

Kid's Creek Project Update

Work is progressing steadily on our Kid's Creek Restoration Project. Last July, we received a \$99,150 grant through the Great Lakes Commission Soil Erosion and Sedimentation Control Program to restore a 3,000 foot length of Kid's Creek in Traverse City.

Kid's Creek and its associated wetlands and ponds occupy a 17.9-acre area between Kohl's Department Store and the Great Wolf Lodge along US 31 in Traverse City. As a part of the PUD approval process, the site was preserved through the efforts of the Grand Traverse Regional Land Conservancy and is now owned by Garfield Township. The special permit also required business owners on either side of Kid's Creek to pledge funds to assist in the restoration efforts.

Specific activities include removing debris from the site, lowering the grade on steep banks, stabilizing banks with fiber logs and rock rip-rap, installing fish lunger structures, placing large boulders in the stream, and planting vegetation along riparian areas.



Want to volunteer? You can assist with Kid's Creek restoration; check our website calendar this fall for dates and times of volunteer work bees.

Through the use of various outreach activities in this project, we are also aiming to increase local governments', business owners', and the general public's awareness of how stream restoration can work in their communities and how PUDs may fund such activities. A brochure, half-day workshop for business owners in the area, open houses and public tours of the site will be part of the education effort. This fall, a project brochure will be developed and mailed to riparian business owners highlighting key issues and accomplishments of the project. Check our website later this summer for dates and times for these events.

In spring 2005, trails, bridges, fencing, and educational signs will be added to the site. The old grist mill will also be restored. When finished, this project will reduce sediment loadings to Kid's Creek by an estimated 150 tons per year.

Special thanks go to Great Wolf Lodge, the Hinman Group and Gourdie Fraser for their contributions.

232 E. Front Street, Traverse City, MI 49684

GRAND TRAVERSE BAY

The Watershed Center



A QUARTERLY PUBLICATION FOR

Members & Partners

WINTER 2004

Comprehensive Study of Boardman Lake Concluded

The Watershed Center, in partnership with Ball Environmental Associates and the Great Lakes Environmental Center, recently completed a multi-faceted study of Boardman Lake which was part of a Michigan Coastal Management Program grant funded through the National Oceanic and Atmospheric Administration (NOAA) and the Michigan Department of Environmental Quality (DEQ).

The study identifies and evaluates the physical, biological, and built infrastructure resources of the Boardman Lake watershed for potential impacts to the water quality of Boardman Lake and the lower reaches of the Boardman River. Additionally, the study complements other regional watershed plans (including the center's recently completed Grand Traverse Bay Watershed Protection Plan) and provides recommendations to reduce impacts on water quality.

Major findings of the study include:

- There are 43 contamination sites in the watershed -- twenty-nine are still considered "active" by the MDEQ and pose potential water quality threats to the lake or the river.
- Average impervious surface percentages within the watershed are over 2.5 times the threshold known to result in degraded water quality. (Note: This is not an uncommon finding in an urbanized watershed.)
- Approximately 36 percent of former wetlands have been lost to development, reducing critical habitat for birds, amphibians and other wildlife.
- Nutrient loading, bacterial contamination, heavy metal concentrations, and/or thermal pollution were documented in six tributaries to Boardman River, seven stormwater culverts along the Boardman River, and one location on Boardman Lake.
- Evidence of impacts of leachates from former disposal sites have appeared on the banks of Boardman Lake near the former Boot Lake Dump, and along the Boardman River at the former Keystone dump.
- An area lacking plant and animal life exists in Boardman Lake exists in an area east of Thirteenth and Fourteenth Streets.
- Two sediment contamination "hot spots" exist within Boardman River bottomlands near the Govern-



▲ **The Baykeeper's Boat as it was nearing completion earlier in the year. Turn to page 5 to keep up-to-date with the Baykeeper's Log.**

mental Center.

Recommendations from the study state that further investigation, monitoring, and remedial measures should be considered and undertaken where necessary in order to protect and improve water quality in the Boardman Lake watershed. Other recommendations include:

- Land use planning and regulation should be encouraged to explore the application of "low impact development" stormwater treatment techniques.
- Remove tires, drums, various scrap metal, wooden pallets, bricks/ceramics, and other debris from Boardman River and the southern end of Boardman Lake. A work bee is planned for this fall.

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Baykeeper Program Launches Boat & Summer Tour

As members of the Waterkeeper Alliance, we are expected to have a presence on the waters that we are designated to protect -- in our case, Grand Traverse Bay and its watershed. In 2002, Backcountry Outfitters generously donated a kayak for our use. However, the kayak is not suitable for many areas of the watershed or the open waters of the bay. To remedy this situation the Center's board of director's embarked on an ambitious project to build an eco-friendly boat for use by the Baykeeper.

The boat will allow us to fulfill the Baykeeper's mission of being the "eyes, ears and voice" for Grand Traverse Bay and its watershed. The boat will be used to conduct outreach and education and serve as a monitoring platform.

To kick off this project we will embark on a summer long outreach tour to area marinas to introduce residents and visitors to the Grand Traverse Baykeeper program. Throughout the tour we will be working to build awareness of how the Baykeeper and the Center are working to protect and preserve our coastal and water resources.

The boat made its debut in the DTE Energy Cherry Royale Parade on Saturday, July 11, as part of DTE's parade entry.

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The Watershed Center Grand Traverse Bay

The Members&Partners newsletter is a quarterly publication of The Watershed Center Grand Traverse Bay. Our purpose is to keep members and partners informed about programs and activities of our organization as well as developments affecting the Grand Traverse Bay and its nearly 1,000-square mile watershed. Reader comments are welcome. Phone: 231/935-1514 or email: info@gtbay.org.

This publication was funded in part by the Coastal Management Program, Michigan Department of Environmental Quality, and the National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

Please call The Watershed Center offices at 231/935-1514 for additional details about the following events and activities listed here.

Calendar 2004

- July 24 Grand Traverse Baykeeper Tugboat Tour - Suttons Bay Marina
- July 31 Grand Traverse Baykeeper Tugboat Tour - Elk Rapids Marina
- August 7 Grand Traverse Baykeeper Tugboat Tour - Clinch Park Marina Traverse City
- August 14 Grand Traverse Baykeeper Tugboat Tour - Northport Marina
- August 21 Grand Traverse Baykeeper Tugboat Tour - Clam River at the Dockside Restaurant
- October 20 Annual Meeting NMC Great Lakes Campus

* All tugboat tour events are from 1-5 p.m.

Lake Level Information

It looks like lake levels are again on the upswing, which is good news for boaters, marina owners and riparians. According to the latest Army Corps of Engineers data, Lake Michigan is now about 12 inches above its level of a year ago, but still 11 inches below its long-term average water level. Predictions point to a continuing rise in lake levels. If you would like to track the Army Corps data on your own, go to www.lre.usace.army.mil.

Office Wish List

If you are "simplifying" your office or home, we could use the following items for our office:

- Microwave oven of a newer vintage
- Basic toolkit items – screwdrivers, hammer, etc.
- Color printer (ours died a tragic death)
- Desk chairs

Thanks for thinking of us!

Baykeeper Program Launches Boat & Summer Tour, cont.

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The Watershed Center was selected to be DTE's community partner for this year's parade and it was great to be able to show off our "baby" at such a large event. DTE's float featured a rain garden which will be transferred to a site in Hull Park as a demonstration site for this innovative form of stormwater control.

The Baykeeper Boat will be on the water soon and the marina tour will take place through Labor Day. We will be distributing information about clean boating practices including how to avoid fuel spills and the spread of invasive species.

The tour project is being supported by a grant from Michigan's Coastal Management Program, with funding provided by the National Oceanic and Atmospheric Administration. The Lawton Gallagher Group of Traverse City is helping with the tour organization and promotion. Sponsors of the tour include: Arms & Cole, Inc., Alden State Bank, Bay Breeze Yacht Charters & Sales, Bill Marsh Automotive Group, Bonek Insurance Agency, Moomers, WGTU TV 29&8, and WTCM. Tour dates are listed in the calendar, page 2.



Support the Baykeeper Boat Project!

With generous help from Board Director Phil von Voigtlander, we have been able to build our boat. Now we need to finish paying for it! The total cost of this unique boat is \$65,000, including all onboard equipment and a trailer. We have several thousand dollars to go to meet a Rotary Charities challenge grant and an additional \$20,000 to raise after that to cover all the costs of the project. Donors of \$1,000 or more will have their names engraved on the ship's brass bell.

To make a donation, see form below.



Yes, I would like to help protect Grand Traverse Bay.

\$35 \$50 \$100 \$250 \$500 \$1000 Other \$_____

Please charge by gift to VISA MasterCard Discover American Express

Credit Card # _____ Expiration Date: _____

Signature _____

Enclosed is my check payable to The Watershed Center. Please use my donation toward the Baykeeper Boat.

Name _____

Billing Address _____

City _____ State _____ Zip _____

Phone _____

Your donation is tax deductible to the extent allowed by law.

Send this form with your check to: The Watershed Center Grand Traverse Bay • 232 E. Front St. • Traverse City, MI 49684



Beachcombers: Take Note!

A recent court ruling addressed existing state laws regarding access to Great Lakes shoreline and walking the beach. According to this decision, it is legal throughout the State of Michigan to walk the shoreline – whether in front of public or private property – as long as you stay in the water. If your passage is blocked by natural or manmade obstructions, such as docks or retaining walls, you may trespass on the upland property to get around it. Most riparian owners have no problem with beachcombers, but it is important to respect their property rights and behave courteously. This law does not apply to inland lakes where property ownership extends into the lake and walking along the shore constitutes trespassing.

Beach Testing

Fourteen area beaches will be monitored in the Grand Traverse region this summer thanks to \$23,000 in grant funding. The annual beach monitoring program is coordinated by The Watershed Center Grand Traverse Bay in partnership with the Grand Traverse County Health Department and the Benzie/Leelanau District Health Department.

Beaches will be tested weekly through Labor Day Weekend for escherichia coli (e.coli) bacteria, which is an indicator for the presence of other bacteria potentially harmful to humans.

The following Lake Michigan beaches are being tested throughout the 2004 season:

- West End Beach
- Bryant Park
- Clinch Park
- Milliken Park
- Traverse City State Park
- Empire Village Beach
- Northport Park
- Suttons Bay Park
- Frankfort Beach

The following inland lake beaches will be tested:

- Gilbert Park and Taylor Park, Long Lake
- Beulah and Bellows beaches, Crystal Lake
- Nedow's Beach, Lake Leelanau

Monitoring program funding is provided by the U.S. Environmental Protection Agency Beach Act and Clean Michigan Initiative programs, administered by the Michigan Department of Environmental Quality.

Reminder re: Beach Grooming

Beach maintenance continues to be of concern to many owners along the Grand Traverse Bay shoreline. There are a number of minor activities you can do to make access to the lake easier, such as mowing to a height of four inches, or hand-pulling plants. However, many activities now require a permit from both the MDEQ and the Army Corps of Engineers. It is important to remember that the emergent plants along our shoreline are important habitat and part of a natural cycle. These same plants will also protect from shoreline erosion as water levels begin rising again. Lake Michigan shorelines have been in a constant state of evolution since the lake was formed and as stewards of this magnificent resource, it is important to respect these cycles. For up-to-date information on beach maintenance guidelines visit www.michigan.gov/deq and follow the links.

Weekly results are available on the state's beach monitoring database located at: www.deq.state.mi.us/beach/public/default.asp.

Boardman Lake Study Concluded, cont.

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- Initiate education efforts that promote the essential link between land use and water quality protection and improvement (i.e., promote shoreline buffer retention and replacement, minimize vegetation removal and mowing to the waters edge, eliminate the dumping of grass clippings and/or solid wastes into water).
- Gain an understanding of the natural and biological resources of the watershed to promote and protect the region's economy.

This project was made possible as part of the MDEQ Michigan Coastal Management Program funded through NOAA. Funding from this program was supplemented with funds from Cone Drive Operations, Inc. as part of the settlement with the MDEQ for contamination cleanup on their property.

The Watershed Center has already acted upon the findings and has applied to the Department of Environmental Quality for funds to continue monitoring and research on Boardman Lake to address two recommendations of immediate concern. This research will help determine what, if any, remedial action needs to be taken and whether the sites in question pose a threat to both public health and the health of the ecosystem. Specifically, our proposed work will 1) identify the source of the 'dead zone' in the benthic area of Boardman Lake east of the ends of 13th and 14th Streets and 2) monitor/sample groundwater migration into Boardman Lake near the former Boot Lake dump site to determine the nature, extent and source(s) of chemical contaminant into the lake (resulting in the aesthetic impact observed there).

The center will work with both Traverse City and Garfield Township to implement recommendations of the study as funding permits.

Details of the study can be read or downloaded at www.gtbay.org.

Spring Stream Search A Success

Nineteen volunteers joined Watershed Center staff on Saturday, June 5 for the second annual Spring Stream Search where teams of volunteers are let loose into area streams with nets and I.D. kits to conduct habitat assessment and sample for macroinvertebrates (insects that live in the stream). These insects, depending on the types and numbers found, are good indicators of stream health. Each team of volunteers is led by a team leader trained in identifying and sampling for the insects.

Out of the eight streams that were sampled results were as follows: Acme Creek, poor; Baker Creek, fair; Brewers Creek, poor; Cedar Creek, fair; Jack's Creek, Fair; Kid's Creek, poor; Miller Creek, fair; Mitchell Creek, poor.

Water quality, habitat, and the time of year a stream is sampled may affect the numbers, types, and species of insects that inhabit a stream. Some insects are more sensitive to the conditions in a stream and will not survive if the water quality is poor or the ideal habitat



is not present. Others are more tolerant of degraded water quality and habitat. Results from Stream Search give us a quick, "snapshot" assessment which will be used to help guide future protection efforts.

A big thanks to all our team leaders and volunteers! A total of nine team leaders volunteered their services this spring; Kate Jaquish, Todd Kalish, Jesse Karner, Mark Leugers, Jim Muratzki, John Nelson, Adam Segerlind, and Devereaux Trepp.

Many thanks to our friends at Backcountry Outfitters who also sponsored Stream Search and organized their annual Kayak Demo Day at Clinch Park immediately after Stream Search. All proceeds from this event were used to support this year's Stream Search event.



Stream Search was sponsored by Flood Fighters, Global Remediation Technologies, Inc., Grand Traverse Organic Landscapes, Inc., and Bullfrog Industries.

If you would like to get involved in Stream Search, our next training and sampling events will be in early October. Call Sarah U'Ren at 935-1514 or email suren@gtbay.org.

Watershed Protection Plan Gains Approval

After two years of meetings, information gathering, research, surveys and lots and lots of writing, the Grand Traverse Bay Watershed Protection Plan was submitted to the MDEQ and approved in late December 2003. The plan summarizes historic and current water quality and other environmental conditions throughout the 973-square mile watershed and identifies a series of more than 200 recommended actions and activities for protecting and preserving the watershed for years to come.

The plan was completed with the help of many partners including Conservation Resource Alliance, Northwest Michigan Council of Governments, Grand Traverse Regional Land Conservancy, Leelanau Conservancy, Land Information Access Association, Peninsula Township and Northwestern Michigan College's Business Research Services, all of which provided contracted services. Many other local governments, conservation districts, organizations and individuals assisted in gathering information, reviewing draft documents and serving on committees to help develop the core principles and recommended tasks in the plan.

The Center was recently awarded additional funding to meet newly-established USEPA guidelines for watershed plans and also begin the task of educating local leaders and citizens about the plan and how they can help implement it.

The plan will serve as both a guide and a gauge against which future preservation, protection and restoration activities will be planned and evaluated. Some key priorities in the plan are:

- Establishing stormwater best management practices and ordinances, particularly in shoreline communities.
- Conducting streambank and shoreline erosion surveys and stabilization projects.
- Establishing riparian buffers on all water bodies where possible.
- Assessing, restoring and protecting wetlands.
- Developing conservation plans for farms.
- Preserving open space and wildlife corridors.
- Continuing monitoring programs.

Education efforts should begin in the early fall with a series of public meetings. **The entire plan is currently posted on our website at www.gtbay.org.**

Worldwide Waterkeepers Meet in San Diego

More than 100 Waterkeepers from the United States, Canada, Australia and Latin America met in San Diego in early June to network, attend workshops and celebrate our success as the fastest growing environmental movement. Waterkeeper Alliance members now employ 301 full-time and 188 part-time staff, and protect 67,000 miles of rivers and shorelines around the world with the help of more than 23,000 volunteers.

Led by Robert F. Kennedy, Jr., members advocate for the protection of rivers, streams, bays and estuaries. The group recently launched "Waterkeeper Magazine," a quarterly, four-color publication which will highlight Alliance member activities and victories, as well as environmental issues of interest.



Watershed Center Executive Director Anne Brasie was elected to the Alliance Board of Directors representing the interests of U.S. Great Lakes Keepers. For more information about the Waterkeeper Alliance, see www.waterkeeper.org.

Website Updates

Want to learn more about the newly-minted Watershed Protection Plan for Grand Traverse Bay? Curious to learn more about what is going on in the Boardman Lake?

Head to our website – the results of these two very large projects are now posted in downloadable (pdf) format for interested folks.

In addition, the front page now features a news section with information about upcoming events and activities.

Check out our links page for interesting sites pertaining to our watershed and the Great Lakes Basin. And, 20 water quality studies are now entered in our database.

To check out these changes and additions, visit www.gtbay.org.



Below is an abbreviated list of the some of Grand Traverse Baykeeper John Nelson's activities the past six months.

Baykeeper Log	
<input type="checkbox"/>	Worked with the Village of Suttons Bay regarding the development of their new wastewater treatment plant.
<input type="checkbox"/>	The Baykeeper's advocacy led to a design change for Lowe's driveway, resulting in a wetland loss of only .38 acres, down from nearly 4 acres.
<input type="checkbox"/>	Conducted various water quality monitoring projects, including tributary monitoring and sampling for several local townships.
<input type="checkbox"/>	Testified before a State Senate hearing regarding additional proposed adverse beach maintenance legislation.
<input type="checkbox"/>	Worked with Tip of the Mitt Watershed Council to develop a "rapid response" team to answer citizens' questions regarding beach maintenance activities.
<input type="checkbox"/>	Wrote letters and comments regarding a variety of permits and legislation including beach permits, Great Lakes Restoration, Army Corps permits, and mercury legislation comments submitted to the EPA by the Waterkeeper Alliance.
<input type="checkbox"/>	Monitored the progress of the County's and MDEQ's wetland cases against a local developer.
<input type="checkbox"/>	Served on the Acme Township Boat Launch sub-committee providing input and guidance regarding protecting water quality and habitat.