc.).