



2022 Impact Report



The Watershed Center Grand Traverse Bay advocates for clean water in Grand Traverse Bay and acts to protect and preserve its watershed.

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## **Community Support**

We started the year with an ambitious campaign to raise \$275,000 to hire a director of philanthropy and bolster our operational reserves. Thanks to the generous support from our community, we reached this goal within two months. Following years of great accomplishments with a small, hardworking staff, we have now embarked on the exciting process of identifying opportunities to strengthen our fundraising efforts and sustain our work.



Our community's passion to protect local water was evident in the support we saw for this campaign. We are so grateful to everyone who generously contributed to sustain our efforts to advocate for the lakes, rivers, and waterbodies we all cherish.

Royce Ragland, Board Member

### **Leadership Circle**

We launched our Leadership Circle as a means to directly engage individuals in ways that increase knowledge, enjoyment, pride, and informed decisionmaking around water. Dozens of community members have joined and now serve as ambassadors for clean water, demonstrating how strong connections to water fuel loyalty and action.

## **Your Generosity at Work**

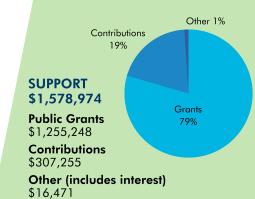
100%...the amount of our advocacy and policy work funded by donations. In 2022, your support helped us monitor streams for emerging threats to water quality, work alongside community members, champion policies that protect the health of our water, and investigate water quality concerns.

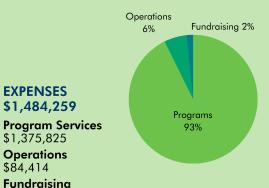


We have a lot to celebrate, most of all the donors who empower us to be a voice for Grand Traverse Bay and its waterways. Your generosity is put to work each day fueling dialogue and information sharing so healthy water is a priority throughout our watershed.

Christine Crissman, Executive Director







\$84,414

\$24,020



#### Green Infrastructure Installations

Stormwater runoff results when rain falls or snow melts and the water flows over the surface of the land. The flow of this stormwater often carries pollutants such as oil, grease, gas, toxins, and bacteria, as well as sediment particles and the pollutants that are attached. One of the best ways to reduce stormwater and its harmful impacts on water quality and ecosystem heath is to install green infrastructure. Green infrastructure mimics and works with nature to reduce stormwater runoff onsite using green space, native landscaping, and other techniques to encourage water to infiltrate into the ground.



## <u>Meijer</u>

In partnership with Meijer in Traverse City, we installed 5 underground infiltration trenches under their parking lot and 6 connected bioretention cells along the eastern edge of their property that capture and infiltrate nearly half a million gallons of stormwater each year. As part of this project, we are also working with university researchers to monitor stormwater runoff from the parking lot both before and after green infrastructure installation to determine

its effectiveness

## Elk Rapids

We partnered with the Village of Elk Rapids to install a series of 2 underground infiltration trenches on Cedar Street near River Street and 6 roadside rain gardens on Cedar Street between First and Third streets. This project completes a phase of green infrastructure installations totaling 11 rain gardens, a bioswale, and 2 infiltration trenches that keep nearly 3 million gallons of stormwater and its associated pollutants from reaching the bay each



## **Bacterial Source Tracking**

To reduce the public health threats due to elevated *E. coli* levels, it is essential to know the source of bacterial contamination so proper steps can be taken to lower the inputs. We analyzed water samples from local beaches and several locations in Mitchell Creek for potential bacterial contamination from human, cow, pig, canine (dogs, foxes, coyotes), and gull sources.

## Local Beaches

Initial results showed gull and canine markers were the most frequently found and were present in nearly all samples tested. The pig and human markers were found in less than half the samples and at barely detectable levels, while the cow marker was nearly non-existent.



# Mitchell Creek

Working closely with Michigan State University and local partners, we continued analyzing surface and groundwater samples collected during wet and dry periods. Findings show rainfall mobilizes *E. coli*, increasing bacteria levels in the creek. Preliminary results show pig and canine markers were found in most locations, human markers were identified at several sites,

and cow and gull markers were rarely detected.



### **Community Concerns**

We pride ourselves on being a local resource for community members, municipalities, and local entities to gain knowledge, access support, get in-volved, and make educated, water friendly decisions. We received nearly 100 potential threats to water quality that we researched and responded to relating to issues such as tree cutting, fish die-offs, riparian rights, invasive species, septic regulations, road salt use, and many more.

In addition to community concerns, we provided over 30 letters to local municipalities and attended dozens of public meetings to provide resources and recommendations to decision makers to ensure a voice for water quality.

### **Leelanau Township Setbacks**

We worked with Leelanau Township in their process to adopt a wetland setback and a deeper water's edge setback in the Commercial Resort district. Our involvement included providing technical and legal recommendations, talking with township staff and officials, attending numerous Planning Commission meetings, and encouraging community members to support this forward-thinking zoning.

After the Leelanau Township board adopted these provisions, a petition brought these zoning amendments to a vote in the fall. Ultimately, township voters supported these improvements to water quality protection. We applaud Leelanau Township and its citizens for taking these steps to keep our water healthy.



We owe a great deal to The Watershed Center for their help, guidance, and grassroots organizing that got the word out about the importance of wetlands and the ordinances we need to protect that resource.

Tom Weber, Leelanau Township Planning Commissioner



### Adopt-A-Stream

We completed our 20th successful season of Adopt-A-Stream thanks to support from our amazing volunteers and generous sponsors. Over 100 volunteers surveyed aquatic insect communities at 27 stream sites throughout the Grand Traverse Bay watershed. The high-quality, replicable data collected can be used for management and restoration decisions by local and state resource professionals.



The opportunity to contribute some meaningful scientific data that helps with understanding the health of our local streams really appeals to the scientist in me.

Mike Foley, Adopt-A-Stream volunteer

### **Master Plans**

Several communities completed or began the process of updating their Master Plans. Master Plans are policy-guiding documents designed to help communities identify a vision for land use and development patterns, shaping the zoning provisions needed to achieve that vision. As East Bay Township, Leelanau Township, and the City of Traverse City updated their Master Plans, we provided resources and recommendations to better protect water quality.

