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Watershed Moments
December 2013

Crissman Named Executive Director

Christine Crissman is the new Executive Director of the Watershed Center. She began November 13.

“She is well-qualified, known in the area and exhibits a strong commitment to the Watershed Center’s mission,” said Dick Thompson, Chair.

Crissman has most recently served as Director of Education and Conservation at the Grand Traverse Conservation District. Prior to that, she served as Education Director and Chief Scientist at Inland Seas Education Association.

She replaces former Executive Director Andy Knott, who accepted a position with Sierra Club to work on climate change.

“I am honored to join the dedicated staff at the Watershed Center and be a part of working to protect and preserve the Grand Traverse Bay watershed,” Crissman said. “Our freshwater resources are valuable to our economy, well-being and way of life, and I am passionate about advocating for their protection.”

Crissman holds a Master of Science in Aquatic Resource Ecology Management from the University of Michigan’s School of Natural Resources and Environment. She earned her Bachelor of Science at St. Mary’s College in Notre Dame. She has served as adjunct faculty at Grand Valley State University and Northwestern Michigan College.

Crissman’s publications in the North American Journal of Fisheries Management include “A Comparison of Methods for Sampling Round Gobies in Littoral Rocky Areas” and “Consumption of Hatchery Trout by Walleye in Two Major Rivers in Michigan,” which is currently under review.

Crissman won U of M’s Karl F. Lagler award for outstanding fisheries scholarship. She also won the Janice Fenske Memorial Award from the Michigan Chapter of the American Fisheries Society.

“Our freshwater resources are valuable to our economy, well-being and way of life, and I am passionate about advocating for their protection.”
Suttons Bay Gets 15 New Rain Gardens

Bacterial contamination at two Suttons Bay family swimming beaches should be decreased or eliminated thanks to 15 new rain gardens and nearly 3/4 mile of underground runoff filtering trenches.

"By managing runoff from the three largest storm drains in Suttons Bay, we hope to drastically decrease public health risks at local beaches associated with runoff," said Sarah U'Ren, Program Director.

Runoff flows into the rain gardens and is naturally filtered into the ground. Any excess runoff that can't be absorbed during a heavy rain flows into storm drains nestled in the rain gardens.

Overflow from the rain gardens plus runoff from other areas of the village makes its way to underground filtering trenches. The trenches are plastic pipes with holes in them set into a bed of gravel. The filtering trenches are under Front Street and in the alleys between Broadway and Jefferson. Water flows into the trenches, leaks out through the holes in the pipes, and naturally filters into the ground.

The old storm drain on Madison was abandoned and redirected to the wetland on the south side of the marina. Now there is a new drain at the end of Madison next to the wetland. Most of the flow that used to come out of the Broadway storm drain is also being directed to the wetland.

Left: the southwest corner of Madison and M-22, before and after. Runoff flows into the rain garden through the indentation in the curb. Rain gardens naturally filter runoff to keep our water clean, and they are aesthetically pleasing. Top: Workers install an underground filtering trench. Runoff naturally seeps into the ground from the perforated pipes. Photos by Sarah U'Ren.

Boardman Dams Begin Phase Two

The second phase of the Boardman River Dams Ecosystem Restoration Project is underway. URS Corporation has been selected as project engineer. URS has worked the past five years with the U.S. Army Corps of Engineers on the Environmental Assessment for removing Boardman and Sabin dams, modifying Union Street dam, and building a new Cass Road bridge. Design will start in January with surveying Boardman and Sabin dams, respective impoundments, and the future Cass Road bridge area. The Implementation Team has thus far raised 60 percent of funding for the design phase. Report by Kim Balke

Drummers from the Grand Traverse Band of Ottawa and Chippewa Indians sing during the Boardman reopening ceremony on August 16 near the site of the former Brown Bridge dam. Photo~D. Baker.
Our Adopt-A-Stream teams collected aquatic insects to assess stream health. Here are preliminary fall results!

**Stream Name~Results~Stream Team**

- Acme Creek~Poor-Fair~Grand Traverse Resort and Spa
- Baker Creek~Poor~Tracey Coe & Hazelnut Kids
- Carpenter Creek~Fair~Boardman Fly Tiers, sponsored by Oryana
- Cedar-Hines Creek~Poor~Youngflesh Family, sponsored by Joan Bonney’s The Color of Water
- Cold Creek~Fair~Three Lakes Association
- Finch Creek~Good~Three Lakes Association
- Kids Creek Upper~Fair~Traverse City Noon Rotary Water Committee
- Kids Creek Lower~Poor-Good~Boardman Fly Tiers, sponsored by Dr. Katherine Roth
- Maury Creek~Fair~Three Lakes Association
- Miller Creek~Good~Blue Water Transportation and Wasserman Family
- Mitchell Creek~Fair~GT Regional Land Conservancy and Traverse Bay Area Intermediate School District
- Northport Creek~Poor~Northport Sixth Grade, sponsored by Village of Northport
- Parker Creek~Fair-Good~Traverse Bay Sunrise Rotary Water Studies Committee
- Rapid River Team 2~Fair~Fields Family
- Rapid River Team 3~Fair~Lawicki Family and Laura Wasterman
- Rapid River Team 4~Good~Dale Claudepierre, sponsored by Elk-Skegemog Lakes Association
- Shanty Creek~Fair~Three Lakes Association
- Twenty-Two Creek~Good-Fair~Boardman Fly Tiers, sponsored by Oryana
- Water Wheel Park~Fair~Leslie Etienne and Scott Wilson, sponsored by Bud Welch
- Yuba Creek~Poor~Virginia Tegel, Maureen Poliskey and Charlene Abernethy, sponsored by Grand Traverse Organic Landscapes

**Thank You Program Sponsors!**
Phase one of restoring Kids Creek on Munson Medical Center’s campus is complete.

We replaced 900 feet of underground culverts and channelized ditches with a natural, aboveground channel. This is called daylighting the creek. The new stream bed eliminates 73,000 square feet of impervious, or paved, area and establishes 27,000 square feet of floodplain. This is vital for reducing runoff.

Kids Creek is on the state’s list of Impaired Waters due to poor aquatic insect populations, which is caused by heavy sedimentation from runoff. Robust aquatic insect populations are important for fish habitat.

The new meandering stream channel incorporates tree root wads embedded in the banks, which provide fish habitat and reduce erosion. The Grand Traverse Conservation District helped with streambed design.

Now we’re beginning phase two, which focuses mostly on installing green runoff design, otherwise known as Low Impact Development. Features will include rain gardens, green roofs and pervious pavement. Such green infrastructure absorbs more runoff, which will help reduce sedimentation impacts on Kids Creek.

Some of the features will be designed as part of the new Cowell Family Cancer Center, while others will be installed at various locations on the Munson campus.

Engineering work takes place this winter. Construction will begin in summer 2014.

We’re also working with DEQ to determine how much sediment Kids Creek can handle while also meeting water quality standards. The plan is called a Total Maximum Daily Load. The plan will help determine how much runoff we need to reduce to improve the creek. The ultimate goal is to get Kids Creek off the Impaired Waters list.

Watershed Center funding for this project comes from the U.S. Environmental Protection Agency’s Great Lakes Restoration Initiative, MDEQ, Munson, the Great Lakes Fishery Trust and the Oleson Foundation. Munson funding partners include Rotary Charities of Traverse City and Consumers Energy Foundation.
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November 8, 2012- November 21, 2013

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Thank you! You can also give online at gtbay.org
The Watershed Center advocates for clean water in Grand Traverse Bay and acts to protect and preserve the Bay's watershed.

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