

Flint River Watershed Coalition



Voice of the River Annual Celebration Success Marking 25 Years of Flint River GREEN



Fun Times in the Cold Annual Celebration, January 28, 2014 Flint Institute of Arts

The Flint River Watershed kicked off 2014 with a celebration marking the start of '25 Years of Flint River GREEN.' For the first time, the Flint Institute of Arts served as the venue for the evening of networking, learning about the FRWC, and fundraising for watershed programs.

Through the generosity of our sponsors and silent auction donors, we raised over \$19,000.

Over 125 supporters braved the cold to join us. After a dinner of hearty hors d'oeuvres, our guests got a chance to peruse our program booths, bid on our silent auction items, and meet our



staff and board. The FIA very generously opened their exhibit halls, so an evening of art was a treat for our environmental friends. Most importantly, everyone learned about Flint River GREEN, and the importance of this program in the schools in Genesee and Lapeer counties.

A short program included a presentation to our 2013 award recipients, John Maksimchuk, the *Volunteer of the Year*, Olof Karlstrom, the *Joe Leonardi Leadership* award recipient, and Michael Freeman, the 'Golden Gloves' Flint River and Community Cleanup winner. In conclusion, departing board members, Brent Nickola, David Churchill, and Jim Ananich were thanked for their service to the FRWC.

Thank you to all who attended. The Annual Celebration is our way of showcasing the great work of the FRWC. We plan to return to the FIA next year.

Join us in January 2015 and find out what we have in store for our 26th year of GREEN!

Award Winners

Volunteer of the Year Award
John Maksimchuk, III (pictured at left)

Joe Leonardi Leadership
Olof Karlstrom (pictured below)



"Golden Gloves" - Michael Freeman

Our Valued Supporters Silent Auction Donors

Jim Ananich - State Senator, Linda Berker, Ellen Brothers, Cabela's, David Churchill, Dale's Natural Foods, Laurie Elbing, Duane Elling, Pam Faris, Essential Balance Massage of Fenton, Denise Penwell, Flint Institute of Arts, Flint River Watershed Council, Greater Flint Arts Council, Lotus Dragon Bodywork & Massage, Tammie Heazlit - Lotus H2O, Steve Hester, Hoffman's Deco Deli, Kearsley Park, Kay Kelly, King Par Superstore, Amy McMillan, Marr Chiropractic, Ortonville, Mexico at the Market, Jack Minore, John Mrozik and Heather Sisto, Peg Myers - Mary Kay Consultant, Greg Palinsky, Wade Pyles - Berkshire Hathaway Home Services, Luis Rivera, Rowe Professional Services Company - John Matonich, Arlene Schmitzer, Doug Schultz, Suski Automotive - Birch Run, University of Michigan - Flint, Rec Center, Yoga Loft of Flint and SHARP Fitness - Lois Schneider, Gabe Zawadzki

Through the generous support of our sponsors, silent auction donors, and members, we are able to carry out our important programs, such as Flint River GREEN!

See our GREEN kids in action



Voice of the River

Annual Celebration Sponsors

Voice of the River
Key Sponsor – \$4,400



A collection of gifts made in loving
memory of
Linda Joyce Fedewa

Pike – \$1,000 Sponsor Level



WASTE CONNECTIONS INC.
Connect with the Future®



Walleye - \$500 Sponsor Level



PPG Industries

Bringing innovation to the surface.™



TETRA TECH



WADETRIM

Bass-\$250 sponsor level



ROWE PROFESSIONAL
SERVICES COMPANY



Dr. Bobby
Mukkamala



Blue Gill - \$100 Sponsor Level



Deborah Cherry E&L Construction Mary Porte
Quaker Chemical Corporation Vern's Collision, Mr. Mike Herriman



400 N. Saginaw Street, Suite 233
Flint, MI 48502
www.flintriver.org

Celebrating 25 Years of Flint River **GREEN**



Lots to do in the Watershed

Join us on Saturday, April 26, 2014 for our first activity on the River!

2014 FLINT RIVER AND COMMUNITY CLEANUP

9:00 am to noon

Lunch and an insulated bag provided to all volunteers

Meet at any of our sites in Genesee and Lapeer counties.

- Downtown Flint by Café Rhema • Atwood Stadium • Flushing Riverview Park •
Gilkey Creek by Pierce Park • Vietnam Veterans' Park • Riverbank Park in Flint
- Holloway Dam Canoe Access • Kearsley Park • Thread Lake in McKinley Park • Mott Park •
Happy Hollow • Thread Creek • Carriage Town by Durant Hotel in Flint
& our new site at Carriage Town Ministries (*NEW*)
- All Lapeer volunteers report to Cramton Park in Lapeer •

FROM THIS IN APRIL:



TO THIS ALL SUMMER:



Make a Difference!

Watershed

REPORTER

PARTNERING TO PROTECT OUR NATURAL RESOURCES

July 2014

SUMMER FUN IN THE WATERSHED!

Mark your calendars for these dates on the river

Paddles

We hope you can join us all summer long on the first and third Saturdays of the month.

See page 4 for a detailed paddle schedule. We provide equipment, transportation, and fun!

Please pre-register with Jaime Welch at 810-767-7140, jwelch@flinriver.org.

Friends of the Flint River Trail

Ride your bike on the trail every Sunday

Meet at 1:45 at the former site of the Flint Farmers' Market, E. Boulevard Drive

Or, Join the FFRT for rides on the third Saturday of every month

July - Paint Creek Trail • August - Lansing River Trail • September - Bay City Loop • October - Kensington Metro Park

See the FFRT Facebook page, or contact jacksonmin@aol.com, or bnbaton@gmail.com.

Flint River FLOTILLA

Hosted by the Flint River Corridor Alliance, a chapter of the FRWC

The first annual 'FLOTILLA' will launch on August 2, 2014 at 3:00 pm

Bring your inflatable raft, float, pool, etc, and join the fun!

Details: www.flinriver.org, or send an email to info@flinriver.org. Call 810-767-6490.

Flint Park Lake and Thread Lake Community Celebrations

The FRWC is partnering with the Genesee County Parks and neighborhood groups

'Love Your Lake' - Flint Park Lake Picnic

Thursday, July 17, 5:30 – 7:30pm

Meet at the pavilion off Winthrop Boulevard

'Love Your Lake' - Thread Lake Picnic

(Joint with International Academy of Flint)

Thursday, July 24, 5:30 – 7:30 pm

McKinley Park near the Vista Center

Join us for a picnic! Food, games, music, and water activities at these fun celebrations. If you are interested in helping out, contact Sondra at ssevern@flinriver.org, or 810-618-5969.

River Path Clearing is ongoing in Lapeer!

Join our volunteers in Lapeer County to help clear the river of woody obstructions.

Supervised by the Department of Natural Resources, this activity ensures clear canoe and kayak passage all summer long. Contact Joe Leonardi to participate. leonardij@michigan.gov.

Fall Season Benthic Monitoring Will Be Here Before We Know It

Get trained and help us monitor the quality of our watershed

Monitoring Training: Saturday, September 13, 10:00 am to 12:00 pm at For-Mar Nature Preserve

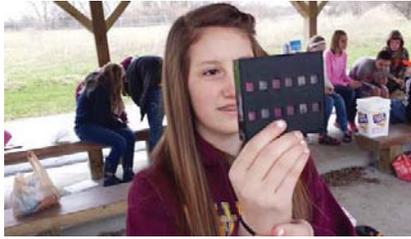
Genesee County fall monitoring labs are on Saturday, October 11 and Thursday, October 16

Lapeer lab dates and times will be announced later. Join us.



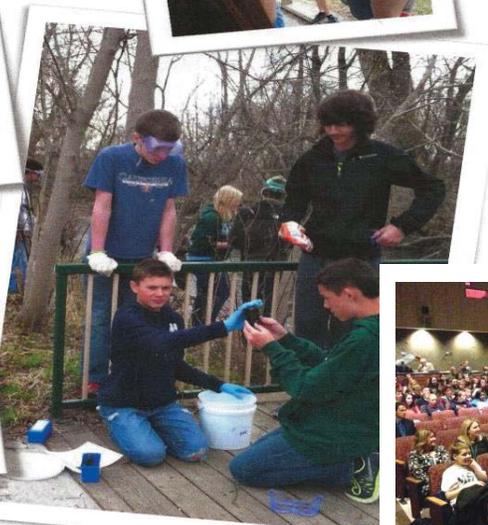
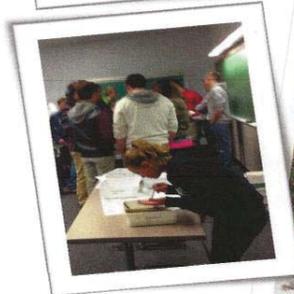
2014: Celebrating 25 Years of Flint River GREEN

Global Rivers Environmental Education Network



Flint River GREEN

Gathering data on the watershed



Presenting results



Created in 1989, the Global Rivers Environmental Education Network (GREEN) is a nationally replicated program that offers a unique and hands on experience for middle and high school students. Students and their teachers collaborate with mentors from environmental professions to perform water quality tests on bodies of water within their watershed. They use their findings to develop action plans to improve or maintain their area's water. They then share this information with their peers and community officials at the annual student summit.

On May 16, 2014 GREEN mentors, community members, students from 23 schools, teachers, and volunteers gathered together at Kettering University for the annual Student Summit.

2014 was a great year to celebrate the 25th anniversary of this important curriculum.

Participating GREEN Schools in 2014

- Atherton High School • Beecher Middle School • Bendle High School •
Brandon Middle School • Carman-Ainsworth High School • Chatfield School - Lapeer
- Carter Middle School • Davison Middle School • Flushing High School • Grand Blanc East •
Grand Blanc West • Kearsley Armstrong Middle School • Lakeville Middle School
- Linden Middle School • Marshall Greene Middle School • Mt. Morris Junior High School •
North Branch High School & Middle Schools • Rolland-Warner Middle School • St. John Vianney
- Swartz Creek Middle • Westwood Heights/Hamady High School • Zemmer Middle •

Thank you to our partners

City of Flint, Earth Force, Genesee County Drain Commissioner's Office, Genesee County Parks and Recreation Commission, Genesee Intermediate School District, General Motors Corporation, General Motors Foundation, Kettering University, Lapeer Intermediate School District, Michigan State University 4-H Youth Development

Another year of cleanup success

FROM THIS IN APRIL:



TO THIS ALL SUMMER!



River and Community Cleanup

2014 Flint River and Community Cleanup

We could not do it without our sponsors

\$500 Clean Up Advocates



\$250 Clean Up Supporters



WADE TRIM



ROWE PROFESSIONAL SERVICES COMPANY

\$100 - \$200 Basic Supporters



Additional In-Kind Donations

Rich Rhein Disposal - Lapeer City of Flint Flint DDA Kroger
Environmental Rubber Recycling City of Flint City of Lapeer City of Flushing



400 N. Saginaw Street, Suite 233
Flint, MI 48502
www.flintriver.org

Celebrating 25 Years of Flint River GREEN



Enjoy your summer in the Watershed

Join us on the first and third Saturday each month!

2014 FLINT RIVER PADDLING SCHEDULE

Meet at the designated paddle location at 9:45. Paddles leave at 10:00 unless noted.

\$15 per person if you are providing your own canoe/kayak, and \$20 per person if you need to rent equipment

- **July 5th** – Dog Days of Summer Paddle - Mitson Canoe Launch •
- **July 19th** – Summer Getaway - Holloway Dam •
- **August 2nd** – Flint River Corridor Alliance ‘Flotilla’ (Starts at 3:00 pm) •
- **August 16th** – Fun Times Picnic on the Flint River – Meet at Montrose Barber Park with bag lunch •
- **September 6th** – Bike and paddle - 2nd Annual Pedals to Paddles. See www.flintriver.org for meeting times and locations •
- **September 20th** – Experience the Fall Colors - Flushing Riverview Park •
- **September 23rd** – (TENTATIVE) Celebrate the Fall Solstice Evening Paddle - Morseville Road launch •

paddle the watershed





2014 ANNUAL REPORT

FLINT RIVER WATERSHED COALITION

Partnering to Protect, Preserve, and Improve the Flint River Watershed Since 1997



*Partnering to Protect, Preserve, and
Improve the Flint River Watershed*

2014 Board of Directors

Executive Committee

Amy McMillan	Genesee County Parks and Recreation <i>Board Chair</i>
Irene Bashore	General Motors LLC, Flint Assembly <i>Board Vice-Chair</i>
Darren Bagley	Michigan State University Extension, Genesee County <i>Board Secretary</i>
Derek Bradshaw	Genesee County Metropolitan Planning Commission <i>Board Treasurer</i>

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Linda Berker	Sierra Club: Nepessing Group
Duane Elling	Charles Stewart Mott Foundation
Steve Hester	Zoom Digital Media
Brad Hill	Genesee Conservation District
Daugherty Johnson	City of Flint
S. Olof Karlstrom	Attorney-At-Law (Retired)
Ryan Londrigan	AKT Peerless
Dr. Robert McAllister	Kettering University
Jack Minore	Friends of the Flint River Trail
Steve Montle	Resource Recycling Systems
Greg Palinsky	Palinsky Tools and Engineering
Sandra Robinson	South Park Neighborhood Assoc
Patrick Ryals, Sr.	Flint Park Lake Neighborhood Assoc
Doug Schultz	Rowe Professional Services
Raynetta Speed	Genesee County Land Bank

Staff

Rebecca Fedewa	Executive Director
Lauri Elbing	Outreach and Events Manager
Sondra Severn	Project Coordinator
Jaime Welch	Program Coordinator
Edythe Westhoff	Business Manager
Stephanie Nummer	Program Coordinator*

*Copies of this report are available on our website or by contacting:
Flint River Watershed Coalition, 400 N. Saginaw Street, Suite 233, Flint, MI 48502
(810) 767.6490 | info@FlintRiver.org | www.FlintRiver.org*

**Left the organization in 2014*

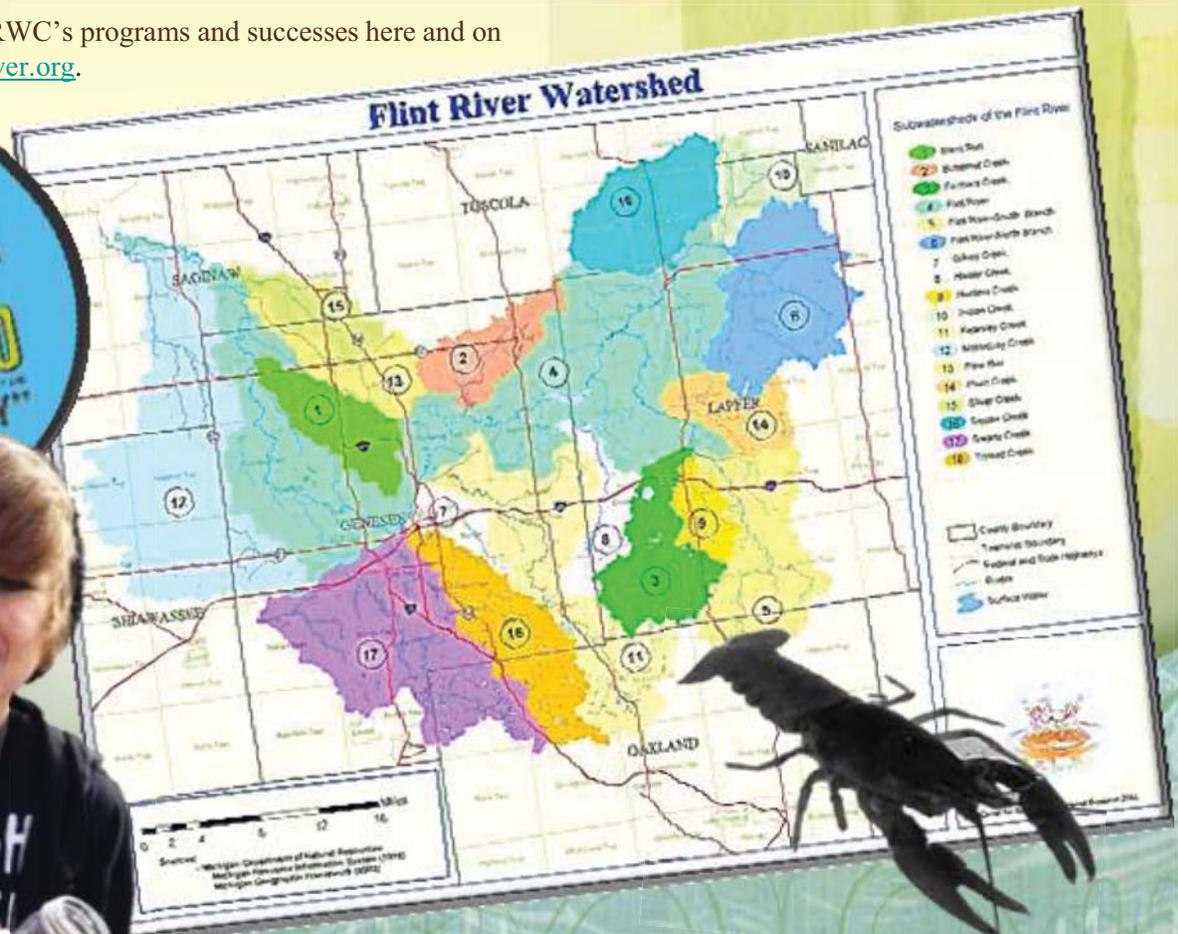
The Voice of the River

Partnering to Protect, Preserve & Improve the Flint River Watershed

What is a watershed? A watershed is an area of land that drains to a particular stream, lake or wetland. The Flint River Watershed is increasingly healthy and strong, and offers many recreational, educational, and environmental opportunities. It is home to more than 600,000 people who live within its 1,400 square mile area. It encompasses 59 townships, 25 cities and villages and 43 school districts within 7 counties. The Flint River Watershed Coalition (FRWC) believes that all people should have access to the Flint River, its tributaries and lakes for recreation, swimming, and fishing as well as the ecosystem services and economic values it provides to our communities: it is a right, but also a collective responsibility to keep our watershed healthy.

FRWC is an organization representing individuals, businesses, community organizations, and local units of government sharing a vision of a healthier Flint River Watershed. As the leading community-based advocate for clean water resources in the region, the FRWC promotes efforts to protect, preserve, and improve the region's ecosystem through partnership, public education, scientific projects, and community involvement. The FRWC provides the necessary resources, knowledge, and capacity to area resident and decision makers to protect local water quality through science-based resource management and citizen stewardship.

You can read more about FRWC's programs and successes here and on our website at www.FlintRiver.org.



2014 Watershed Moments



Joint Report from the Board Chair & Executive Director

Dear Friends:

If you want to get something done, you can just do it yourself. But if you want to make great strides in pursuing your mission and goals, partnerships are where we get the biggest bang for *your* buck. The Flint River Watershed Coalition was established and has flourished on a foundation of partnership, cooperation, and collaboration across our seven-county region. Together, we are achieving steady gains on water quality and quality of life for those living in the Flint River Watershed.

We are thrilled to share a few of the highlights from 2014 with you in this report.

Working with the MSU Institute for Water Research, we now have a powerful web-based decision making tool that can be accessed by anyone interested in developing incredibly sophisticated maps (see page seven for more information on ELUCID). And with MSU's Planning and Zoning Center (PZC), we now have detailed action plans for improving access and water quality for two of the lakes within the City of Flint boundaries (see page 7 for more information). In the process of both projects, we've developed many new relationships and exciting opportunities for partnerships in the coming years.

Our work with PZC happened to dovetail beautifully into the long and productive history of partnership between the FRWC and the Genesee County Parks and Recreation Commission. Our organizations' common interest in ensuring the lakes within the City of Flint are safe, accessible, and used by area residents culminated this year in the "Love Your Lakes" celebrations at Flint Park Lake and Thread Lake. At Thread Lake, we also are excited to work with the International Academy, Diplomat Pharmacy, and other members of the South Saginaw Task Force to implement ambitious economic, recreation, and safety developments in the neighborhoods.

In addition, long-term partnerships with the Genesee County Drain Commission has meant sustainable funding for all of our education programs. Their support means more residents experience first-hand the beauty of our river, water quality data is consistently collected and shared, hundreds of students are "*learning by doing*" about water quality and watershed protection, and citizens stewards remind us all that storm drains go directly to their nearest river or stream.

And from the halls of the capital to city hall, and from boardrooms to streambeds, our Chapters get things done. Our cyclist and paddlers bring our river to the masses through recreation. Our newest chapter, Flint River Corridor Alliance, is ensuring plans for substantial improvements along the Flint River in downtown Flint are realized. The Lapeer Chapter, our oldest, continues the work of maintaining canoe paths throughout the county, coordinating water quality monitoring and cleanup efforts, as well as advocating for water quality protection measures...and this team gets results. You can read more about our Chapters on pages nine and ten.

Yes, 2014 had been an inspirational and fulfilling year here in our Flint River Watershed thanks to the constancy and friendship of our members, volunteers, funders and partnerships. We are stronger together and look forward to another rewarding year ahead as we join together as a community to care for and share all that is great about our corner of the world.

Thank you for all you do...with our best wishes for a healthy, happy, prosperous year.

Rebecca Fedewa
Executive Director

Amy McMillan
Chair, Board of Directors

Partnering to Protect, Preserve, and Improve the Flint River Watershed

Flint River Watershed Coalition Programs



River and Community Clean Ups prepare the Flint River and its tributaries, their banks, trails and nearby parks for a summer's worth of fun. Our heartfelt thanks goes out to hundreds of volunteers, community leaders and sponsors for the hard work and dedication they deliver on the last Saturday in April each year. Volunteers collect bags of trash, tires, and usually a few dumpsters worth of large debris such as old lumber, broken glass, carpeting, and roofing materials. There are always some unique items discovered, and these particular gems compete in a public poll to win the "Golden Glove" award, which is bestowed the following year at the Voice of the River Annual Celebration each January.



Flint River GREEN offers students a hands-on experience to assess the water quality of their local stream by conducting nine different tests, including levels of dissolved oxygen, fecal coliform, and biological oxygen demand. Students can investigate what contributes to their local water's conditions and create action plans to improve or maintain their local water quality. Flint River GREEN culminates in the annual Student Summit, which was generously hosted by Kettering University in 2014. At the Student Summit, students present their findings and recommendations to an audience made up of peers and local officials. Sixteen schools from around the Flint River Basin participated in the 2014 Student Summit. Flint River Green Annual Reports are on the FRWC website at www.FlintRiver.org.



Water Quality Monitoring is undertaken every Spring and Fall at 35 sites in the Flint River Watershed across Genesee and Lapeer Counties by FRWC staff and citizens scientists trained according to Michigan DEQ standards. Volunteers take measurements and collect insect nymphs and larvae (a.k.a. *benthics*) that spend a good portion of their lives in the substrates of our local rivers and streams. Once analyzed, the number and variety of benthics collected reveals stream health. The data is then compared to previous seasons and analyzed for trends and anomalies. While most monitoring sites are steadily increasing with scores of "good" or "excellent," FRWC identified a decreasing score at one particular site for the last 3 years, prompting an investigation into the causes by the Genesee County Drain Commission. Data is reviewed by our monitoring committee and shared with local and state agencies, as well as on the FRWC website: www.FlintRiver.org.

“Our Water” Program Partnership

Creating Citizen Stewards and Memorable Experiences

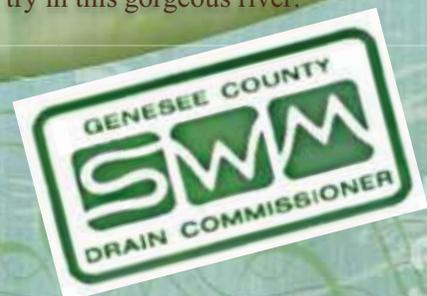
Thanks to the generous support of the Genesee County Community Water Quality Consortium and the Genesee County Drain Commissioner, the FRWC implements several public education programs that educate residents and promote citizen stewardships through ways to prevent stormwater pollution and to keep our water clean. Genesee County Drain Commissioner also generously supports the Flint River GREEN program, as well as the annual Flint River and Community Clean Up.

Storm Drain Stenciling program is part of the “Our Water Campaign” to promote storm water awareness. This project educates communities about the water that runs into the storm drains in the area. The Storm Drain Stenciling project addresses how storm drains can transport pollutants. Volunteers stenciling the message “Dump No Waste, Drains to River,” near the storm drains and distribute door hanger to local homes that provide information on simple steps residents can take to help reduce pollution runoff into storm drains. Adults and children of all ages volunteer with this program to protect the waters of the Flint River.



Paddles in 2014 were more popular than ever and it was a great year to be on the water! Every first and third Saturday from May through October, the Flint River Watershed Coalition hosts paddles through various stretches of the Flint River. These trips allow participants to experience the true beauty of the Flint River, while reinforcing the importance of preserving it. One trip last summer included an unexpected treat: a bald eagle nest with three lively juveniles. Bald eagles only have a 4% chance of laying 3 or more eggs and the sight of three juveniles is a wonderful testament to the health of the Flint River. You can read about the Press and Friends Paddle FRWC sponsored on August 10, 2014: [“The Flint River isn't what you think it is, and here's why you should check it out.”](#) A powerful and persuasive article written by Scott Atkinson with photos by Jake May of the Flint Journal created positive reverberations across the watershed, enticing even more people to give paddling a try in this gorgeous river.

Educational Presentations are another way the FRWC promotes citizen stewardship around the watershed. The goal of the presentations are twofold: to educate citizens on specific actions they can employ to avoid contributing nonpoint source pollution to our watershed, and to share stories and opportunities on the wonderful recreational activities the river provides right here in our own back yard. The presentations cover the Seven Simple Steps of the “Our Water” program sponsored by The Genesee County Water Quality Consortium. For more detailed information on The Seven Simple Steps look on our website at www.FlintRiver.org.



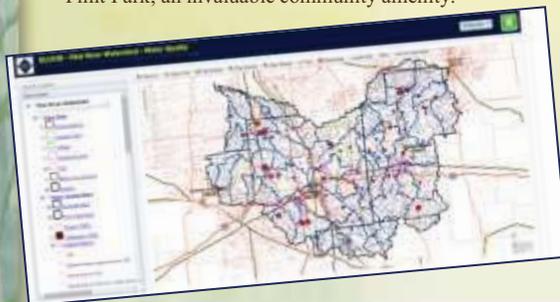
Partnering to Protect, Preserve, and Improve the Flint River Watershed

Engaging the Community

City of Flint Master Plan Moves Forward: After serving on various advisory committees during the Master Planning process, this year the FRWC shifted from planning to implementation strategies. FRWC staff and board members serve on the Environmental Features, Parks & Open Space and the Infrastructure & Community Facilities Implementation Task Groups. Projects that focus on recognizing, protecting, and bringing awareness to the river and surrounding areas were selected and initial assignments were made. We look forward to the coming year to fine tune the plans and begin implementation.



These two “Super Volunteers” take a moment away from the “Love Your Lake” Community Celebration preparations to pose for a picture on the new Flint Park Lake floating dock installed by Genesee County Parks in a partnership agreement to maintain and improve Flint Park; an invaluable community amenity.



Thread Lake and Flint Park Lake get some TLC: The FRWC along with MSU Planning and Zoning Center (PZC) engaged City of Flint residents, businesses, and organizations from the neighborhoods surrounding the three lakes within the City of Flint borders: Flint Park Lake, Thread Lake, and Kearsley Reservoir. In this final year of the project vision documents were developed by PZC from resident feedback for Flint Park Lake and Thread Lake, and a future engagement strategy document was created for Kearsley Reservoir. With the intent to maintain the momentum driven by residents, this summer the FRWC successfully partnered with the Genesee County Parks and Recreation Commission at both lakes and also with the International Academy of Flint at Thread Lake to hold ‘Love Your Lake’ events. With over one hundred in attendance at each event, residents enjoyed food, games, give-aways, and bounce houses along with the company of their neighbors. In 2015, we will continue to find ways in which to implement the “visions” articulated by the residents surrounding Thread and Flint Park Lakes.

Web-based Tools to Identify and Mitigate Non-Point-Source-Pollution: During a two-year partnership with Michigan State University Institute of Water Research (IWR) the FRWC worked to provide and deliver feedback from a variety of potential user groups during development of an innovative land management tool: Environmental Learning Using Computer Interactive Decisions (ELUCID). This tool is web-based and currently available to the public online. ELUCID will enable users from across the Flint River watershed to assess their current or potential land use practices with precision, to illuminate risks and test solutions to improve water quality outcomes. FRWC and staff presented ELUCID to teachers taking part in the Flint River GREEN program, local and county planning officials, and shared ELUCID on the FRWC website. For more information on this project and to see how we partner with IWR on other efforts please visit www.FlintRiver.org under the “Programs” tab, then clicking on “Mapping Tools.”

Outreach and Advocacy

FRWC is the “Voice of the River” and serves as the region’s principal resource on the Flint River Watershed. FRWC promotes and advocates for the Flint River watershed on issues that impact the function and integrity of the basin in part or as a whole at the local, regional, state, and federal level. Examples of our outreach and advocacy work include: partnering to secure implementation of watershed management plans across the watershed; collaborating with partner organizations on common priorities within the greater Saginaw Bay watershed; taking a leadership role in the Flint River Corridor Alliance mission to transform the Downtown Flint stretch of the Flint River from a distressed waterway to a natural resource that is an asset to the community; serving on City of Flint Master Plan development and implementation teams; and providing testimony to the Federal Energy Regulatory Commission on the Rover Pipeline proposal.



Rebecca Fedewa, FRWC Executive Director, provides testimony at Federal Energy Regulatory Commission Public Hearing opposing the Rover Pipeline. (photo credit: Erin Kirkland | MLive.com)



FRWC Board collaborates with Friends of the Shiawassee River Board on common priorities.



[“A Vision for Thread Lake & Adjoining Neighborhoods”](#) is a report prepared by the MSU Planning and Zoning Center, FRWC and the surrounding communities that focuses on Thread Lake, and is one of three prepared to promote a better future for these lakes and the people of the neighborhoods that surround them.



FRWC and FRCA accept a grant from Saginaw Bay WIN for Hamilton Dam Naturalization



Genesee County Commissioner Omar Simms tours Thread Lake with FRWC staff in anticipation of “Love Your Lake” Community Celebration.

Partnering to Protect, Preserve, and Improve the Flint River Watershed

FRWC Chapter Accomplishments



*Flint River Corridor Alliance
First Annual Flint River Flotilla*



*Flint River Corridor Alliance
Spearheading Hamilton Dam Naturalization*



*Friends of the Flint River Trail
Annual Pedals to Paddles event*

Friends of the Flint River Trail (FFRT) host Sunday rides every week from May through October. Along with a core group of cyclists that have been riding on Sundays for more than ten years, these rides bring new cyclists to the trail almost every week. FFRT also leads rides on several Saturdays to explore trails within an hour drive from Flint. The Flint River Trail and Genesee County Parks are included in the current draft of the Governor's "State to State Showcase Trail;" a trail from Detroit, across the Straits of Mackinac, and across the UP to Wisconsin - a little over 1,200 miles.

Flint River Corridor Alliance (FRCA) is a community-based organization of government, non-profit, and private sector stakeholders organized to initiate, support, and sustain projects in the Flint River Corridor that revitalize the river as a community asset while enriching the quality of life for the area's residents, businesses, and visitors. FRCA is leading efforts to support the naturalization of the Hamilton Dam. FRCA secured critical funding and local cooperation to move this economically, ecologically, and socially significant project forward. FRCA also hosted the first annual Flint River Flotilla in August, bringing well over 100 people together for a fun float through Chevy Commons.



Flint River Paddlers (FRP) is group of paddle sport enthusiasts who share common goals for paddling and conservation on the Flint River. FRP promotes recreational canoeing and kayaking, and advocate to increase and maintain public access sites. FRP invests countless volunteer hours at paddle events promoting the Flint River as a safe, family friendly outdoor experience, including the FRCA Annual Flotilla and the FRWC Paddles, among other events.

Lapeer County Chapter (LCC) is one of FRWC's oldest chapters, and the volunteers in Lapeer County are tireless in their conservation and protection activities. Maintaining canoe paths throughout the county, coordinating water quality monitoring and cleanup efforts, as well as advocating for water quality protection measures with local officials and decision makers are the LCC's highest priorities, and this team gets results.

On January 8, 2015, the Lapeer County Commissioners voted in favor of allowing LCC to move forward with the development of the Saginaw Street Canoe Landing. In 2006, FRWC volunteers passed the hat to come up with the \$1,250 needed to buy 5 acres that were in foreclosure. LCC purchased the land and then donated it to the county to add to the inventory of other canoe landings they own and maintained. We now have drawings of the proposed parking lot/landing, preliminary cost estimates of \$27,000, and have begun the permitting process and fundraising. This stretch of the South Branch of the Flint River is the closest to town, usually the first to be cleared of obstructions, and the most widely used by student groups. The development of this landing and LCC's plans to improve access at Rotary Park will showcase this amazing section of the river and highlight the important work done by Lapeer's amazing team of obstruction removal volunteers.

The obstruction removal partnership with the DNR and Lapeer County Probation Department continues to battle poison ivy, mosquitoes, and a seemingly endless amount of fallen trees. This project concluded its 9th consecutive year. Crews cleared 16 sections and put in over 450 hours to remove 58 obstructions, clearing 11.7 miles of river.

LCC's Benthic Monitoring crew covered the majority of sites again this year and even recruited a college trained entomologist to work at the lab! The river cleanup was composed of about 75% students, with many repeat volunteers reporting that there was less trash. LCC had several Lapeer County schools participate in Project Green again, testing local streams, storm drain stenciling, and attending the Green Summit.

LCC's #1 goal in 2015 is to recruit more volunteers.



*Lapeer County Chapter
Obstruction Removal Workday*



*Lapeer County Chapter
Saginaw Street Canoe Landing*



*Lapeer County Chapter
South Branch before obstruction removal project*



*Kearsley Creek Chapter
Last remaining cool water fishery in the Flint River Watershed*



Kearsley Creek Chapter (KCC) represents northern Oakland County portions of the Flint River Watershed. KCC monitors and advocates for what is the last remaining cool water fishery in the Flint River Watershed. They promote stewardship and recreation through the popular Annual Ortonville Creek Fest event, as well as biannual water quality monitoring and FRWC's River and Community Clean Up.

*Partnering to Protect, Preserve, and
Improve the Flint River Watershed*

Grants & Major Sponsors

The following individuals and organizations are the major source of grants and financial support for the operations and projects of the Flint River Watershed Coalition. Without the generosity of these foundations, businesses, and individuals, we would not be able to carry out the FRWC mission. We look forward to a continued strong relationship with our supporters in 2015 and beyond. Thank You

Grants and Program Support in 2014

Reinvent Michigan, Senator James Ananich
Captain Planet
Center for Community Progress
Ms. Deborah Cherry, Genesee County Treasurer
The Conservation Fund
Diplomat Specialty Pharmacy
E & L Construction Group
Flint Institute of Arts
Flint River Corridor Alliance
General Motors, LLC
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Health Plus of Michigan
Dan Kildee for Congress
King Par Superstore
Land Bank of Genesee County
Lotus H2O, Lotus Dragon Bodywork & Massage, Tammie Heazlit
C. S. Mott Foundation
C. S. Mott Foundation, Matching Gifts Program
Drs. Bobby & Srinivas Mukkamala
Laura Jane Musser Fund
Michigan State University
Michigan State University - Institute for Water Research
Michigan State University - Planning and Zoning Center
Mott Community College
MPS Group
Ruth Mott Foundation
PPG Chemical
Quaker Chemical Corporation
Rowe Professional Services Group
Security Federal Credit Union
Six Rivers Regional Land Conservancy
Steve's Plumbing and Heating Company, Inc., Mr. Rick Figula
Suski Automotive, Birch Run
Tetra Tech
University of Michigan - Flint, Rec Center
Vern's Collision, Mr. Michael Herriman
Wade Trim, Inc.
Waste Connections, Inc.
The Yoga Loft of Flint, and SHARP Fitness, Ms. Lois Schneider

We have dozens of sources of valued in-kind support, and wish that space would allow individual recognition for all. Please contact the offices of the FRWC for a list of our in-kind donors, or to find out how you can offer support to our programs.

Partnerships

The Flint River Watershed Coalition would like to thank the following partners who have helped build the success of the organization and its many programs.

C. S. Mott Foundation
Ruth Mott Foundation
Genesee County Drain Commissioner
Genesee County Water Quality Consortium
Genesee County Parks and Recreation Commission
University of Michigan – Flint
Genesee County Conservation District
Lapeer County Conservation District
Michigan State University Planning and Zoning Center
Michigan State University Institute of Water Research
Flint Institute of Arts
Diplomat Specialty Pharmacy
Keep Genesee County Beautiful
Flint Downtown Development Authority
Genesee Intermediate School District
Lapeer Intermediate School District
Six Rivers Regional Land Conservancy
City of Flushing
City of Flint
City of Lapeer
Epic Technology Solutions
Earth Force
General Motors

Individually, we are one drop. Together, we are an ocean.

- Ryunosuke Satoro



Thank you!



Partnering to Protect, Preserve, and Improve the Flint River Watershed

Membership Matters

The Flint River Watershed Coalition is a grass roots organization that depends on its supporters and members for financial and volunteer viability. We have made a lot of progress in increasing our membership and sponsorship base, and in expanding the ways that we reach out to those who share our love of the Flint River.

There are many ways that the community, businesses and individuals can become members of the Flint River Watershed Coalition. We accept contributions in the traditional way with cash and checks, but now, at any time during the year, members can use the convenience of the internet. By going to the FRWC website at www.flintriver.org and pressing the 'Donate Now through Network for Good' button on the home page, credit card users can become new members or renew their membership in the Coalition.

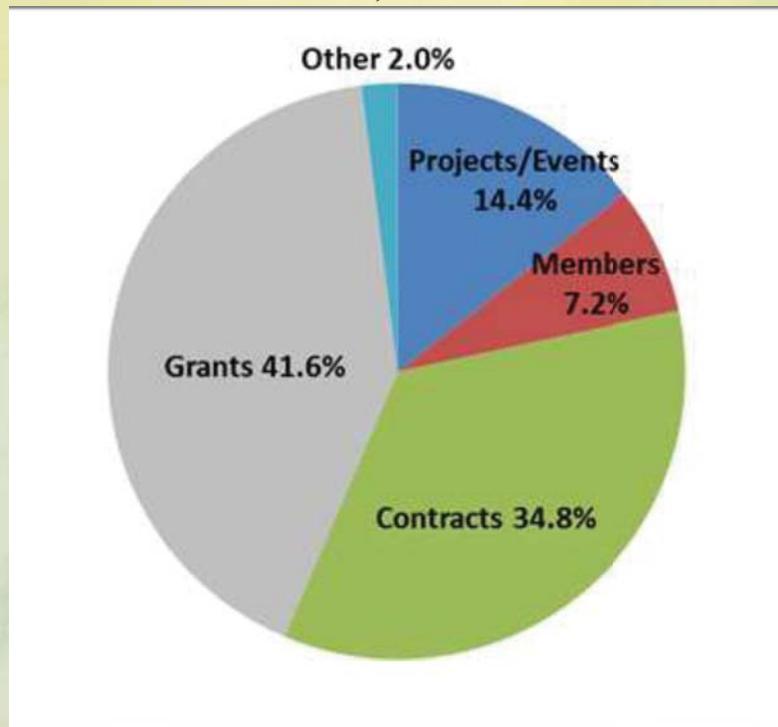
There are seven levels of membership available, and four 'Big Fish' sponsorship opportunities. Please contact any one of our Board members or staff if you are interested in membership, sponsorship, or volunteer opportunities with the Coalition.

FRWC ANNUAL MEMBERSHIP LEVELS

Student	\$10.00
Individual	\$25.00
Family or Group	\$40.00
River Sponsor	\$100.00
River Patron	\$250.00
Watershed Protector	\$500.00
Watershed Patron	\$1,000.00



Community Support from Memberships, Sponsorships, and Local Program Awards: \$53,037.00



Flint River Watershed Coalition
Statement of Activities
31-Dec-14
UNAUDITED

Revenues and Support	2014
Contributions, Fundraising, Events	\$ 15,594.00
Foundation grants	208,000.00
In-kind donations	15,000.00
Interest income	25.00
Membership fees	16,822.00
Miscellaneous	4,743.00
Project revenues	100,391.00
Total revenue and support	\$ 360,575.00
Net Fiduciary Assets Added to Restrictions	(94,704.00)
Total revenue, support and net assets released from restrictions	265,871.00
Expenses	
Program services	\$ 124,429.00
Support services	
Management and general	76,290.00
Total expenses	\$ 200,719.00
Increase (Decrease) in Net Assets	159,856.00
Beginning Year Assets - All Funds	104,546.68
Increase (Decrease) in Net Assets	159,856.00
Total Ending Year Assets - All Funds	264,402.68
Restricted Fiduciary Funds	94,704.00
Unrestricted Funds - Available for Programs and Operations	169,700.00
Total Ending Year Assets - All Funds	264,404.00

FRWC Financial Information

The Balance Sheet and Activities Statement reflects the accounts of the Flint River Watershed Coalition as of December 31, 2014. These statements are not audited as of the printing of this annual report. The last audit of the organization's financial statements were conducted for the accounts as of December 31, 2012. See the audit report dated July 2013 by Taylor & Morgan, Certified Public Accountants. The INDEPENDENT AUDITORS' REPORT stated that there were no material exceptions to the FRWC records. A copy of the auditor's report can be found on line at www.flintriver.org or by calling the Flint River Watershed at 810-767-6490.) The next bi-annual audit is scheduled to be conducted in 2015, and will cover the period January 1, 2013 through December 31, 2014. When that report is completed, the results will be available on our website at www.flintriver.org.

THANK YOU!



...FOR YOUR CONTINUED SUPPORT OF THE FLINT RIVER WATERSHED COALITION AND ITS MISSION TO PROTECT, PRESERVE AND IMPROVE OUR REGION'S MOST IMPORTANT NATURAL ASSETS.



Copies of this report are available on our website or by contacting:
Flint River Watershed Coalition, 400 N. Saginaw Street, Suite 233, Flint, MI 48502
(810) 767.6490 | info@FlintRiver.org | www.FlintRiver.org



Flint River GREEN
Annual Report 2013

*Flint River
Watershed Coalition*

Board of Directors

- Amy McMillan, *Board Chair*
- Irene Bashore, *Vice Chair*
- Derek Bradshaw, *Treasurer*
- Darren Bagley, *Secretary*
- Jim Ananich
- Linda Berker
- David Churchill
- Duane Elling
- Steve Hester
- Brad Hill
- Daugherty Johnson
- S.Olof Karlstrom
- Bob McAllister
- Jack Minore
- Steve Montle
- Brent Nickola
- Greg Palinski
- Raynetta Speed

Staff

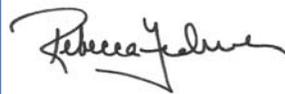
- Rebecca Fedewa
Executive Director
- Edythe Westhoff
Business Manager
- Casey Foote
Development Director
- Jaime Welch
Program Manager
- Holly Rosser
GREEN Program Coordinator

Every year, through the Flint River GREEN program we watch students from across the Flint River watershed as they experience their local stream in an entirely new way. For many, it's the first time they've ever visited that, or any, stream. The wonder and excitement they show is certainly contagious! We're so pleased to be a part of bringing that experience to our local schools. It's an invaluable experience that simply can not be replicated in the classroom.

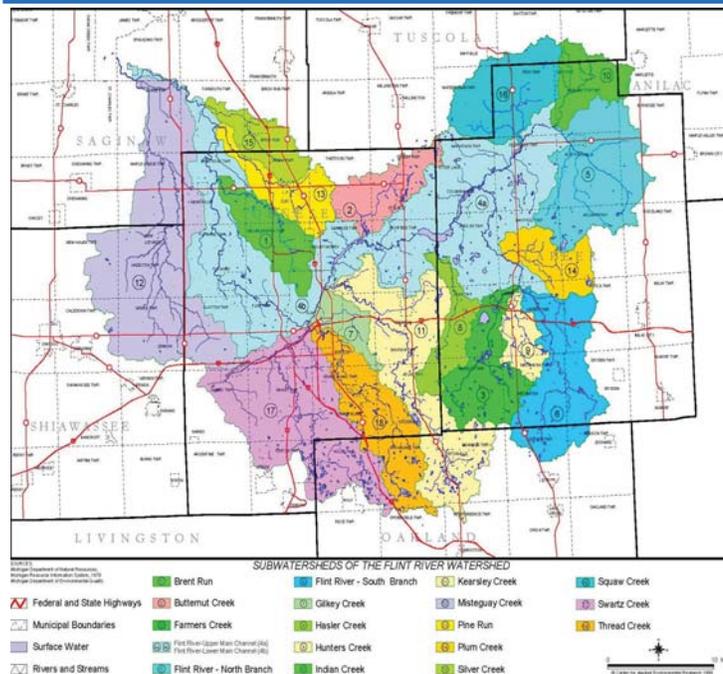
And once again, we are excited to partner with Kettering University as the host of the 2013 GREEN Student Summit. Our GREEN students had a great time while experiencing one of the premiere engineering colleges in the country. Many thanks to Kettering for providing a wonderful venue for this year's event.

Flint River GREEN wouldn't be possible without the support of our participating schools, funders, mentors, speakers, and myriad other volunteers who make this program a success, year after year. We thank you!

See you in 2014,



Rebecca Fedewa
Executive Director



The Flint River Watershed covers approximately 1,400 square miles across 7 counties, including Genesee, Lapeer, Saginaw, and Oakland. All of the land and tributaries that flow into the Flint River make up the Flint River Watershed that GREEN students learn about and protect.

The GREEN Planning Committee meets monthly to prepare and plan for the year's GREEN season. This dedicated group brings their expertise, resources, and enthusiasm to the GREEN program. The planning committee oversees the planning for the summit and professional development day for teachers, mentor and teacher pairings, seeks funding sources, and works with community partners to increase the scope of GREEN. This year's Professional Development Day for teachers was hosted by Mott Community College. The planning committee collaborates to improve and expand the program year to year. Its efforts ensure that GREEN continuously provides the best experience possible for teachers and students.



Planning Committee

Darren Bagley

Irene Bashore

James Emmerling

Rebecca Fedewa

Tammie Heazlit

Lisa Hook

Tom Hutchings

Tom Jones

John Maksimchuk III

Ashley Miller-Helmholdt

John Moldovan

Holly Rosser

Jan Sneddon

Deb Wilson

Edythe Westhoff

“During GREEN, I learned that our creek is in good condition.”

— Grand Blanc West Middle School 8th grade student

The Global Rivers Environmental Education Network (GREEN) is a nationally replicated program that offers a unique and hands on experience for students in the field of water quality testing. It was created in 1989 by University of Michigan professor, Dr. William Stapp and assistant Mark Mitchell.

Students and their teachers collaborate with mentors from environmental professions to perform water quality tests on bodies of water within their watershed. They use their findings to develop action plans to improve or maintain their area's water, and then share this information with their peers and community at the annual student summit. Teachers participate in a Professional Development Day to learn about GREEN, and learn about performing the various field tests.

Beginning in 1989, GREEN worked with Flint schools, and later expanded to include many high schools and middle schools within Genesee County. The success and value of GREEN later led to the inclusion of schools in Saginaw, Lapeer, and Oakland counties. GREEN continues to grow and is now incorporated into many teacher's annual curriculum. The 2014 season will mark **25** years of GREEN!

“I learned that you can kayak all the way from the Flint River to Niagara Falls.”

— Swartz Creek Middle School 8th grade student

“I learned that many chemicals, objects, rats, etc. can be found in wells.”

— Davison Middle School 7th grade student



Beecher Middle School

Teacher: Don Hammond

Bendle High School

Teacher: Todd Barden

Birch Run (Marshall-Greene) Middle School

Teachers: Tammy Daenzer & Roger Rothe

Brandon Middle School

Teacher: Dave Green

Carman-Ainsworth-High School

Teacher: Julie Lawrence

Chatfield School

Teachers: Annette Young, Karla Pretty & Lori Raymond

Clio (Carter) Middle School

Teachers: Chip McCallum & Ryan Niemi

Davison Middle School

Teacher: Jodi Kosiara

Flushing Middle School

Teacher: Steve Groulx

Grand Blanc Middle School-East

Teachers: Deb Lacki & Lauren Drury

Grand Blanc Middle School-West

Elizabeth Lemerond & Vicki Skrisson

Kearsley (Armstrong) Middle School

Teacher: Cindy Sierra

Lakeveille Middle School

Teachers: Josh Henley & Andrea Thelen

Lapeer East High School

Teacher: Cheryl Butterfield

Linden Middle School

Teacher: Charlene Nester

Mt. Morris Jr. High School

Teachers: Bekah D’Haene, Scott Smith & Kim McCormick

North Branch High School

Teacher: Carrie Wenta

North Branch Middle School

Teacher: Julie Tumblin

Rolland-Warner Middle School

Teachers: Anne Prill, Wyatt Stevens & Mike Wiltse

St. John Vianney Catholic School

Teacher: Janice Matlon

Swartz Creek Middle School

Teacher: Brandolyn Forbes

Hamady High School

Teacher: Tammy Wylie

“During GREEN I learned that anything we do can affect the watershed that we live in.” — Marshall-Greene Middle School 7th grade student

GREEN Information & Watershed Facts

The Water Quality Index rating, (WQI), is the overall score the body of water receives after the field tests have been performed and the results tabulated.



Water Quality Field Tests

Dissolved Oxygen

Fecal Coliform

B.O.D

pH

Nitrates

Turbidity

Total Solids

Temperature

Total Phosphate

Water Quality Index Ratings

100-90: Excellent Water Quality

89-70: Good Water Quality

69-50: Average Water Quality

49-25: Marginal Water Quality

24-0: Poor Water Quality



A * denotes that complete testing results were not available due to inclement weather on the testing day, calculation, or testing errors. Trial and error is part of the scientific process. Students were able to learn about what factors may have contributed to these results and correct them for next season. GREEN is a valuable and continuous learning experience.

GREEN School	Testing Location	WQI
Beecher Middle School	Kalamazoo River, Talmadge Creek	*
Bendle High School	Thread Creek at Bristol Rd.	68.58
Birch Run Marshall-Greene Middle School	Silver Creek	*
Carman-Ainsworth High School	For-Mar Nature Preserve	77.4
Chatfield School-Lapeer	Farmer's Creek	82.45
Clio Carter Middle School	Pine Run at Clio Park	77.55
Davison Middle School	Black Creek-Abernathy Park	68.2
Flushing Middle School	Unidentified Location	*
Grand Blanc East Middle School	Armstrong Creek at Dodge Road	*
Grand Blanc West Middle School	Frost Gardens	85.9
Kearsley Armstrong Middle School	Thread Creek, Grand Blanc	*
Lakeville Middle School	Swartz Creek, near school.	*
Lapeer East High School	Unidentified Location	*
Linden Middle School	Linden Middle School Grounds	77.14
Mt. Morris Junior High School	Farmer's Creek	*
North Branch High School	Unidentified Location	*
North Branch Middle School	Gravel Creek, North Branch	77.95
Rolland Warner Middle School, Lapeer	Silver Creek	72.4
St. John Vianney Catholic School	Flint River, Mott Park	59.62
Swartz Creek Middle School	Swartz Creek, Hill Road Bridge	77.51
Westwood Heights-Hamady High School	Clio Bike Path	*



“We can talk to farmers near the creek about the fertilizers they use.”

— Marshall Greene Middle School 7th grade student

On May 17th, 2013, GREEN students, teachers, mentors, community members, and volunteers gathered for the pinnacle of every GREEN season: the annual Student Summit. This year's summit was hosted by Kettering University. Here, the students presented their water testing results, action plans, and other information gathered from their days of study and field testing. Presentations and follow up inquiries from the audience were facilitated by emcee, Mr. Tom Jones from the Genesee County Drain Commissioner's Office and the Our Water Program.

When not presenting, students participate in a variety of break out sessions. These sessions are led by community members excited about sharing their knowledge with the GREEN students, and include demonstrations and activities focused on the environment.

Summit Break Out Sessions

Beyond Sim City:

Geospatial Technologies & Our World

Laura Young, *Michigan State University Institute of Water Research*

Being A Bee Keeper

Carol Winn, *Bee and Nature Specialist*

Sewer CSI

Thad Domick, Eric Brubaker, Tom Hutchings,
City of Flint - Water Pollution Control Specialists

Incredible Edible Plants

Peter McCreedy, *Ecology Director - Chatfield School*

Paddling the Flint River

Riley McLincha, *Watershed Enthusiast*

Rats In Your Drinking Water

Darren Bagley, *Michigan State University Extension, 4-H Youth Development Coordinator*

Chevy In The Hole Tour

Joel Parker, *Environmental Consulting & Technology, Inc.*

Be A Fly Fisher

Josh Henley, *Trouts Unlimited & Lakeville Schools*

Meet The Macro Invertebrates

Mike Haley & Denny Crispell, *Flint River Watershed Coalition Monitors*

“I learned that our meals travel about 1,500 miles to get to our table. When we need food, we should think about looking for edible plants and making natural foods.”

— Rolland Warner Middle School 8th grade student

Flint River Project GREEN Summit Evaluation 2013

Pre/Post Evaluation

Before Project Green

Answer Options	1 (Strongly DISAGREE)	2 (DISAGREE)	3 (AGREE)	4 (Strongly AGREE)
The Flint River is clean and healthy.	12	53	25	8
I can make a difference in the health of the Flint River.	5	32	43	18
I understand how a river may become polluted.	6	20	34	38
I want to do things to help the environment.	7	20	42	29
I know about jobs in the environment field.	26	28	37	6

After Project Green

Answer Options	1 (Strongly DISAGREE)	2 (DISAGREE)	3 (AGREE)	4 (Strongly AGREE)
The Flint River is clean and healthy.	6	38	37	17
I can make a difference in the health of the Flint River.	1	3	36	58
I understand how a river may become polluted.	0	0	12	86
I want to do things to help the environment.	0	4	40	54
I know about jobs in the environment field.	2	6	49	40

“I learned to put plants along the creek to absorb fertilizer.”

— Clio Carter Middle School 8th grade student

“I learned that seagulls and other birds affect the fecal coliform levels.”

— Linden Middle School 8th grade student



GREEN Mentors

GREEN mentors offer assistance in both the classroom and at the testing site. Working closely with the teachers, they visit classrooms and speak with the students about GREEN, the tests they will perform, the proper way to carry out those tests, safety procedures, and how to interpret their results. They offer insight as to what may cause a certain result to be high or low, as well as help the students develop action plans. Mentors are key to the success of GREEN. The knowledge they bring from their respective fields, as well as the hands-on assistance at the testing sites, further exposes students to the value of environmental stewardship and potential career paths in a science, technology, engineering, or mathematics field.



“During GREEN, I learned that there are lots of jobs in the environmental field.”

— Rolland-Warner Middle School 8th grade student

Marv Ashbury

General Motors, CCA Swartz Creek

Darren Bagley

*Michigan State University Extension -
Genesee County 4-H*

Irene Bashore

General Motors, Flint Assembly

Craig Buike

Quaker Chemical

Thad Domick

*City of Flint-
Water Pollution Control Division*

Rob Fenn

*General Motors,
Flint Engine Operations*

Heather Griffin

*Naturalist,
University of Michigan-Flint*

Tom Hutchings

*City of Flint-
Water Pollution Control Division*

Tom Jones

*Genesee County Drain Commission-
Our Water Program*

John Maksimchuk III

General Motors, Flint Metal Center

Renee Mietz

General Motors

John Moldovan

Retiree, General Motors

Pat Schultz

General Motors

Brent Wilson

General Motors, Flint Tool & Die

Appreciation

The Flint River Watershed Coalition is very thankful for the many financial and in-kind supporters of Flint River GREEN. Such generosity makes it possible for GREEN to continue its mission to educate our young people about their watershed and their environment. Your support will have a lasting impact for generations to come.

Thank You!

City of Flint, Water Pollution Control Department

Dort Federal Credit Union

Earth Force

Flint River Watershed Coalition

Genesee County Drain Commissioner's Office

Genesee County Drain Commissioner's Office, Our Water Program

Genesee County Parks and Recreation Commission

Genesee Intermediate School District

Genesee Intermediate School District, Office of Education and Learning

General Motors Corporation

General Motors Foundation

Kettering University

Lapeer Intermediate School District

Michigan State University 4-H Youth Development

Merit Labs

Mott Community College

“I learned how small things can affect the water in many ways.”

— Grand Blanc West Middle School 8th grade stu-



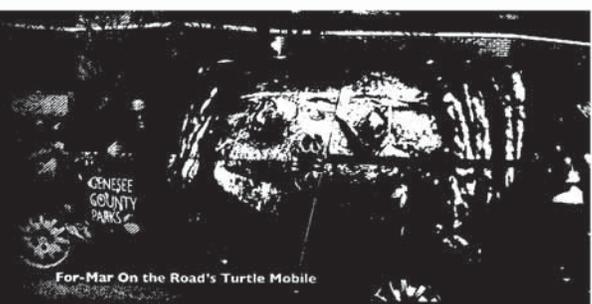
Flint River Watershed Coalition
400 N. Saginaw Street, Suite 233
Flint, Michigan 48502
www.flintriver.org



**Join us, as we celebrate
25 years
of GREEN in 2014!**

JUNE

Family Fun for Everyone!



For-Mar Nature Preserve & Arboretum's TRUCK FARM

MONDAY, JUNE 2
Ultimate Dash Training Program - Beginner
 Linden County Park, Clover Beach Pavilion
 Time: 5:30-6:30pm. Please refer to page 2 for program details and cost.

TUESDAY, JUNE 3
Avian Adventures: Cavity Nesters
 E.A. Cummings Event Center
 Join a For-Mar naturalist as we explore the many species of birds that inhabit the E.A. Cummings Event Center, more specifically the species that would nest in a cavity. We'll look for everything from sparrows to swallows and wrens to bluebirds. Learn how to identify these birds by sight and sound. Bring your binoculars if you've got them (limited quantity will be available for those without) and meet us at the Turtle Van. For families, all ages and abilities.
 Time: 6-8pm. Cost: FREE!
 Pre-registration not required.

WEDNESDAY, JUNE 4
Knee-High Naturalist: Mother Nature's Helpers
 For-Mar Nature Preserve & Arboretum
 Earn your "Jr. Naturalist" badge as we explore ways to help Mother Nature. For children ages 3-6, all abilities.
 Time: 10-11:30am. Cost: \$3 per child.
 Pre-registration required by 6/2/14.

WEDNESDAY, JUNE 4
Wild Adventures: Frog Frenzy
 For-Mar Nature Preserve & Arboretum
 Would you be able to survive without modern day commodities? How would you find food, water and shelter? Learn the skills necessary to survive in the wild! For youth ages 7-12, all abilities.
 Time: 10-11:30am. Cost: \$3 per student.
 Pre-registration required by 6/2/14.

WEDNESDAY, JUNE 4
Truck Farm: Help a Sister Out; Companion Planting
 E.A. Cummings Event Center
 Join us in the garden to experience Native American culture by using this

companion planting technique to help us plant a Three Sisters garden. Learn about some other garden companions and even get up a couple to grow at home. For children ages 4-6 and 7-12, all abilities.
 Time: 7-8pm. Cost: FREE!
 Pre-registration is not required.

THURSDAY, JUNE 5
Knee-High Naturalist: Mother Nature's Helpers
 For-Mar Nature Preserve & Arboretum
 Earn your "Jr. Naturalist" badge as we explore ways to help Mother Nature. For children ages 3-6, all abilities.
 Time: 10-11:30am. Cost: \$3 per child.
 Pre-registration required by 6/3/14.

THURSDAY, JUNE 5
Ultimate Dash Training Program - Intermediate/Advanced
 Linden County Park, Clover Beach Pavilion
 Time: 5:30-6:30pm. Please refer to page 2 for program details and cost.

THURSDAY, JUNE 5
For-Mar On The Road: Wonderful Wildflowers
 E.A. Cummings Event Center
 It's true that many wonderful wildflowers bloom in late May, however, different species will arise at different times of the year. This wildflower program will act as a companion to the Wonderful Wildflowers program held on May

24 at Wolverine Campground, or as a stand-alone learning experience. Learn to identify common, invasive and endangered species of wildflowers found in and around the E.A. Cummings Event Center. Program participants will create and take home a DIY flower press. For all ages, all abilities.
 Time: 11am-12pm. Cost: FREE!
 Pre-registration not required.

FRIDAY, JUNE 6
Outdoor Explorer Series: Build-a-Blind
 For-Mar Nature Preserve & Arboretum
 Build a ground blind and test its effectiveness by playing capture the flag with a twist. Class will be held outdoors. Please wear appropriate clothing. For youth ages 8 and older, all abilities.
 Time: 6-7:30pm. Cost: \$3.
 Pre-registration required by 6/4/14.

SATURDAY, JUNE 7
10th Annual Kids Fishing Derby Bluegill Boat Launch
 It's summertime and the fishing is easy! Bring fishing gear if you have it, we'll supply the bait, the boats, the experts and lunch! A limited number of rods and reels will be available for kids who don't have their own. Co-sponsored by the Flint River Valley Steelheaders and Fishing Tackle Grab Bag. For families, all ages and abilities.
 Time: 9am-2pm. Cost: Purchase of an annual or daily pass required for entrance into the facility. Participation in the Fishing Derby is FREE!
 Pre-registration not required. Please refer to page 2 for vehicle fees.

SATURDAY, JUNE 7
Mini BioBlitz: What's in your Water?
 For-Mar Nature Preserve & Arboretum
 Join Darren Bagley from MSU Extension as he takes you on a trip to the different bodies of water at For-Mar to get down and dirty searching for the creepy crawlies that call our water home. Then identify the creatures

you find and learn how they can tell us how healthy our water is. Finally, learn how you can be part of a local Citizen Science group, Flint River Watershed Coalition's Project GREEN, which studies and monitors the health of the water in Genesee County. For families, all ages and abilities.
 Time: 10am-12pm. Cost: FREE!
 Pre-registration required by 6/1/14.

SATURDAY, JUNE 7
Here Fishy...Fishy!
 Buell Lake County Park, docks
 Come learn all about fish and have fun fishing!
 For individuals with cognitive disabilities.
 Time: 10:30am-12pm. Cost: \$2 per person.
 Pre-registration required by 6/5/14.

SATURDAY, JUNE 7
For-Mar On The Road: Fillet Your Fish
 Wolverine Campground, meet behind the camp store.
 It's the DNR's bi-annual free fishing weekend! Hurray! Now that you've caught the fish, bring it to For-Mar's fish cleaning workshop. We'll demonstrate the proper ways to clean your pan fish for eating. But before we do that, we should preserve our catch. Before cleaning your fish, immortalize it in a traditional Japanese fish print! For all ages and abilities.

Where Did My Lunch Come From?

Where was my lunch grown? How far did it travel to make it to my plate? Why is it so good for me? We'll answer these and more when you learn how to grow your lunch right in your very own garden! For children ages 4-6 and 7-12, all abilities.
 Cost: FREE! Pre-registration not required.

WEDNESDAY, JUNE 18
10:30am-12pm. Linden County Park, Pavilion 2

1:30-3pm. Flushing County Park, Pavilion 1

THURSDAY, JUNE 19
10:30am-12pm. For-Mar

1:30-3pm. Davison Roadside Park Pavilion

Time: 11am-12pm. Cost: FREE!
 Pre-registration not required.

SATURDAY, JUNE 7
Truck Farm: Help a Sister Out; Companion Planting
 Wolverine Campground, meet behind the camp store.

Join us in the garden to experience Native American culture by using this companion planting technique to help us plant a Three Sisters garden. Learn about some other garden companions and even get up a couple to grow at home. For children ages 4-6 and 7-12, all abilities.
 Time: 1:30-3pm. Cost: FREE!
 Pre-registration not required.

SATURDAY-SUNDAY, JUNE 7-8
Free Fishing Weekend
 Fish all weekend without a DNR Fishing License! All state regulations still apply.

MONDAY, JUNE 9
Ultimate Dash Training

Program-Beginner
 Crossroads Village, Ticket Booth
 Time: 5:30-6:30pm. Please refer to page 2 for program details and cost.

MONDAY, JUNE 9
Geocaching 101
 Linden County Park, Pavilion 2
 Join the Auto City Cachers for a beginner's course in geocaching, an adventure game using GPS that combines technology with location-based gaming, social networking, treasure hunting, GPS navigation and outdoor recreation. Geocaching is a worldwide game of hiding and seeking treasure and is like a secret worldwide swap meet! Bring a GPS if you have one, but come even if you don't! We'll have some available for your use. For families, all ages and abilities.
 Time: 6:30-8:30pm. Cost: FREE!
 Pre-registration not required.

TUESDAY, JUNE 20
Geocaching 101
 Flushing County Park, Pavilion 1
 Join the Auto City Cachers for a beginner's course in geocaching, an adventure game using GPS that combines technology with location-based gaming, social networking, treasure hunting, GPS navigation and outdoor recreation. Geocaching is a worldwide game of hiding and seeking treasure and is like a secret worldwide swap meet! Bring a GPS if you have one, but come even if you don't! We'll have some available for your use. For families, all ages and abilities.
 Time: 6:30-8:30pm. Cost: FREE!
 Pre-registration not required.

THURSDAY, JUNE 12
Ultimate Dash Training Program - Intermediate/Advanced
 Crossroads Village, Ticket Booth
 Time: 5:30-6:30pm. Please refer to page 2 for program details and cost.

THURSDAY, JUNE 12
Geocaching 101
 Richfield County Park, Pavilion 3
 Join the Auto City Cachers for a beginner's course in geocaching, an adventure game using GPS that combines technology with location-based gaming, social networking, treasure hunting, GPS navigation and outdoor recreation. Geocaching is a worldwide game of hiding and seeking treasure and is like a secret worldwide swap meet! Bring a GPS if you have one, but come even if you don't! We'll have some available for your use. For families, all ages and abilities.
 Time: 6:30-8:30pm. Cost: FREE!
 Pre-registration not required.

FRIDAY, JUNE 13
Arthritis Foundation Exercise Program
 For-Mar Nature Preserve & Arboretum
 Join Abbie Mars, Program Development Coordinator at the Valley Area Agency on Aging, for this low-impact physical activity program proven to reduce pain and decrease stiffness. The routines include gentle range-of-motion exercises that are suitable for every fitness level. Program will be held outdoors if weather permits. Chairs will be used both indoors and outdoors during the program. For seniors, all abilities.
 Time: 10:30-11:30am. Cost: FREE!
 Individual pre-registration suggested by 6/10/14. Group pre-registration required.

FRIDAY, JUNE 13
Yoga in Nature
 For-Mar Nature Preserve & Arboretum
 Looking for a good stretch and relaxation? Maybe you just want time away from everyday stress. Learn breathing techniques and posture contris. Plan to be outdoors. Class will be held indoors in cases of bad weather. Wear layered, loose, comfortable clothing. Bring your yoga mat or blanket. Some mats are available. For ages 9 and older, all abilities.

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FRIDAY, JUNE 20
10:30am-12pm. Buell Lake County Park, Pavilion 1

1:30-3pm. Bluebell Beach, Pavilion 1

SATURDAY, JUNE 21
11am-12pm. Richfield County Park, Pavilion 5

1:30-3pm. Wolverine Campground, behind camp store

Natural Tie Dye

The science of dyeing has evolved through history and we're going to put it to the test in some natural dyeing experiments. We will be dyeing our very own bandanas to wear in the garden. For children ages 4-6 and 7-12, all abilities.
 Cost: FREE! Pre-registration not required.

treasure and is like a secret worldwide swap meet! Bring a GPS if you have one, but come even if you don't! We'll have some available for your use. For families, all ages and abilities.
 Time: 6:30-8:30pm. Cost: FREE!
 Pre-registration not required.

WEDNESDAY, JUNE 11
Knee-High Naturalist: Animal Dads
 For-Mar Nature Preserve & Arboretum
 Explore the amazing ways animal fathers take care of their young. For children ages 3-6, all abilities.
 Time: 10-11:30am. Cost: \$3 per child.
 Pre-registration required by 6/9/14.

WEDNESDAY, JUNE 11
Wild Adventures: Who's your Daddy?
 For-Mar Nature Preserve & Arboretum
 Animals have fathers too! Learn about different animal dads, and make a gift for your own. Just in time for Father's Day!

For youth ages 7-12, all abilities.
 Time: 10-11:30am. Cost: \$3 per student.
 Pre-registration required by 6/9/14.

THURSDAY, JUNE 12
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 For-Mar Nature Preserve & Arboretum
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 Time: 10-11:30am. Cost: \$3 per child.
 Pre-registration required by 6/10/14.

THURSDAY, JUNE 12
Ultimate Dash Training Program - Intermediate/Advanced
 Crossroads Village, Ticket Booth
 Time: 5:30-6:30pm. Please refer to page 2 for program details and cost.

THURSDAY, JUNE 12
Geocaching 101
 Richfield County Park, Pavilion 3
 Join the Auto City Cachers for a beginner's course in geocaching, an adventure game using GPS that combines technology with location-based gaming, social networking, treasure hunting, GPS navigation and outdoor recreation. Geocaching is a worldwide game of hiding and seeking treasure and is like a secret worldwide swap meet! Bring a GPS if you have one, but come even if you don't! We'll have some available for your use. For families, all ages and abilities.
 Time: 6:30-8:30pm. Cost: FREE!
 Pre-registration not required.

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 Time: 6:30-8:30pm. Cost: FREE!
 Pre-registration not required.

FRIDAY, JUNE 13
Arthritis Foundation Exercise Program
 For-Mar Nature Preserve & Arboretum
 Join Abbie Mars, Program Development Coordinator at the Valley Area Agency on Aging, for this low-impact physical activity program proven to reduce pain and decrease stiffness. The routines include gentle range-of-motion exercises that are suitable for every fitness level. Program will be held outdoors if weather permits. Chairs will be used both indoors and outdoors during the program. For seniors, all abilities.
 Time: 10:30-11:30am. Cost: FREE!
 Individual pre-registration suggested by 6/10/14. Group pre-registration required.

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WEDNESDAY, JUNE 25
10:30am-12pm. Linden County Park, Pavilion 2

1:30-3pm. Flushing County Park, Pavilion 1

THURSDAY, JUNE 26
10:30am-12pm. For-Mar

1:30-3pm. Davison Roadside Park Pavilion

FRIDAY, JUNE 27
10:30am-12pm. Buell Lake County Park, Pavilion 1

1:30-3pm. Bluebell Beach, Pavilion 1

SATURDAY, JUNE 28
11am-12pm. Richfield County Park, Pavilion 5

1:30-3pm. Wolverine Campground, behind camp store

Time: 6-7pm. Cost: \$2 per participant.
 Pre-registration required by 6/11/14.

FRIDAY, JUNE 13
Outdoor Explorer Series: Where's Waldo?
 For-Mar Nature Preserve & Arboretum
 Camouflage is more than a fashion trend! Discover how to effectively disguise yourself. Class will be held outdoors. Please wear appropriate clothing. Bring camouflage clothing if you have it. We will have some available. For youth ages 8 and older, all abilities.
 Time: 6-7:30pm. Cost: \$3 per student.
 Pre-registration required by 6/11/14.

SATURDAY, JUNE 14
Maple ID Walk
 For-Mar Nature Preserve & Arboretum
 Join us as we take a look at the many species of maple trees at For-Mar and learn how to identify the various species based on leaf and other characteristics. For adults ages 16 and older, all abilities.

Time: 10-11:30am. Cost: \$5 per person.
 Pre-registration not required.

SATURDAY, JUNE 14
Scouting Outing: Flowers
 For-Mar Nature Preserve & Arboretum
 Flowers are so beautiful that we bring them from the outside into our homes to add cheer to a room. But there is more to flowers than just good looks. Without them, plants could not make seeds, and scientists think the world would be a lot drier. Dig up more flower secrets, and Junior Girl Scouts, earn your flower badge. Then make a bouquet to give to your sweetest! For youth, all abilities.
 Time: 10:30-12pm. Cost: \$5 per scout.
 Pre-registration required by 6/12/14.

SATURDAY, JUNE 14
For-Mar On The Road: Nature Journaling
 Wolverine Campground, meet behind the camp store.
 A time-honored way of developing one's connection to nature. An experienced For-Mar naturalist will guide you through thought-provoking activities that will encourage creativity and curiosity in the natural world. All of which you can record in your nature journal. Build on the journal you already use or start a new journal today! For families, all abilities.
 Time: 11am-12pm. Cost: FREE!
 Pre-registration not required.

SATURDAY, JUNE 14
Truck Farm: Edible Enchanted Gardens
 Wolverine Campground, meet behind the camp store.
 Join us in the garden as we learn about enchanted gardens and their residents. Help us plant an edible enchanted garden to share with the fairies, trolls and gnomes. Plant your own mini-enchanted garden for your home. For children ages 4-6 and 7-12, all abilities.
 Time: 1:30-3pm. Cost: FREE!
 Pre-registration not required.

SATURDAY, JUNE 14
Dirty Dash
 E.A. Cummings Event Center
 Have you ever said to yourself, "Marathons are too easy, and Triathlons are for sissies"? We haven't either... those races are really hard. Think about it... the first person to run a marathon actually died. HE DIED! ... and he probably didn't even have fun along the way! Well, welcome to a new kind of race: THE DIRTY DASH. This race puts all other races to shame. The Dirty Dash is a mud-run obstacle course where a military boot camp meets your inner fitness year-old's fantasy

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For-Mar On The Road

Celebrating Urban Birds

Ages 3-6: Become a Citizen Scientist your very first week of For-Mar On The Road! Help the For-Mar naturalists find out which bird species survive and thrive in the Genesee County Parks. All junior birders who participate will create their own birding tool kit to include such essential tools as binoculars, bird callers and local species identification guides.
Ages 7-12: For our first week of summer programs, we will be doing our part to help out migrating birds in the Genesee County Parks, as well as in your own backyard. Join For-Mar naturalists in evaluating proper bird habitats in the parks, all while learning how to create good habitats for avian travelers who might also visit your home.
 Cost: FREE! Pre-registration not required.

TUESDAY, JUNE 17
2-3pm. Davison Roadside Park Pavilion

WEDNESDAY, JUNE 18
11am-12pm. For-Mar

2-3pm. Richfield County Park, Playground Pavilion

THURSDAY, JUNE 19
11am-12pm. Buell Lake County Park, Pavilion 1

2-3pm. Bluebell Beach, Pavilion 1

FRIDAY, JUNE 20
11am-12pm. Flushing County Park, Pavilion 1

2-3pm. Linden County Park, Clover Beach Pavilion

SATURDAY, JUNE 21
11am-12pm. Wolverine Campground, behind camp store

2-3pm. Creasby Bicentennial Park, Sledding Hill Pavilion

A Feisty Forest: Wilderness Survival Skills

Ages 3-6: Warning coloration in plants, common warning animal behaviors, and avoiding unknowns: our young friends will learn these and other simple tips and tricks to help them understand when something in nature is safe or unsafe. Program participants will go home with their own safety whistle.
Ages 7-12: Older brothers and sisters

will get an introduction to wilderness survival skills. We're learning how to build a shelter, find clean drinking water, and start a fire. You'll also create a survival kit to keep in your day pack.
 Cost: FREE! Pre-registration not required.

TUESDAY, JUNE 24
2-3pm. Davison Roadside Park Pavilion

WEDNESDAY, JUNE 25
11am-12pm. For-Mar

2-3pm. Richfield County Park, Playground Pavilion

THURSDAY, JUNE 26
11am-12pm. Buell Lake County Park, Pavilion 1

2-3pm. Bluebell Beach, Pavilion 1

FRIDAY, JUNE 27
11am-12pm. Flushing County Park, Pavilion 1

2-3pm. Linden County Park, Clover Beach Pavilion

SATURDAY, JUNE 28
11am-12pm. Wolverine Campground, behind camp store

2-3pm. Creasby Bicentennial Park, Sledding Hill Pavilion



AUGUST

Family Fun for Everyone!

Wolverine Campground

For-Mar Nature Preserve & Arboretum's TRUCK FARM

MONDAY-FRIDAY, AUGUST 1-28
Summer Playground Program
Bluebell Beach, Pavilion 1, Flushing County Park, Pavilion 1 and Davison Roadside Park Pavilion
The FREE summer playground program is back! Kids ages 4-18 can drop in daily for crafts, gardening, nature, games and all kinds of fun stuff!
Monday-Friday, June 23-August 28.
For kids ages 4-18, all abilities.
Time: 11am-3:30pm. Cost: FREE!
Pre-registration is not required, but parents/guardians must complete a release form before kids can participate.

FRIDAY, AUGUST 1
Acting Workshops with Flint Youth Theatre
For-Mar Nature Preserve & Arboretum
Working with an FYT theatre educator, students will create amazing characters and stories from literature and their own imaginations, while working on acting techniques, teamwork, confidence, self-worth and responsibility. Class will be outside, weather permitting. For families, all ages and abilities.
Time: 10-11am. Cost: FREE!
Pre-registration required by 7/31/14.

FRIDAY, AUGUST 1
Outdoor Explorer Series: Beginner Orienteering
For-Mar Nature Preserve & Arboretum
Learn the basics of using a compass. Then test your navigation skill on a timed course. Class will be held outdoors. Please wear appropriate clothing and bring a compass if you have one. We will have a limited supply available. For youth ages 8 and older, all abilities.
Time: 6-7:30pm. Cost: \$3 per student.
Pre-registration required by 7/30/14.

FRIDAY, AUGUST 1
Firefly Hike
For-Mar Nature Preserve & Arboretum
Come light up with firefly knowledge.

We will learn about fireflies, building firefly hatches, and take a night hike to catch & view fireflies. For families, all ages and abilities.
Time: 8:30-10pm. Cost: \$5 per person.
Pre-registration required by 7/31/14.

SATURDAY, AUGUST 2
Planting for Monarchs
For-Mar Nature Preserve & Arboretum
Monarch butterflies are kings of the butterfly world, and these kings need to feast. Join us as we walk the gardens at For-Mar and see what plants these winged wonders feed upon. For adults ages 16 and older, all abilities.
Time: 10-11:30am. Cost: \$5 per person.
Pre-registration not required.

SATURDAY, AUGUST 2
Rookie Ranger Academy
Flushing County Park, Pavilion 5
What does it take to become a Genesee County Parks park ranger? See all the police and fire equipment that park rangers use every day. Become a detective finding hidden fingerprints, identifying wildlife, and solving a crime by collecting clues on a scavenger hunt. Learn what to do if you see a gun and the proper way to call 911, and much more. Prizes, lunch and snacks provided (special needs to be supplied by parent/guardian). Dress for the weather. Wear tennis shoes. **No flip flops.**
For ages 8-13, all abilities.
Time: 10am-4pm. Cost: FREE!
Pre-registration required by 8/1/14.

SATURDAY, AUGUST 2
Water is Wonderful
For-Mar Nature Preserve & Arboretum
Water is important to all of us! Learn all about where we get our water and how to keep it clean! For individuals with cognitive disabilities.
Time: 10:30am-12pm. Cost: \$2 per person.
Pre-registration required by 7/31/14.

SATURDAY, AUGUST 2
Critters of Alice in Wonderland
For-Mar Nature Preserve & Arboretum
Join us at For-Mar to learn all about the many animal friends who take part in Lewis Carroll's *Alice's Adventures in Wonderland*. Meet these fascinating

animals and plants and get ready for the Flint Youth Theatre's production of *Alice in Wonderland*. Participants will create their own mini mushroom garden to take home. For families, all ages and abilities.
Time: 1-2:30pm. Cost: \$5 per person.
Pre-registration not required.

Treats From Nature

Join us as we explore the many treats that nature provides for us for free. We will take an exploratory hike to see if we can locate some tasty morsels to sample. For children ages 4-8 and 7-12, all abilities.

Cost: FREE! Pre-registration not required.
WEDNESDAY, AUGUST 6
10:30am-12pm. Linden County Park, Pavilion 2
1:30-3pm. Flushing County Park, Pavilion 1
THURSDAY, AUGUST 7
10:30am-12pm. For-Mar Nature Preserve & Arboretum
1:30-3pm. Davison Roadside Park Pavilion

FRIDAY, AUGUST 8
10:30am-12pm. Buell Lake County Park, Pavilion 1
1:30-3pm. Bluebell Beach, Pavilion 1
SATURDAY, AUGUST 9
11am-12pm. Richfield County Park, Pavilion 5
1:30-3pm. Wolverine Campground, behind camp store

Shake, Rattle & Roll!
Come join us for some horticulture inspired movement, music and art in the garden. For children ages 4-6 and 7-12, all abilities.
Cost: FREE! Pre-registration not required.

MONDAY, AUGUST 4
SKIP Nutrition Playgroup
Flushing County Park, Pavilion 5
For families with kids ages 0-5, not yet in kindergarten, all abilities.

Time: 10-11am. Cost: FREE!
Pre-registration not required.

MONDAY, AUGUST 4
Cooking with Kids
Stepping Stone Falls Picnic Area
For kindergarten-6th grade

WEDNESDAY, AUGUST 13
10:30am-12pm. Linden County Park, Pavilion 2
1:30-3pm. Flushing County Park, Pavilion 1
THURSDAY, AUGUST 14
10:30am-12pm. For-Mar Nature Preserve & Arboretum
1:30-3pm. Davison Roadside Park Pavilion

FRIDAY, AUGUST 15
10:30am-12pm. Buell Lake County Park, Pavilion 1
1:30-3pm. Bluebell Beach, Pavilion 1
SATURDAY, AUGUST 16
11am-12pm. Richfield County Park, Pavilion 5
1:30-3pm. Wolverine Campground, behind camp store

Please, Feed the Worms!
It's the wonderful world of vermicomposting! Learn how these tiny worms turn our garden trash into food for plants. For children ages 4-6 and 7-12, all abilities.
Cost: FREE! Pre-registration not required.

WEDNESDAY, AUGUST 20
10:30am-12pm. Linden County Park, Pavilion 2
1:30-3pm. Flushing County Park, Pavilion 1
THURSDAY, AUGUST 21
10:30am-12pm. For-Mar Nature Preserve & Arboretum

students, all abilities.
Time: 1:30-2:30pm. Cost: FREE!
Pre-registration not required.

MONDAY, AUGUST 4

Empowering Youth (Nutrition Education/Cooking)
Stepping Stone Falls Picnic Area
For 6th grade and older, all abilities.
Time: 3-4pm. Cost: FREE!
Pre-registration not required.

MONDAY, AUGUST 4
Cooking Matters
Davison Roadside Park Pavilion
For families, all ages and abilities.
Time: 6-8pm. Cost: FREE!
Register for this program by calling 810.591.5134. Families are asked to commit to the entire 6-week program. Class size is limited, so register early!

MONDAY, AUGUST 4
Birthday Card Workshop
Linden County Park, Clover Beach Pavilion
Handmade birthday cards, the perfect present! Learn a few card-making techniques and make your own hand-stamped and decorated cards with Michelle Litviller from Stampin' Up! All supplies are provided and all skill levels welcome. For families, all ages and abilities.
Time: 7-8:30pm. Cost: FREE!
Pre-registration not required.

MONDAY, AUGUST 4
Bokwa®
Flushing County Park, Pavilion 5
Join certified instructor Terri Sweet Herrick for Bokwa® in MI Big Green Gym, the Genesee County Parks! What is Bokwa®? It's a new and completely different approach to group exercise! Participants draw letters and numbers with their feet while performing an energizing and addictive cardio workout routine to today's hit music. No counting steps or complicated choreography, and it doesn't even feel like working out! Because of the energizing music, the fun and predictable steps, and great motivation coming from people moving together to music, you'll get addicted and you won't even realize that you just burned up to 1,200 calories in one workout session. For all ages and abilities.
Time: 7-8pm. Cost: FREE!
Pre-registration not required.

TUESDAY, AUGUST 5
SKIP Nutrition Playgroup
Davison Roadside Park Pavilion
For families with kids ages 0-5, not yet in kindergarten, all abilities.
Time: 10-11am. Cost: FREE!
Pre-registration not required.

TUESDAY, AUGUST 5
Cooking with Kids
Davison Roadside Park Pavilion
For kindergarten-6th grade students, all abilities.
Time: 1:30-2:30pm. Cost: FREE!
Pre-registration not required.

1:30-3pm. Davison Roadside Park Pavilion
FRIDAY, AUGUST 22
10:30am-12pm. Buell Lake County Park, Pavilion 1
1:30-3pm. Bluebell Beach, Pavilion 1
SATURDAY, AUGUST 23
11am-12pm. Richfield County Park, Pavilion 5
1:30-3pm. Wolverine Campground, behind camp store

Garden to Table
It's harvest time! We're picking garden goodies and trying new recipes. For children ages 4-6 and 7-12, all abilities.
Cost: FREE! Pre-registration not required.

WEDNESDAY, AUGUST 27
10:30am-12pm. Linden County Park, Pavilion 2
1:30-3pm. Flushing County Park, Pavilion 1
THURSDAY, AUGUST 28
10:30am-12pm. For-Mar Nature Preserve & Arboretum
1:30-3pm. Davison Roadside Park Pavilion

FRIDAY, AUGUST 29
10:30am-12pm. Buell Lake County Park, Pavilion 1
1:30-3pm. Bluebell Beach, Pavilion 1
SATURDAY, AUGUST 30
11am-12pm. Richfield County Park, Pavilion 5
1:30-3pm. Wolverine Campground, behind camp store

TUESDAY, AUGUST 5
Cooking with Kids
Wolverine Campground & Buttercup Beach. Program will be behind the camp store. Park at the beach.

For kindergarten-6th grade students, all abilities.
Time: 1:30-2:30pm. Cost: FREE!
Pre-registration not required.

TUESDAY, AUGUST 5
Empowering Youth (Nutrition Education/Cooking)
Davison Roadside Park Pavilion
For 6th grade and older, all abilities.
Time: 3-4pm. Cost: FREE!
Pre-registration not required.

TUESDAY, AUGUST 5
Avian Adventures: Shorebirds
E.A. Cummings Event Center
Explore the shores of the ponds and the Flint River in search of our wading water birds with your For-Mar naturalists. Specialized for prying on fish, amphibians and invertebrates that live along the water's edge, we'll be looking for great blue herons, egrets, green herons and more in today's Avian Adventure. Bring your binoculars if you've got them (limited quantity will be available for those without) and meet us at the Turtle Van. For families, all ages and abilities.
Time: 6-8pm. Cost: FREE!
Pre-registration not required.

TUESDAY, AUGUST 5
Zumba® Kids & Zumba® Kids Jr.
Davison Roadside Park Pavilion
Terri Sweet Herrick brings Zumba® Kids and Zumba® Kids Jr., the ultimate dance-fitness party for kids ages 4-11 who love loud music and rockin' it out with their friends, at the Genesee County Parks! This program features age-appropriate music and the opportunity for kids to move to the beat. It's all about feeling fearless on the dance floor, beginning the journey to a healthy future, and reinforcing the idea that it's okay to just be yourself. It's time to dance like no one's watching! For kids ages 4-11, all abilities.
Time: 7-8pm. Cost: FREE!
Pre-registration not required.

August events continued on next page >>

For-Mar On The Road

Return of the Dinosaurs

Ages 3-6: Back by popular demand, take a journey back in time with your For-Mar naturalists to meet the prehistoric creatures that once roamed the Earth. Travel back to a time when the Earth was younger and the animals that inhabited it much stranger. Play games and complete a craft all about these ancient reptiles.

Ages 7-12: New discoveries have been made that indicate dinosaurs may have been much bigger than we originally thought! What other parts of these rambunctious, ravenous reptiles might be different? Create your own dinosaur to take home.
Cost: FREE! Pre-registration not required.

TUESDAY, AUGUST 5
2-3pm. Davison Roadside Park Pavilion

WEDNESDAY, AUGUST 6
11am-12pm. For-Mar Nature Preserve & Arboretum

2-3pm. Richfield County Park, Playground Pavilion

THURSDAY, AUGUST 7
11am-12pm. Buell Lake County Park, Pavilion 1

2-3pm. Bluebell Beach, Pavilion 1

FRIDAY, AUGUST 8
11am-12pm. Flushing County Park, Pavilion 1

2-3pm. Linden County Park, Clover Beach Pavilion

SATURDAY, AUGUST 9
11am-12pm. Wolverine Campground, behind camp store

2-3pm. Crassey Bicentennial Park, Sledding Hill Pavilion

Nature at Nighttime

Ages 3-6: Humans and many other animals get their rest at night, however there are just as many that prefer to stay active when the sun goes down. In preparation for our visit from Bat Zone, let's learn about what it means to be nocturnal, and which animals call nighttime nature home.
Ages 7-12: Put yourself in the shoes of a nocturnal animal, act out nighttime animal adaptations with your For-Mar naturalist. Discover what it means

to be an after-hours animal with interpretive games and a craft.
Cost: FREE! Pre-registration not required.

TUESDAY, AUGUST 12
2-3pm. Davison Roadside Park Pavilion

WEDNESDAY, AUGUST 13
11am-12pm. For-Mar Nature Preserve & Arboretum

2-3pm. Richfield County Park, Playground Pavilion

THURSDAY, AUGUST 14
11am-12pm. Buell Lake County Park, Pavilion 1

2-3pm. Bluebell Beach, Pavilion 1

FRIDAY, AUGUST 15
11am-12pm. Flushing County Park, Pavilion 1

2-3pm. Linden County Park, Clover Beach Pavilion

SATURDAY, AUGUST 16
11am-12pm. Wolverine Campground, behind camp store

2-3pm. Crassey Bicentennial Park, Sledding Hill Pavilion

What Big Teeth You Have! Predators

Ages 3-6: We'll do our best to make some of Earth's more ferocious animals not seem quite so scary. We'll imagine what life might be like for some of Michigan's most iconic predators including bear, bobcat and bald eagle.
Ages 7-12: Often misunderstood and feared, predators are some of the planet's most clever creatures and can come in a wide variety of stealthy forms. Predators are a vital part of any healthy ecosystem! Take a close look at the wolves of Isle Royal and why they are so important to the moose also found on the island.
Cost: FREE! Pre-registration not required.

TUESDAY, AUGUST 19
2-3pm. Davison Roadside Park Pavilion

WEDNESDAY, AUGUST 20
11am-12pm. For-Mar Nature Preserve & Arboretum

2-3pm. Richfield County Park, Playground Pavilion

THURSDAY, AUGUST 21
11am-12pm. Buell Lake County Park, Pavilion 1

2-3pm. Bluebell Beach, Pavilion 1

FRIDAY, AUGUST 22
11am-12pm. Flushing County Park, Pavilion 1

2-3pm. Linden County Park, Clover Beach Pavilion

SATURDAY, AUGUST 23
11am-12pm. Wolverine Campground, behind camp store

2-3pm. Crassey Bicentennial Park, Sledding Hill Pavilion

What Does the Fox Say? Animal Communication

Ages 3-6: Wouldn't it be interesting to find out what some animals are thinking? This week we'll find out! One of our experienced naturalists will show your preschooler how certain animals communicate. We'll have them dancing like a deer and singing like a robin in no time.

Ages 7-12: Humans display one of the most complex forms of communication — speech. We certainly make it look easy, but other plants and animals make it look amazing! Explore communication in the animal kingdom, including what foxes do and do not do.
Cost: FREE! Pre-registration not required.

TUESDAY, AUGUST 26
2-3pm. Davison Roadside Park Pavilion

WEDNESDAY, AUGUST 27
11am-12pm. For-Mar Nature Preserve & Arboretum

2-3pm. Richfield County Park, Playground Pavilion

THURSDAY, AUGUST 28
11am-12pm. Buell Lake County Park, Pavilion 1

2-3pm. Bluebell Beach, Pavilion 1

FRIDAY, AUGUST 29
11am-12pm. Flushing County Park, Pavilion 1

2-3pm. Linden County Park, Clover Beach Pavilion

SATURDAY, AUGUST 30
11am-12pm. Wolverine Campground, behind camp store

2-3pm. Crassey Bicentennial Park, Sledding Hill Pavilion



The City of Flint's Water Pollution Control Division (WPC) is responsible for maintaining a clean Flint River in a variety of ways. First, it operates and maintains a 50 million gallon per day capacity treatment plant and 9 remote pumping stations for conveying sewage through sanitary sewers. It cleans this wastewater from homes, businesses, and industries before discharging it to the river. WPC also supports the City's Storm water Management Plan, designed to prevent water pollution caused by illegal discharges to rivers via the street drains (storm sewers) that empty directly into them. WPC monitors chemical spills and other illicit discharges to the City's storm water collection system. Finally, to prevent overloading of the plant or damage to sewers, WPC administers an Industrial Pretreatment Program (IPP). The IPP tests and regulates discharges from industries into the sanitary sewers.

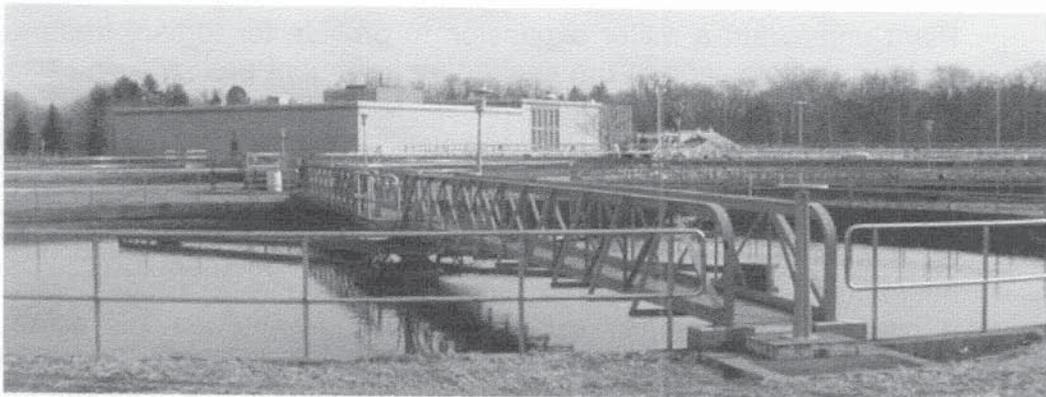
WPC is proud of its long history of protecting the Flint River, public health, and the environment through the operation of these programs and maintaining the cleanliness of wastewater discharge, consistently exceeding the standards set by the Michigan Department of Environmental Quality and the U. S. Environmental Protection Agency.

How you can help keep the Flint River clean and healthy:

Keep trash and pollutants out of storm sewers

Report dumping of polluting wastes to the Environmental Compliance Unit at (810) 766-7210

Report sewer backups or blockages to Sewer Maintenance at (810) 766-7079



For additional information or to schedule a tour, please (810) 766-7210

Robert Case
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City of Flint

Water Pollution Control Plant Historical Highlights

- October 1925 Sewage flow diverted from Flint River to WPC through 50" force main
WPC included 4 Imhoff tanks and 40 sludge drying beds
- 1931 – 1932 Plant was expanded to include trickling filters, 2 secondary clarifiers and chlorination
- 1953 – 1956 Plant was expanded to include 2 sludge digesters, 2 final clarifiers, one grit removal chamber, northwest pump station, and modifications to influent structure and trickling filter piping
- 1962 – 1964 Plant was expanded to provide activated sludge secondary treatment. It then included 1 additional grit chamber, 6 primary settling tanks, 1 15,000 CFM and 2 30,000 CFM blowers, 3 aeration tanks, 3 final tanks, a digester building with 1 additional sludge storage tank and a gas storage sphere, pre-aeration tanks, chlorine contact tanks, two vacuum filters, two multiple-hearth incinerators, 1 ash lagoon (north), administration building and remodeling of the service building
- 1973 plant expansion
- Plant underwent a major expansion to provide for tertiary treatment and biological nitrification in the secondary treatment process. The expansion increased the design capacity to 50 MGD. It included mechanical bar screens at Northwest and Third Avenue Pumping stations, grit removal and handling equipment (B-Grit), 4 more primary settling tanks, phosphorus removal equipment, 6 aeration tanks (Battery B), 3 40,000 CFM blowers (#4-6), 4 more final tanks, a trickling filter effluent lift station, 6 fine mesh microstrainers, chlorination equipment, 2 high pressure air compressor units, a dissolved air flotation sludge thickening system, a low pressure air oxidation system (Zimpro), 3 vacuum filter units, 2 new multiple hearth incinerators (& modification of the existing multiple hearth incinerators), an ash handling system, 1 ash lagoon (south), and various metering devices, instrumentation equipment and process pumping units
- September 1983 East Pump Station, new relief sewers, and deep tunnel network put in service
- August 1985 Primary effluent flow to trickling filters was terminated

<u>April 1987</u>	Two belt filter presses were put on line, and the zimpro process was shut down
<u>September 1987</u>	Liquid propane gas facility was put in service as an alternate fuel system
<u>December 1987</u>	Battery b aeration system was modified to incorporate sanitaire fine bubble diffusers
<u>March 1988</u>	Battery A aeration system was modified to incorporate sanitaire fine bubble diffusers
<u>June 1988</u>	The activated sludge aeration system was modified to route waste activated sludge to the primary tanks for co-settling purposes and the DAF thickener building was shut down
<u>December 1988</u>	Stockroom/vehicle storage building additions were completed.
<u>November 1990</u>	Completed modifications to women's locker room and office area in the administration building
<u>December 1990</u>	Completed the removal of all category 1 asbestos containing building material from WPC and Third Avenue Pumping Station
<u>April 1991</u>	Sulfur Dioxide dechlorination system was brought on line
<u>May 1991</u>	Belt filter presses were modified to include rotary screen thickeners (RSTS)
<u>1991</u>	Polymer storage facilities added Blower monitoring (Bently-Nevada) established East digester floating cover removed and replaced with geodesic aluminum roof
<u>1997</u>	Microstrainers permanently bypassed, increasing peak hydraulic flow to 76 MGD Two additional belt filter presses with RSTs installed
<u>1998</u>	Third Ave. Pump Station - First variable frequency drive installed on Pump #1
<u>1999</u>	Closed north ash lagoon; installed overflow structure on south side
<u>2001</u>	Rerouted discharge from ash lagoon to plant headworks
<u>2005</u>	Began replacement of all motor control centers

- 2006 Incinerator feed system modifications
- 2007 Incinerator Control System replacement: digitally controlled, with variable gas burners
- 2009 Demolished gas storage sphere.
Began reconstruction of North Digester (with Swedish Biogas)
- 2010 Completed replacement of North Digester equipment, flare, new pump house, and new digestate storage tank
Resumed anaerobic digestion of all sludge
- 2011 Removed South Digester cover and cleaned out the tank to prepare for renewal.
Replaced the two older BFP units with centrifuges
- 2012 Began rebuilding final settling tanks with new mechanical equipment
LPG tanks removed
- 2013 Completed rebuild of B-Grit facility with all new mechanical equipment
Replaced bar screen and other mechanical equipment at Third Avenue Pump Station.
Added monitoring and control equipment and enabled operation from the WWTP
Began using cellular equipment to monitor all remote pump stations
- 2014 Unmanned operation of Third Avenue Pump Station.
Replaced chlorination equipment; began feeding chlorine gas only
Replacing bar screen and raking equipment at East and Northwest Pumping Stations
- 2015 Biosolids Loadout Facility to be constructed; all biosolids diverted to landfill and Incinerators shut down.

Historical Perspective, 2014

There have been significant changes over the years in both the treatment plant itself, and the challenges it has had to face. Currently, the 50 MGD treatment plant handles a dry weather flow of about 20 MGD. The steady reduction in dry weather flows has occurred since the 70s due to loss of both population and industry.

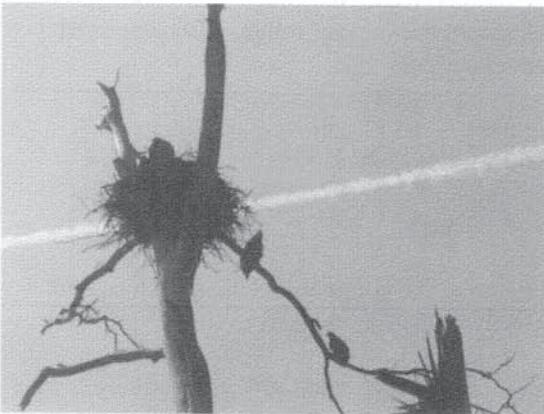
This has affected the quality of sewage treated as well. In the 70s, about 40% came from various industrial sources, principally GM facilities. Today, most of those sources have been eliminated, and new ones that have replaced them use only a small fraction of the previous amounts of water. The new GM facilities are also designed to release very little waste in their effluent. Consequently, today only about 5% of the wastewater is from industrial sources, and Flint can no longer be characterized as an industrial city.

One thing that has not changed, however, are the wet weather flows, which still can exceed 100 MGD, although rarely. Since 1983, flows beyond the plant hydraulic maximum, about 75 MGD, overflow into a 10 MG Retention and Treatment Basin. If the RTB capacity is exceeded, these dilute flows are given basic treatment and disinfection only before discharge.

The City does have separated storm sewers, but most building footing drains still empty into the sanitary system. Leaks in the collection system (Inflow and Infiltration) contribute the rest. Wet weather flows and their management remain a great challenge.

Three Eaglets Nesting on Our Flint River

*...and they are in the upper 4%
among their peers.*



The Flint River Watershed Coalition partners with the Genesee County Drain Commission to sponsor public kayak trips down the Flint River through the "Our Water" program. Just a few weeks ago, we had a once in a lifetime privilege to witness **three fledglings** in and around their nest under one of the parent's watchful eye during one of the public paddles. Only 4% of nesting eagles lay a "clutch" of 3 eggs. Given mortality rates for first flight attempts, this large family of bald eagles is profoundly unique. It would be a rare treat for anyone across this country to see, and yet they are right here in our backyard.

Bald Eagle Factoids¹

The bald eagle is both the national bird and national animal of the United States of America. The bald eagle appears on its Seal. It was chosen as the emblem of the United States of America because of its long life, great strength, and majestic appearance. This selection had its detractors, most notably Benjamin Franklin who expounded on the bald eagle's "bad moral character."

The bald eagle is a bird of prey found in North America. Its range includes most of Canada and Alaska, all of the contiguous United States, and northern Mexico and is found near large bodies of open water with an abundant food supply and old-growth trees for nesting.

The bald eagle is the second largest North American bird of prey, with an average wingspan of 7 feet. (California condor is largest). Body size varies widely, with adult total length 2.3 -3.1 feet and wingspans 5.5 - 8.0 feet. Adult body weights range from 10 -14 pounds. The female is about 25% larger than the male; otherwise there is no distinction between the sexes.

Bald eagles are not actually bald; the name derives from an older meaning of "white headed." The adult is mainly brown with a white head and tail. The sexes are identical in plumage. The distinctive white head, neck, and tail are not attained until 5.5 years of age, which is the age of sexual maturity.

The bald eagle is a powerful flier, and soars on thermal convection currents. It reaches speeds of 35-43 mph when gliding and flapping, and about 30 mph while carrying fish. Its dive speed is between 75-99 mph, though it seldom dives vertically.

The bald eagle is an opportunistic feeder which subsists mainly on fish, which it swoops down and snatches from the water with its talons. In 20 food habit studies across the species' range, fish comprised 56% of the diet of nesting eagles, birds 28%, mammals 14% and other prey 2%.

When Europeans first arrived on the North American continent there were an estimated one-quarter to one-half million bald eagles. Bald eagle populations declined due to deliberate killing for feathers and trophies, loss of prey, loss of habitat, intentional poisoning, and unintentional poisoning, especially via widespread use of the pesticide DDT (dichloro-diphenyl-trichloroethane).

By the late 20th century, bald eagles were on the brink of extinction in the continental United States, and in 1963 the population reached a low with only 417 nesting pairs in the lower 48 states.

Although bald eagles had been protected at federal and state levels since 1940 and 1954, respectively, they received much greater protection after the ratification of the Endangered Species Act in 1973, and the Michigan endangered species act in 1974. Under the protection of the Endangered Species Act (ESA), and the banning of the use of DDT, the bald eagle population has nearly doubled every 7 to 8 years.

Bald eagles are sexually mature at four or five years of age. When they are old enough to breed, they often return to the area where they were born. It is thought that bald eagles mate for life. However, if one member of a pair dies or disappears, the other will choose a new mate.

¹ Prepared using direct and paraphrased excerpts from the [Michigan Department of Natural Resources webpage on bald eagles](#), the Species Assessment for Bald Eagle in Wyoming by Amber Travsky and Dr. Gary P. Beauvais in November 2004, and the Wikipedia [bald eagle webpage](#).



Bald eagle courtship involves elaborate, spectacular calls and flight displays. The flight includes swoops, chases, and cartwheels, in which they fly high, lock talons, and free fall, separating just before hitting the ground. Usually, a territory defended by a mature pair will be $\frac{1}{2}$ - $\frac{1}{4}$ miles of waterside habitat.

It builds the largest nest of any North American bird and nests may be used year after year, resulting in huge constructions approaching 12 feet in height and 8 feet in diameter. They are the largest tree nests ever recorded for any animal species.

From late March to early April, one to four pure white eggs, approximately twice the size of a chicken egg, are laid (referred to as a "clutch of eggs"). The clutch is most often 2 eggs (79%), occasionally 1 egg (17%) or 3 eggs (4%). Clutches of 4 eggs are extremely rare.

Incubation is primarily by females, with some assistance from males. Incubation lasts about 35 days. The first eaglet to hatch has a significant advantage in competing for food; mortality for subsequent hatchlings is relatively high.

In nests with more than one eaglet the largest chick often receives the most food. Adults preferentially respond to the most noticeable eaglet, both in terms of size and noise. Sibling competition and mortality is greatest early in the nestling period, when size differences are greatest. Nestlings are rarely killed by their nestmates. Similar to other young birds, juvenile eagles are particularly vulnerable to accidents, predation, or starvation during their first year.

When first hatched, a bald eagle is covered with thick, silky down. At about 3 weeks of age the whitish down is replaced by shorter, thicker, and darker down. At 5 -6 weeks of age blackish feathers begin to appear on the body and wings; at 7 -8 weeks eaglets are fairly well feathered, with only a little down showing between feathers.

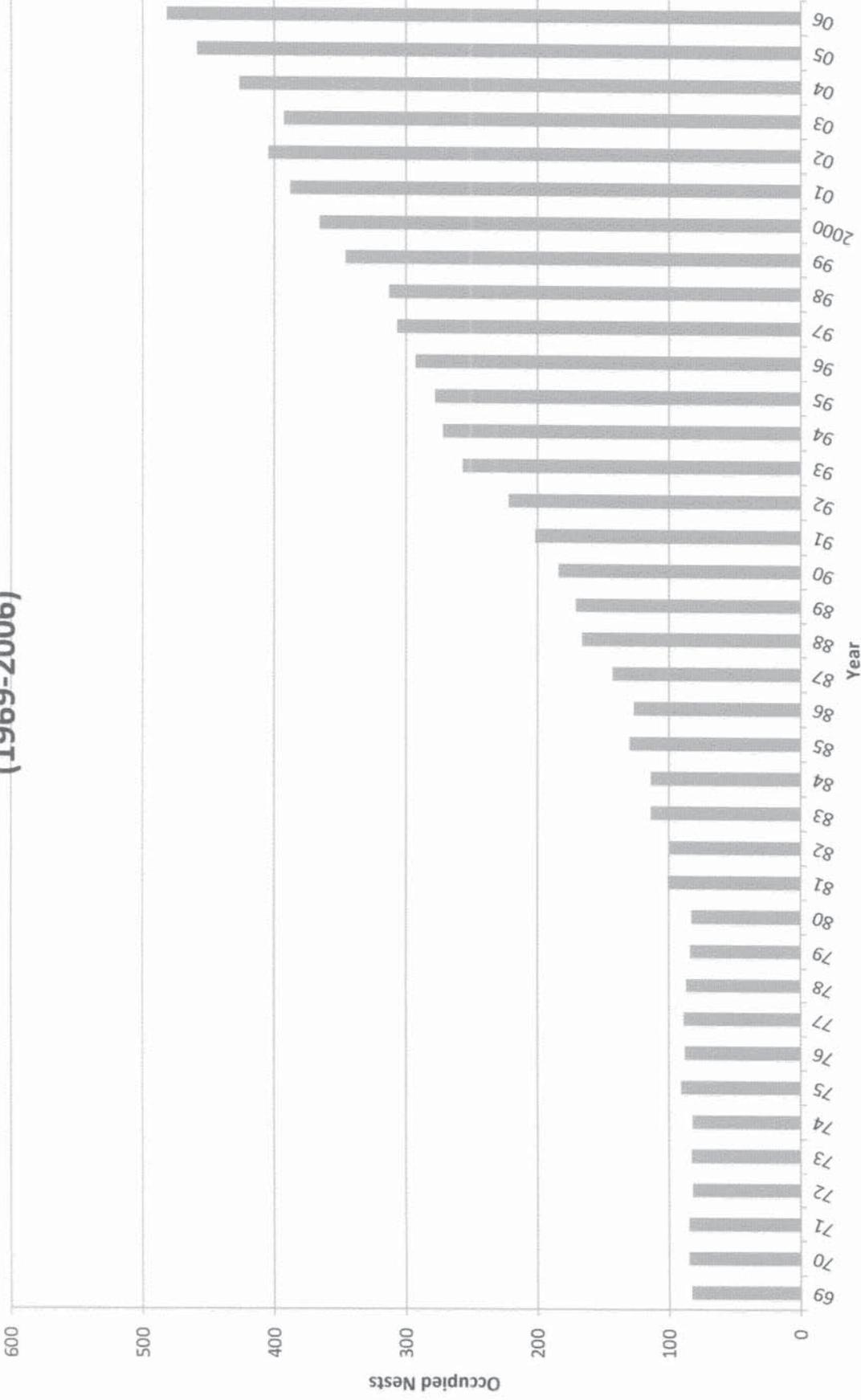
Fledging (to become capable of flight) occurs 10 -12.5 weeks of age, but up to half of nest departures are unsuccessful and the young may remain on the ground for weeks before regaining flight ability. In most such cases, the parents will continue to feed the young even if they're on the ground. The adults continue to care for the young and they may remain around the nest for several weeks after fledging.

Juvenile bald eagles, with their generally all-brown appearance, can be confused with adult golden eagles.

The longevity record for bald eagles in the wild is >28 years. Captive birds have lived to 47 years, and they are believed to be capable of reproducing for 20-30 years.

Full grown bald eagles have few natural enemies, and the most frequently reported causes of adult bald eagle mortality are human-related. Major threats include habitat loss, disturbance by humans, biocide contamination, decreasing food supply, and illegal shooting.

Michigan Bald Eagle Nests (1969-2006)





The Flint River isn't what you think it is, and here's why you should check it out

Loading Photo Gallery

Scott Atkinson | satkins1@mlive.com By **Scott Atkinson | satkins1@mlive.com**

Email the author

on August 11, 2014 at 5:50 PM, updated August 11, 2014 at 5:51 PM

FLINT, MI -- We were just outside of town when we saw the thing we'd been most hoping to see.

"Bald eagle! Bald eagle!" I shouted as the bird emerged from around the trees that reached out over the river. It flew just over our heads, its white head and brown body clear against the blue sky.

"Did you see its talons?" Jaime Welch asked. She's the Flint River Watershed Coalition's education programs coordinator, and she was leading the group of local officials, professionals and media members on a kayak trip down a stretch of the Flint River. The goal: prove that the Flint River isn't what people think it is.

I hadn't seen the talons, but I wasn't disappointed. I'd already seen herons (or, as we suspected, one heron that we kept chasing down the river), clams on the riverbed, ducks, what we thought was a wood duck, and the eagle had flown right over my head. A few minutes before, we'd taken time to paddle against the slight current and stare at the eagle nest -- perhaps 5 feet wide, though it was hard to tell. They've been found as big as 10 feet wide, and this one was not made of twigs and grass, but branches, thick as your fingers, woven into the crook of a dead tree that the years had stripped of bark, making it as bald-looking as the eagles who nested there.

Mostly, though, what we saw was the river itself, and that was what Welch and her FRWC cohorts wanted. They had invited us out as part of a mission to prove that the Flint River was not what people still insisted it was.

They did a good job, or maybe once they got us out there, the river did it for them.

"Everyone goes up north to go on the river, and we've got this gorgeous river...two minutes from downtown Flint," said Rebecca Fedewa, who director of the FRWC.

I admitted that I myself had been up north, in Au Gres (if you count that as up north, which I do) that very morning, but had come back for the trip.

It was worth coming back, even if I was working -- in fact once out on the river, I joked with the dozen or

so people who showed up for the event that if you were to take a picture of where we were and show it to anyone from the state, they would believe they were in northern Michigan.

And it's safe. It's clean. You can eat the fish there. This is something the FRWC folks cannot say enough, mostly, they say, because people either don't know or don't believe them.

Laurie Elbing handles outreach and events for the FRWC. She grew up living on the Flint River and loving the outdoors, but as a girl said she thought she'd never get to enjoy it.

"I grew up on the river, and it was a place you did not go," she said, not long before she stepped into her kayak.

When she was 6 years old, in 1973, things began to change. That was the year that the Clean Water Act was signed, and companies had to start complying with regulations.

What pollution the river now has doesn't come from corporations dumping waste anymore, as it once had. Now it comes from surface runoff, with contaminants from roads, fertilizer and other chemicals from lawns and farmers' fields making their way to the river.

There's also the garbage. The river is home to the occasional empty bottle, milk crate, plastic bag. There were two orange traffic barrels along our stretch.

"I fill a garbage bag every time I go out," Welch said.

Tires are also a problem, and they're something the FRWC targets when they hold volunteer cleanup events.

Overall, the river looks clean and natural, aside from these occasional reminders that the work is never done.

There are still problems, but they are not like the problems the river used to have.

Those eagles are proof.

They and their offspring live off almost exclusively fish, and the fact that they can live in the the area shows that the river has bounced back.

The Flint River has the same fishing advisory as the Great Lakes. It's home to smallmouth bass, walleye, and some trout, and people can eat them all.

A note on those eagles: They're rare. Having them in the area is rare enough, but it's the fledglings that make them interesting. There are three. Elbing said there's about a 4 percent chance that a bald eagle nest

will have three eggs. To have all three hatch and thrive "is off the charts" she said.

The great part about kayaking with the FRWC people is that they know the river as intimately as anyone can. Welch led the float and is out on the water about once a week. For work, that is. She spends more time there on her own.

Every spring and fall they visit sites up and down the river and throughout the entire watershed -- a 1,400-square-mile area -- studying it to see how healthy it is.

Welch is just as fascinated by what's in the water that you can't see easily as she is in all the things you can see.

Her favorites are dragonflies.

They collect bugs and insects on all their outings. In general, finding bugs is good. There are some creatures, like leaches, that can grow anywhere. Many insects are more delicate. If you find them, especially several different species, the river is doing well.

She gets excited talking about the dragonflies. If you've ever seen a dragonfly, chances are you've seen it as it was approaching death, because for the first year or two of their lives, dragonflies live under the water. Once they get their wings and emerge, they're alive for seven to eight weeks.

They're interesting survivors. Dragonflies under the water have been found as far as 350 miles out to sea. When they feed, their bottom jaws detach and shoot forward to snatch their prey. Their jaws are what inspired the creepy anatomy of the mouths of the creatures in the "Alien" movies.

"They're beasts," Welch said. "I love them."

Welch's favorite stretch of the river is between the Halloway reservoir and Irish Road, because of the things she's seen there. Once, by passing by Richfield Park, they witnessed a traditional Irish wedding and a female bagpipe player, outfitted in full traditional dress, serenaded them as they paddled by. Another time, they passed a man playing a traditional Native American flute.

Our stretch of the river started in Flint Township, at a launch point near Flushing Road and Ballenger Road. We kayaked about five miles to another launch at River Road in Flushing.

It was a trip full of wildlife, but one that also took us past other things.

There are several back yards, and many of them may be emblematic of what Welch and her cohorts are trying to change. The river's edge is covered in brambles, and it's clear that though the river is literally in their back yard, they're not using it. She can't believe this.

When we pass by a golf course, one golfer stopped his cart by the shore and shouts to whoever will listen. He was wondering where where you can paddle, where the launch points are, how it all works.

Welch stuck her paddle in the river, keeping herself still against the current, and while the rest of us drifted on, she told him everything she can, more than he'll ever need to know to get him on the river.

*The Flint River Watershed Coalition will be hosting more kayaking events throughout the rest of the summer and fall. For more information, visit the **FRWC website**.*

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Flint residents learn how to protect the environment and save money at 'Green Life' event

glen_wilson.JPG

Glenn Wilson, president and CEO of Communities First Inc., talks to Flint residents about how to lower energy costs and protect the environment at the organization's first Green Life event in the Berston Field House Tuesday, June 3. *(Nathan Clark)*

Nathan Clark | nclark1@mlive.com By Nathan Clark | nclark1@mlive.com

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on June 03, 2014 at 8:30 PM, updated June 04, 2014 at 9:50 AM

FLINT, MI – Flint residents looking to protect the environment and save on their energy costs gathered in the Berston Field House Tuesday, June 3, to learn what they can do.

Communities, First Inc., a nonprofit organization that works to better the lives of residents in distressed communities, hosted its first Green Life community education event in Flint providing residents with information about what they can do to save money and improve their community.

"It's our goal to educate and empower residents to make their communities environmentally friendly," said Glenn Wilson, president and CEO of Communities First Inc. "It's good for the environment and for other residents. People don't think about all the little things they can do to help the environment."

Wilson said little things like cleaning up litter on your property and keeping your lawn mowed can have a major impact on the overall environment in a neighborhood.

Flint resident Peggy Stribling came to the event looking to learn how to save more money on her energy bills.

"I want to put my energy into saving, not just paying the bill," Stribling said.

Stribling looked at one of the available pamphlets at the event and was happy to see she was already on the right track doing many of the things suggested by the program.

Wilson introduced representatives from various organizations to speak about how residents can save money and be more environmentally friendly.

Jef Johnson, education outreach coordinator for the Genesee Conservation District, told residents how letting grass grow to between 2 and half and 4 inches is better for a lawn than cutting it short.

"The longer you let the grass grow, the stronger the roots become and it will need less water," Johnson said.

Johnson also told attendees about some of the things residents used to do to the environment around the area and how some people still do it today, such as pouring used motor oil down storm drains.

The next Green Life event will be held 5:30 – 7:30 p.m. Thursday, June 5, in the McCree Theater located at 5005 Cloverlawn drive.

Everyone is welcome to attend. There will be free food and a raffle for prizes at the end.

For more information about Green Life events and Communities First Inc., visit **communitiesfirstinc.org**

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