Huron Creek Spring Exploration Day

A Watershed Management Plan is in its final stages of development for the Huron Creek Watershed.
Do you know what a watershed management plan is?
Do you know where Huron Creek is located?

Please come join us as we explore, discover and learn about the creek located in our backyard.
This is an opportunity to offer your inputs and comments about the proposed recommended actions for Huron Creek!

Come learn and share Huron Creek history
Take a tour of the Huron Creek wetland

Where: Houghton Waterfront Park
Saturday, April 28th
10-12 pm
Hot Dogs and Refreshments served at 12pm

Sponsored By:
Huron Creek tour is instructional

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Hauswirth, director of the Portage Lake Water & Sewage Authority and a member of the Houghton City Council. Tech student Linda Kersten led a tour of wetlands behind Wal-Mart as part of a mitigation plan, as well as an area where the creek was rerouted.

The tour concluded with a look at the city's new leachate collection system, located behind Taco Bell south of Sharon Avenue.

The city installed the system last year to collect groundwater from the surrounding basin, which includes land used by the former Hurontown landfill. The system is designed to prevent the build-up of leachate, or liquids carrying dissolved metals, in the creek.

About 17,000 to 30,000 gallons of groundwater have been collected per month, Kersten said.

Tech professor Hugh Gorman said photos of the creek would probably be put at the library or the mall to get more exposure.

While the day didn't draw as many people as he hoped, he was glad the City Council had come out.

"It's mostly people from organizations that come out and support it," Gorman said.

Kersten said the day had gone well.

"If we can increase awareness with 30 people in the area, hopefully they'll share their information with others," she said. "That's more support we'll get for the plan, and more input we'll get from the community."

Amy Keranen went on the tour with her children. She called the tour "very informative."

"It's great to see the public awareness of the presence of Huron Creek in the City of Houghton is increasing," she said.

Garrett Neese can be reached at gneeese@mininggazette.com
Healing Huron Creek Watershed

HURON CREEK WATERSHED is located in Houghton County in the Upper Peninsula, a ten-minute drive from Michigan Tech. The roughly three-square-mile watershed encompasses much of the new commercial development for the City of Houghton and Portage Township.

Unfortunately, commercial development along M-26 has greatly impacted Huron Creek, which is important to various forms of wildlife.

The creek also empties into the Portage Canal, which is hydraulically connected to the source of drinking water for the City of Houghton.

GMES Professor Alex Mayer has spent the past two years working with Michigan Tech students to create a watershed management plan to restore and protect Huron Creek. About a dozen senior design students have been working on the project—from geological engineering, civil engineering, and environmental engineering.

"They are having a real impact on the creek and the community," says Mayer.

In addition, Mayer and his team have cooperated with Department of Social Sciences Associate Professor Hugh Gorman and his environmental decision making class, which has included graduate students in environmental policy and environmental engineering. "I'm proud of the fact that this project has been a cross-college cooperation.

Hugh and I have learned quite a bit from each other's disciplinary background as a result," he adds.

Mayer and his students formed a watershed advisory group last year, consisting of residents, developers, representatives from the city and Portage Township, environmental groups, and the local schools, among others. "The public advisory group is supposed to motivate the watershed management plan, so the students have worked with the group to find out what is most important to them as far as restoring and protecting the creek."

In addition, Mayer says, students have had to realize that this is not a hypothetical project—the plan will be submitted to the Michigan Department of Environmental Quality (MDEQ) for approval, and if approved, will open the door to funds for implementing the plan.

The first group of senior design students wrote a proposal to MDEQ to fund the development of the plan, which was approved last year. "This was a real-life funding proposal, which competed against proposals from watershed groups across the state. It was the only one approved in the UP last year. This was quite an accomplishment," notes Mayer.

"It couldn't come soon enough. Water quality monitoring within the Huron Creek watershed has been infrequent over the past decade. The majority of the sampling efforts have focused on the former Houghton City Landfill located next to the stream."

"Working on the project was very enjoyable, especially working with people from different backgrounds—whether citizens in the community, political workers, or government employees. The most challenging aspect was gathering the required information to make the proper recommendations."

Colin Daining,
Environmental Engineering

Leachate from the landfill is visibly seeping into the creek in at least six locations along Huron Creek. The discharging leachate contains elevated concentrations of iron and ammonia. Downstream of the landfill, mercury and copper
A Featured River: Huron Creek and its Watershed

By Steve Albee

During the last spring and summer, readers of the Daily Mining Gazette had the opportunity to become acquainted with Huron Creek, an urban stream that runs through parts of both Portage Township and the City of Houghton. Through a series of feature stories by Gazette reporters, the readers came to know a great deal about this stream. We read with interest about the stream’s water quality and the different organisms that live in the channel. We were made aware of environmental issues that are having a negative impact on the water quality and on those creatures. We also learned about three organizations that have been working together to address these concerns.

Advocates

One group is Michigan Technological University’s Center for Water and Society (MTCWS), which is made up of teachers, researchers, and students. The second group is the Huron Creek Advisory Committee (HCAC). This group includes local residents and representatives of area stakeholders, such as our Copper Country Chapter of Trout Unlimited. The third group is the Michigan Department of Environmental Quality (MDEQ), a state agency, which has provided MTCWS with a $38,667 grant to prepare a watershed management plan for Huron Creek. All three groups have a strong interest in seeing that a healthy local stream is restored and protected in Portage Township and the City of Houghton.

To undertake a program of stream restoration and protection, however, requires an objective that can create an atmosphere of community awareness and support. This becomes problematic with Huron Creek. Why? Because Huron Creek is such a transparent landscape feature. Except for very small segments of the channel, most of the stream is not seen by the everyday passerby. Secondly, the creek has no public pedestrian-friendly access to its stream banks. Being so much out of sight, it has dropped out of most people’s consciousness. Consequently, to begin an examination of our featured stream, we must first locate the channel within the watershed.

Location

Huron Creek originates west of Green Acres Road in Portage Township. The wetlands next to and south of the Ontonagon REA warehouse are its headwaters. From there its waters flow under Green Acres Road into another wetland parcel. Then it moves downhill in a northeasterly direction behind the Copper Country Mall and the Walmart Super Center.

Behind these two commercial facilities, until 2005 when they were drained, Huron Creek emptied into two impoundments, referred to as Frog Pool Location. Here the stream’s waters remained temporarily before proceeding downhill. From these former impoundments the stream channel was reconfigured to flow under Razorback Drive where it twists and turns for a short distance until the waters enter a narrow, tree-lined ravine between Ridge Road and Razorback Drive.

Huron Creek continues flowing along this ravine, going almost unnoticed under Sharon Avenue, passing behind Copper Country Mental Health Services and Northern Foot Care Center before it reaches Calverley Street. At this point the stream channel crosses under the highway, emerging on the north side of M-26 for a short distance before it passes under Canal Road. Emerging in Kestner Waterfront Park, the creek flows across the park grounds before discharging into Portage Lake.

The Huron Creek stream channel covers a distance of three miles from its origin in Portage Township to its discharge point at Portage Lake. Over this distance the watershed drops 458 feet in elevation, from 1,060 feet to 602 feet, mean sea level. The stream drains a watershed that encompasses about 1,920 acres, or approximately three square miles as shown on the accompanying map.

Water quality, a measure of the health of any stream, is a function of watershed land uses. Huron Creek is no exception: its watershed land uses, both past and present, provide quite a story. It is helpful in telling this story, however, to divide the historical record into two periods -- the period before 1970 and the period after 1970, the year Houghton officially became a city. Before then, Houghton was a village, confined to a small area on a hillside along the shoreline of Portage Lake. It also was part of Portage Township.

Land Use Before 1970

Today Houghton stretches up the hill with well-developed neighborhoods and commercial areas on both sides of Huron Creek and Highway M-26 (West Memorial Drive). Until the mid-1970s, however, Houghton’s west side city limits were considered to be M-26 and Huron Creek. With the exception of Dakota Heights (see map), and the former Copper Range Railroad roundhouse and switch yard, then at the base of the hill, west of M-26 was the countryside.

Between 1852 and 1945 two copper mines, the Huron and the Isle Royale, operated in the watershed. They used the waters of Huron Creek to operate stamping mills that created an excess of stamp sand. These may be leaching copper, arsenic, and mercury into the stream. Erosion of the stamp sand from deposits located directly on the stream banks has contributed to sediment buildup in parts of the stream.

When the mines ceased operations in the late 1940s, this part of the landscape acquired a new land use pattern described as one dominated by former mining locations that included clusters of residential neighborhoods; e.g. Hurontown and Dodgeville. Surrounding these

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DID YOU KNOW:

- A storm drain’s purpose is to remove storm water that could cause flooding.
- Storm drains lead directly to local rivers, streams, and lakes. The water in these drains is untreated and unfiltered before it reaches the Portage Waterway.
- Water entering storm drains may contain oil, antifreeze, gasoline, soil, litter, pet waste, yard and gardening chemicals, and yard waste. This pollution can eventually reach rivers, streams, and lakes.
- Polluted storm water from our community can cause serious effects on the water quality and harm fish and other plants and animals in Huron Creek, the Portage Waterway and Lake Superior.
- Every time it rains—polluted stormwater washes down the storm drain into our lakes and rivers.

YOU CAN HELP BY:

- Take used motor oil to an authorized location to be recycled.
- Pick up waste and litter, such as paper, plastic, sticks and leaves, BEFORE they reach storm drains—-not only is it bad for the environment but it doesn’t allow the storm drain to work correctly.
- Properly dispose of used batteries, paint, and other chemicals.

Help keep our streams, Portage Waterway and Lake Superior clean!

Spread the word!

Recycle Old Batteries
Recycle your used portable rechargeable batteries and old cell phones. Rechargeable batteries are commonly found in cordless power tools, cellular and cordless phones, laptop computers, camcorders, digital cameras, and remote control toys. The website, http://www.rbrc.org/call2recycle/dropoff/index.php identifies the following locations in our area for drop-off of rechargeable batteries: Swift True Value Hardware, Cellular One, AllTell, Office Max and Walmart (batteries only)

Recycle your paint
Although there isn’t a place available locally for recycling paint, try to buy only the amount of paint that you can use. If you can’t use it all up add kitty litter to absorb it, or follow the directions on the can for proper disposal.

Thank you to the City of Houghton for allowing us to mark the storm drains!
Thank you also to Houghton Office Max for providing copies of this flyer!
MTU Center for Water and Society receives grant

By Kelly Fosness
DMG Writer

HOUGHTON — Water sampling and future planning for the Huron Creek watershed will continue, thanks to a grant from the Michigan Department of Environmental Quality.

Earlier this month, Michigan Tech University’s Center for Water and Society received a $38,667 grant, one of 19 awarded across the state to restore and protect Michigan’s lakes and streams. The grants, totalling more than $6.3 million, will fund a broad range of activities including local watershed-based planning and education, stream restoration and protection, and innovative storm water treatments such as green roofs and rain gardens.

Alex Mayer, director of the MTCWS, said the funding would be used to continue conducting research, testing the water quality and collecting data at Huron Creek.

The three-mile creek, which flows from the Green Acres Road in Portage Township to the Houghton Waterfront Park, was used during the 1850s into the 1940s by the Huron and Isle Royal mines. Remains of the site can still be seen today. The water quality of Huron Creek further decreased following the development of the M-26 corridor in the 1970s. Leaking landfills, sedimental and chemical runoff, exposed stamp sands and aging septic systems are all factors affecting the water quality.

The MTCWS, comprised of MTU professors and students, has been working closely with the Huron Creek Advisory Committee, a concerned group of local residents, to develop a management plan for the site.

Mayer said he organized a group of students last fall to analyze the situation at Huron Creek.

“The focus of our students was to design a project and write a proposal to the DEQ to get the funding,” Mayer, who is also a professor in the department of Geological and Mining Engineering and Sciences, said. “Alongside antici-

Please see Creek page 10

A portion of Huron Creek is seen between Taco Bell and the Wilderness Car Wash in Houghton where the City of Houghton has been constructing a leachate collection system. The system is designed to divert ground water contaminated by metals such as iron and manganese into the sewer system.
Hidden in plain view

Group holding Huron Creek tour

By GARRETT NEESE
DMG Writer

HOUGHTON — Area residents can get to better know the Huron Creek during a session at the Roy Kestner Waterfront Park in Houghton from 10 a.m. to noon Saturday.

The Michigan Tech Center for Water and Society is hosting the event, which will focus on educating people about the creek's watershed and the need for a management plan.

Over the past year, Michigan Tech University students have worked with a community advisory committee to develop a plan for the creek. The plan is expected to be completed this summer.

"The idea is to get what we've been doing out to a broader public," said Tech professor Hugh Gorman.

For Saturday's event, the students prepared posters showing different aspects of the management plan.

There will be one for each of the main goals: managing stormwater, improving the waterfront park, defining a watershed plan, monitoring water quality and cultural and historic preservation.

Students will also lead tours of a wetland mitigation site behind Wal-Mart and an area where the stream has been rerouted.

"We're just going to drive up there in a van and show people," Gorman said.

Among the recommendations in the plan is replacing the lawn-like stream banks with more natural grading.

Another recurring theme of the watershed committee was the desire to enhance the public's awareness of the creek at the park — theoretically the place where it has the most visibility.

"What we're interested in is that people realize the creek that flows through the Waterfront Park has a name, that it's connected to the watershed, and help them become aware of the Huron Creek watershed, and why it needs to be managed," Gorman said.

One part came into place last week with the installation of a sign at the park showing the watershed's boundaries. BRIDGE High School teachers Betty Carlson and Cathy Hill spearheaded the project with a grant from the Copper Country Intermediate School District.

Garrett Neese can be reached at gneeze@mininggazette.com

Huron Creek ideas presented

MTU students make recommendations

By GARRETT NEESE
DMG Writer

HOUGHTON — Michigan Tech University students presented recommendations for action on Huron Creek Tuesday as the effort to create a watershed management plan for the creek neared the home stretch.

A community advisory committee has been meeting since April to discuss ideas for the 3-mile creek, which winds from Green Acres Road in Portage Township to the Houghton Waterfront Park.

Students from Hugh Gorman's environmental decision-making class presented plans in five areas: stormwater management, water quality, education and heritage, vegetation and wetlands, and improving the waterfront park.

"That's our goal, is basically run down through each of the five groups ... what are the actions they're researching and get some feedback on these actions," Gorman said.

Suggestions for the waterfront park included introducing more natural vegetation or riprap to the banks of the park channel instead

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Residents discuss Huron Creek

Watershed plan addressed

By GARRETT NEESE
Gazette Writer

HOUGHTON — The emphasis varied slightly, but the message was clear: Do something with Huron Creek.

That was the opinion of about 40 residents who attended a meeting on the development of a watershed plan for the creek Tuesday night in Houghton.

This month, a proposal was submitted to the DEQ for funding to create the plan. The meeting was the first step towards forming an advisory council, which will work in concert with the Michigan Tech Center for Water and Society.

Students from Michigan Tech University Prof. Hugh Gorman's environmental decision-making class and Prof. Alex Mayer's social sciences class led the meeting, leading small groups and giving presentations on the creek.

Because the students are transitory, Gorman said, there's only so much they can do.

"They can lay the foundation for it, but they're not going to be around," he said. "It really has to be a community foundation if it's going to work."

The three-mile creek runs from Green Acres Road in Portage Township to the Houghton Waterfront Park. It was used by the Huron and Isle Royale mines, which were in existence from the 1850s to the 1940s, and can still be seen in the remnants of buildings and stamp sand deposits.

During the 1960s and 1970s, land in the watershed was used for a municipal dump and landfill. The development of the M-26 corridor beginning in the 1970s ushered in the current era of business development.

Over time, student Adam Peckens said, the quality of the creek’s been driven down by leaking from landfills, sedimental and chemical runoff from commercial areas, exposed stamp sands or poorly-functioning septic systems.

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Residents discuss Huron Creek

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Peckens pointed out several benefits of the creek. Local schools use it to learn such concepts as water flow. After storms, the creek ferries the excess water to the Portage Canal.

"Without the stream being there, we'd probably experience more flooding in the area," he said.

He said the City of Houghton is looking at ways to reduce iron oxide levels at some parts along the creek, which shows up as a "golden brownish ooze."

In groups, residents suggested various areas of focus, including curbing the amount of runoff, which catches salt from roads and debris from parking lots.

"All that used to fall to the ground and soak in," said Bruce Petersen.

Several attendees related memories of playing or fishing in the canal. John Laux, who owns property near the creek, said the deterioration has noticeably affected life in the stream.

"There hasn't been a smell ... they turn up their noses as they go by," he said.

Mayer, director for the Michigan Tech Center, said the plan's development would take until August 2007, with implementation to follow. The advisory committee will work jointly with the Michigan Tech Center on the plan.

But even after that, Mayer said, people should continue to watch the creek and encourage necessary developments. "The problem doesn't end when the plan is finished," he said.

Melanie Needham of Houghton said she's like to join the advisory council.

"There were a lot of good ideas," she said. "Good discussion. Definitely good cross-section of people representing the different interests."
Groups eye restoration of Huron Creek watershed

Part of drive for management plan

By GARRETT NEES
Gazette Writer

HOUGHTON — Engineers, residents, environmental groups, planners and others converged at Huron Creek Saturday morning in the latest step towards crafting a management plan for the watershed.

The two-hour tour was put together by students from Michigan Tech University professor Hugh Gorman's environmental policy class.

About 20 representatives from various stakeholder groups visited four sites along the creek, which begins near Green Acres Road in Portage Township and empties into the Portage Canal at Houghton Waterfront Park.

Gorman said his class had sought to find people who might be interested in being part of an advisory council for the creek. The council will work with the Center for Water and Society to draw up a management plan for the creek.

"Bringing people together is ninetieth of the problem," he said.

At the park, the groups were asked to consider how the presence of the creek affected the experience.

"By the time it gets to the park, the creek could be mistaken for a ditch," said Steve Delong of the Keweenaw National Historical Park. But he thinks it's still possible for it to be an asset.

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"It's both an obstacle and a gateway. It's a hazard and an opportunity," he said.

Jeff Moyle, of Moyle Construction, suggested planting trees along the banks of the river, as well as making the banks less steep.

"Right now, it's dangerous if a kid were to walk close to it," he said, adding that a more graded bank would eliminate the need for artificial netting.

From there, they proceeded to an area near the stream's source along Green Acres Road, where they considered the land's effect on the creek further downstream.

The group discussed whether standing pools, which charge up the aquifer, would have a negative impact on the volume of water seen at the park.

Restoring the creek might be tricky, some said, in part because of the difficulty in determining what the standard would be.

"For 100 years, this has been mined," said Houghton Middle School principal Jim Luoma. "It's a lot different ... 20 years ago than what it is now. But what it was 20 years ago isn't necessarily what you want to see."

From there, the group proceeded to the Country Inn & Suites, where they looked to identify major changes to the area. Wal-Mart's presence was a big factor, including man-made wetlands installed later.

Houghton Planning Commission member Kristine Bradof noted some problems with the work, pointing to some dying spruce trees in one of the ponds.

"You don't plant spruce trees in water. You plant tamaracks," she said.

After that, the group headed to the creek's appearance near the Taco Bell parking lot. The area, near the site of the former Hurontown landfill, has been pointed to as one of the biggest issues. Orange residue lined the sides of the creek, which coursed through an upturned shopping cart near a culvert.

The section has proven helpful in teaching students about water quality, Lioma said.

"They initially think it's a good stream, and when they're done, they think it's a poor stream," she said.

As for possible restorative work, $1 million would be a "drop in the bucket," Moyle said, noting that Wal-Mart's work had cost twice that.

Afterwards, the groups headed back to the park for a final meeting.

Alex Mayer, director of the Center for Water and Society, said he hoped to schedule an initial meeting by the end of May, with a plan to be drawn up by May 2008.

"We'll be in touch, very soon," he said.
Helping out with the clean-up of Huron Creek Saturday were members of Friends Of the Land of Keweenaw (FOLK) and Trout Unlimited.

The purpose of the clean-up, organized by The Society for Wetland Scientists (SWS), a student organization at Michigan Technological University, was to raise awareness of wetland issues.

SWS is concerned that runoff from development around Huron Creek is allowing chemicals, particularly petroleum products, to enter the creek, which empties into the Portage Lake Shipping Canal.

SWS is working with city of Houghton and Portage Township government officials to develop ordinances to control runoff into streams, including Huron Creek.

By KURT HAUGLIE
DMG Writer
HOUGHTON — It usually doesn’t snow on April 26, even in the Copper Country, so the organizers of a clean-up of Huron Creek in Houghton expected to have a good crowd show up to lend a hand. Early on, only six hardy people braved the cold wind to pick up the trash in and on the banks of the creek, however.

John Hribijan of the Society of Wetland Scientists at Michigan Technological University picks up some trash Saturday during the clean-up of Huron Creek near Wal-Mart in Houghton.

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HURON CREEK CLEAN-UP

Wind solutions

Granholm touts green energy while others are skeptical

By DAVID EGGERT
Associated Press Writer
OLIVER TOWNSHIP, Mich. — They look like small propellers from a distance.

But up close, new wind turbines dotting corn and sugar-beet farmland in Michigan’s Thumb are anything but specks on the horizon. They’re as tall as a 26-story building and have three 135-foot-long blades that, with the rotor, weigh a combined 146,000 pounds.

Gov. Jennifer Granholm last week toured the 32-turbine Harvest Wind Farm between Pigeon and Elkton.

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Huron Creek group presents recommendations

By GARRETT NEESE
DMG Writer

HOUGHTON — The draft of the Huron Creek Watershed Plan is complete. But that doesn’t mean the work is, Alex Mayer said.

“There’s a history with watershed management plans ending up being just that … and not being implemented,” said Mayer, director of Michigan Technological University’s Center for Water and Society.

Mayer and Tech graduate student Linda Kersten gave a presentation on the plan Monday night at BHK in Houghton.

Recommendations for the creek include: stabilizing the banks at the Kestner Waterfront Park; slope and stamp sand stabilization in the former Hurontown landfill area; connecting homes in Dakota Heights to sanitary sewers; monitoring water quality, erosion and invasive vegetative species; and creating a stormwater ordinance for the city of Houghton and Portage Township.

The Huron Creek Watershed Advisory Group was founded in 1997 to protect the natural resources of Huron Creek.

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Group presents recommendations

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Committee, funded by the Michigan Department of Environmental Quality, met over two years to develop recommendations for the plan. The work was prompted by concerns over the water quality of the creek, which stretches from Green Acres Road in Portage Township to the Kestner Waterfront Park in Houghton.

After this, the draft of the plan will be amended to reflect public comments, then again after meetings with Houghton and Portage Township’s planning commissions. A preliminary plan has been submitted to the Michigan Department of Environmental Quality.

Mayer said the goal is to have a final version of the plan by the end of the year. Once the MDEQ approves the plan, Huron Creek will be eligible for funds from the state.

When the plan is in place, Mayer said, the Center for Water & Society will continue as lead agency, while subcommittees of advisory committee members and other interested people will carry out the plans for various sites along the creek.

Kristine Bradof, a member of the Houghton Planning Commission and the creek advisory committee, suggested the subcommittees meet up periodically to update the rest of the group on their progress.

“Now that it’s to the point of ‘OK, we need your help again, you think there’d be some hope of getting people involved,” she said.

Additionally, Mayer said, classes at Michigan Tech and Houghton Middle School could use the creek as a field laboratory.

To view the draft of the plan, go to http://www.geo.mtu.edu/~asmayer/HuronCreek/HuronCreek.htm.

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