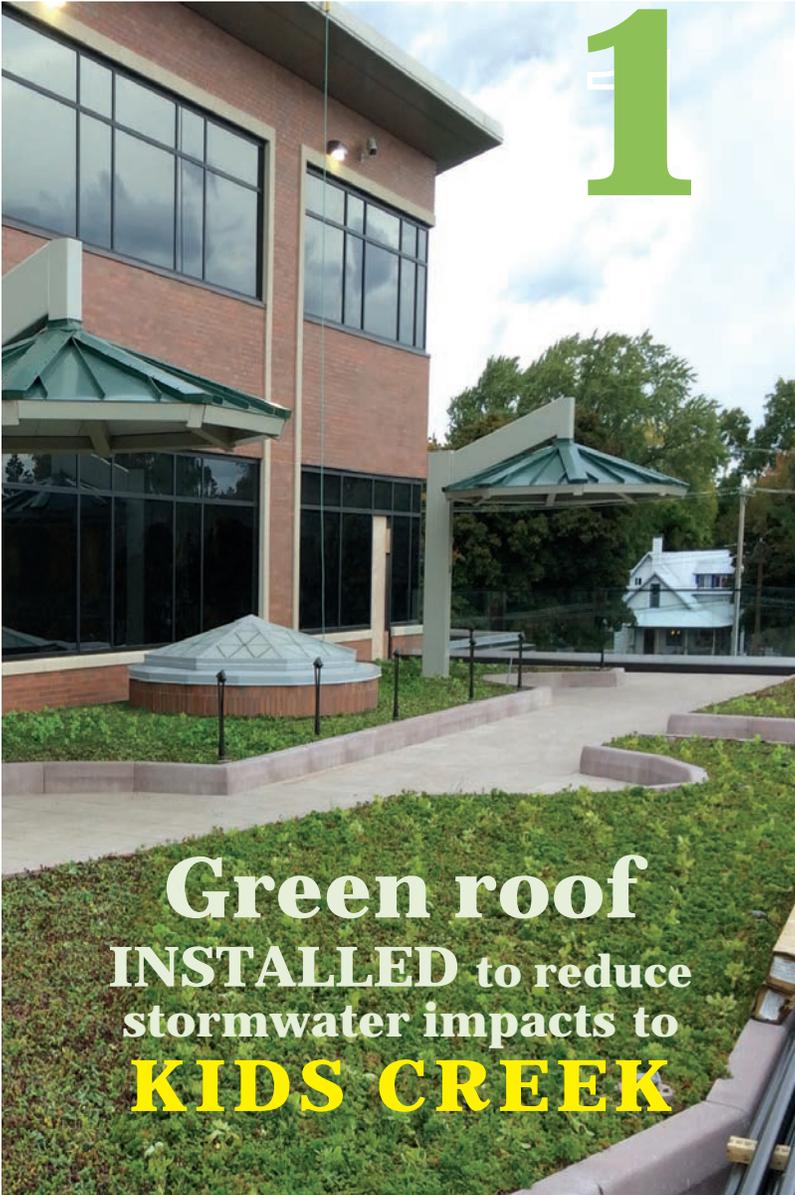
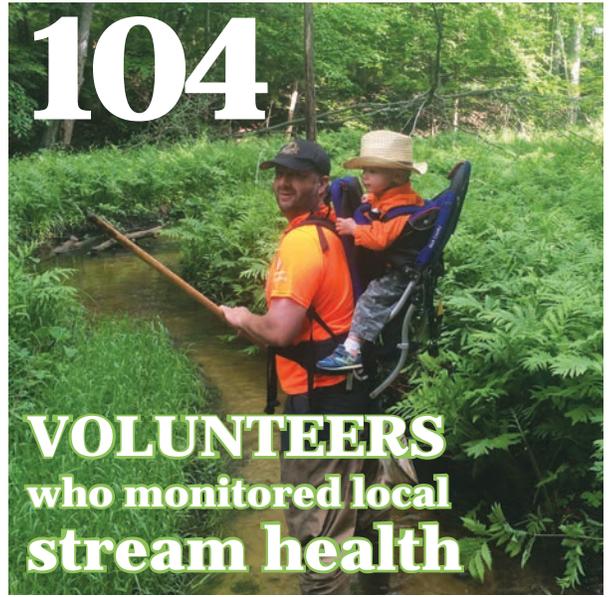




State of the Bay 2015 Annual Report



Green roof
INSTALLED to reduce
stormwater impacts to
KIDS CREEK

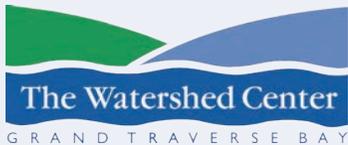


104
VOLUNTEERS
who monitored local
stream health



21 YEARS The Watershed Center
has been the **VOICE** for
clean water
in the Grand Traverse
Bay watershed

Learn more about what we have
done to **PROTECT** and **PRESERVE**
Grand Traverse Bay and our
1,000-SQUARE-MILE watershed inside.



THE WATERSHED CENTER

Grand Traverse Bay **advocates** for clean water in **Grand Traverse Bay** and acts to **PROTECT** and **PRESERVE** the Bay's watershed.

Christine Crissman ~ Executive Director
TJ Andrews ~ Policy Specialist
Jonelle Bowers - Development Specialist
Karlyn Haas ~ Marketing & Communications
Deb Marois ~ Bookkeeper
TBA ~ GRAND TRAVERSE BAYKEEPER®
Sarah U'Ren ~ Program Director

For correspondence and address updates:
13272 S. West Bay Shore Dr.
Traverse City, MI 49684
231-935-1514
www.gtbay.org

Printed on RECYCLED/ENVIRONMENTALLY RESPONSIBLE paper by:



This Nonpoint Source Pollution Control Project has been funded wholly through the Michigan Nonpoint Source Program by the United States Environmental Protection Agency under assistance agreement 2014-0011 to the Watershed Center Grand Traverse Bay for the Kids Creek Restoration Project Phase II. The contents of the documents do not necessarily reflect the views and policies of the EPA, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.

A Letter from Our Executive Director

In 2015, The Watershed Center remained focused on goals identified in our EPA-approved Grand Traverse Bay Watershed Protection Plan. Since 2005, The Watershed Center has secured more than \$8.56 million for projects that have a direct impact on improving water quality. Along with our regional partners, more than \$20 million has been invested in land protection, restoration and water quality activities. Our collective efforts over the last decade have greatly reduced the negative impacts that pollutants and environmental stressors have on Grand Traverse Bay's unique freshwater resources.

The Watershed Center's restoration work continues to focus on waters that are impaired due to habitat loss, limited connectivity and poor water quality. In 2015, we continued our work on the Kids Creek Restoration Project to prevent 200 pounds of sediment from entering the Creek every year. We spent the summer collecting water samples along Mitchell Creek according to MDEQ protocols. Since 30 percent of those samples exceeded State Water Quality Standards, Mitchell Creek has the potential to be listed on the State's Impaired Waters List. Through the completion of our small dam inventory throughout the watershed, we have the information needed to prioritize dams for potential repair and/or removal to improve stream connectivity and function.

Through our Grand Traverse Bay-keeper® program, The Watershed Center wrote or signed on to more than two dozen letters advocating for water



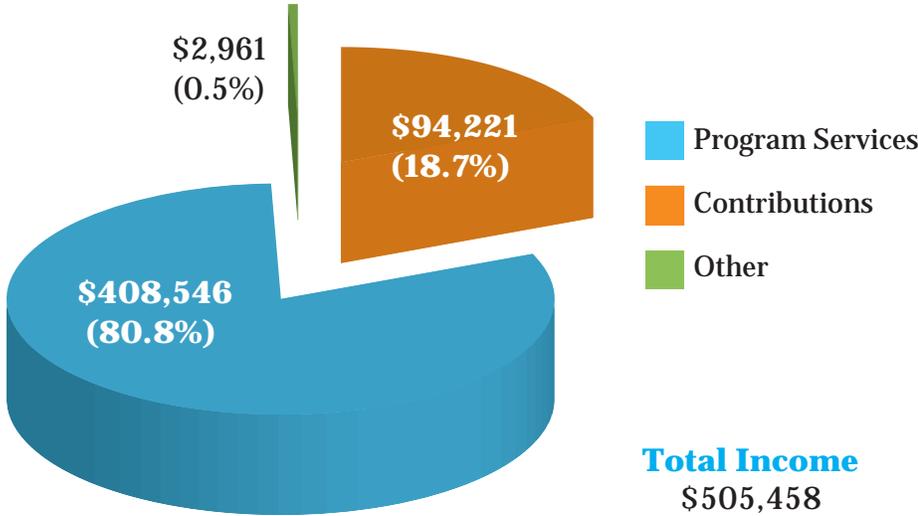
quality protection at the local, state and national level. From local stormwater and soil erosion control concerns to issues like the proposed Waukeha diversion and oil pipelines that affect the entire Great Lakes, The Watershed Center continues to be the eyes, ears and voice for clean water in the Grand Traverse Bay watershed. In John Nelson's

last year as our Baykeeper, he led the effort to appeal a zoning variance that reduced a water setback by 50 percent on a proposed development on Boardman Lake – and won! That court decision set an important precedent in the fight to protect water quality during a time of increased development and growth. As we transition to a new Baykeeper, we are excited to strengthen the program and enhance our reach to protect water quality throughout the watershed.

Grand Traverse Bay is why we live, vacation, work and recreate here – it connects us all. Whether you volunteer, advocate, donate or simply educate yourself to become a better steward, every action we take reduces our impact on water quality and helps ensure our beautiful freshwater resources can be used and enjoyed for generations to come. Support from people like you strengthens our efforts to address emerging issues and continue our decades-long education, restoration, monitoring and advocacy work. The Watershed Center protects what you love, and I encourage you to support our important efforts. On behalf of our clean, healthy waters, we thank you.

FINANCIAL AND DONOR HIGHLIGHTS

INCOME



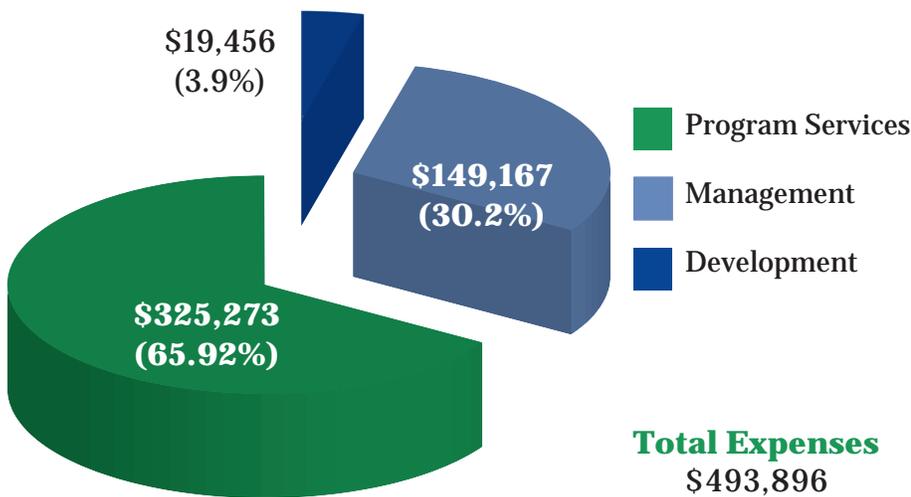
432
Donors*

7

MI Department of
Environmental Quality
grants totaling

\$302,230

EXPENSES

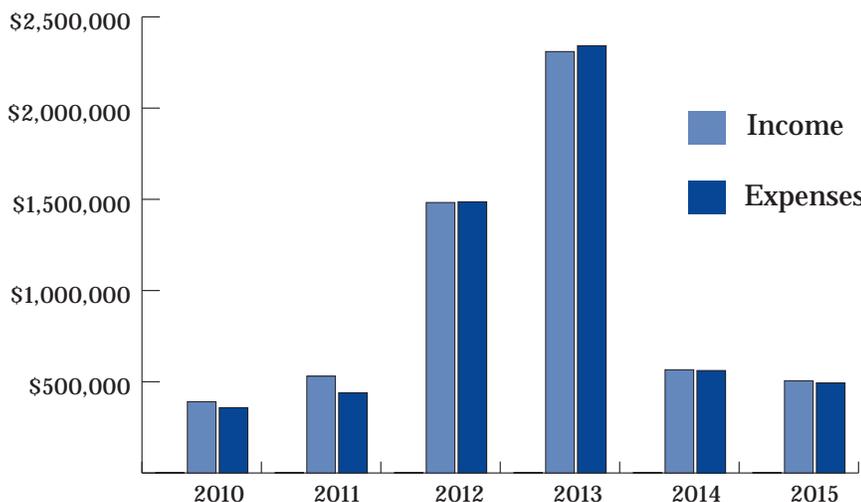


1

U.S. Environmental
Protection Agency
grant totaling

\$24,206

INCOME AND EXPENSES OVER TIME



9

Private foundation
grants/contributions
totaling

\$130,000

**Full donor list can be found at gtbay.org*

KIDS CREEK RESTORATION PROJECT

The issue: A 2-mile portion of Kids Creek is impaired due to sedimentation, flow regime alteration and other human-caused sources – all of which relate to stormwater runoff.



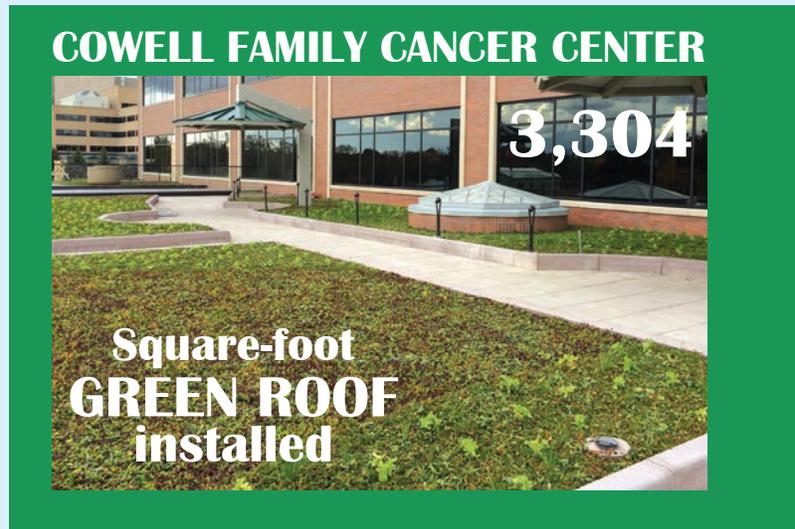
\$138,300
FUNDING for Building 29 work from
MI Department of
Environmental Quality and
ROYAL BANK OF CANADA

200
Pounds of **SEDIMENT**
ANNUALLY PREVENTED
from entering **Kids Creek**

1 RAIN GARDEN
installed

1,300
Square feet of
POUROUS PAVEMENT
installed

PARTNER
Munson Medical Center



ADVOCACY WORK

An essential part of our mission is to advocate for the environmental health of Grand Traverse Bay and its watershed. We do this by working with local governments, developers, planners and citizens; being involved in community planning projects and boards; and commenting on proposed project permits and legislation. Issues we addressed in 2015 include:

Stormwater

WETLANDS

**Setbacks
from water**

MARINAS

**Shoreline
grooming**

Soil erosion

**Shoreline
hardening**

**NETPEN
AQUACULTURE**

MITCHELL CREEK SAMPLING

Weekly sampling of Mitchell Creek during the summer of 2015 to determine presence of bacterial contamination and whether the creek should be included on the State's Impaired Waters List.

\$15,335

Funding from the
MI Department of
ENVIRONMENTAL QUALITY

11 SITES
SAMPLED

12 WEEKS of
sampling

227 SITE SAMPLES
analyzed for
E. coli bacteria



RESULTS

30 PERCENT OF SAMPLES
EXCEEDED STATE
WATER QUALITY
STANDARDS

11 EXCEEDED PARTIAL
BODY CONTACT
STANDARDS

57 EXCEEDED TOTAL
BODY CONTACT
STANDARDS

STORMWATER & SMALL DAM ASSESSMENTS

Long-term water quality protection of the Grand Traverse Bay watershed through detailed stormwater analyses in small communities in Antrim county and an inventory of small dams in the watershed.

\$22,249 FUNDING from the
MI Department of
Environmental Quality

6

**STORMWATER ASSESSMENTS
completed** in Bellaire,
Central Lake, Elk Rapids, Alden,
Ellsworth and Shanty Creek

69

Small dams throughout
the watershed **ASSESSED**

BELANGER CREEK PROJECT

The issue: Two undersized culverts at a road-stream crossing just south of Peshawbestown caused scouring, erosion and sedimentation harmful to habitat and wildlife in Belanger Creek.

\$100,000

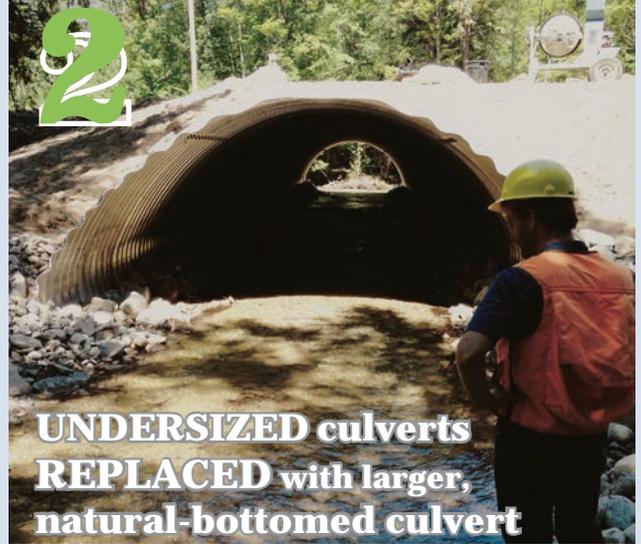
GRAND TRAVERSE BAND OF OTTAWA AND CHIPPEWA INDIANS funding from the U.S. Environmental Protection Agency

\$9,930

The Watershed Center funding for **ADVISING and EDUCATION/OUTREACH**

1 **STORMWATER bioretention area INSTALLED**

6,000 **SQUARE FEET** of road embankment **STABILIZED** with permanent vegetative cover



UNDERSIZED culverts REPLACED with larger, natural-bottomed culvert

5 **ACRES** (almost 4 football fields) of impervious road and surface runoff **PREVENTED** from entering the creek

1 **Educational sign** designed and **INSTALLED**

BOARDMAN RIVER RESTORATION PROJECT

The Boardman River is the centerpiece of the largest dam removal effort in Michigan's history.



8 **YEARS OF PRE- AND POST-DAM REMOVAL MACROINVERTABRATE SAMPLING**



9 **SITES SAMPLED ABOVE AND BELOW OLD BROWN BRIDGE DAM SITE**

9 **SITES** CONSIDERED **"HIGH QUALITY"** DUE TO SPECIES FOUND, INCLUDING **CADDISFLIES, STONEFLIES AND MAYFLIES**

BEACH MONITORING

Weekly monitoring of E. coli bacteria at 15 Great Lakes and 9 inland lake beaches in the region from June 24 to September 2, 2015.

\$14,548

FUNDING FROM THE MI DEPARTMENT OF ENVIRONMENTAL QUALITY

24 BEACHES MONITORED

321 SAMPLES TAKEN

11 BEACH ADVISORIES

5 ADVISORIES RECOMMENDING NO BODY CONTACT

PARTNERS

CITY OF TRAVERSE CITY

GRAND TRAVERSE COUNTY HEALTH DEPARTMENT

BENZIE-LEELANAU DISTRICT HEALTH DEPARTMENT

ADOPT-A-STREAM

A fun, hands-on, volunteer program to monitor stream health in the Grand Traverse Bay watershed.

16 STREAMS

18 TEAMS

21 SITES SAMPLED

104 VOLUNTEERS

STREAM SITE HEALTH RESULTS:

5 Poor

11 Fair

5 Good

0 Excellent

CONNECT WITH US

Like us on

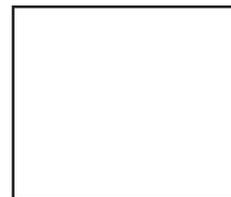


facebook.com/WatershedCenter

Follow us on



@WatershedCenter



UPCOMING EVENTS



FEAST OF THE WATERSHED

A sampling of food inspired by the watershed by some of the area's top chefs

Sunday, April 24, 2016 • 5-9 p.m.

The Parlor • 205 Lake Ave., Traverse City

\$35/person • Cash bar

Tickets: mynorthtickets/events/feast-of-the-watershed



SWIM FOR GRAND TRAVERSE

Celebrate clean, healthy water in Grand Traverse Bay with a 2-mile point-to-point open water swim Saturday, August 13, 2016.

Greilickville Harbor Park to Clinch Park

Registration opens April 15 at www.swimfortgbay.com

SWIM • SPONSOR • VOLUNTEER • DONATE



Presented nationally by

TOYOTA

Waterkeeper Alliance SPLASH Swim for Grand Traverse Bay to benefit The Watershed Center Grand Traverse Bay, presented nationally by Toyota. For more information on the SPLASH Event Series, visit www.splashseries.org.