



Flint River GREEN

2010 Annual Report



Director's Notes:

FRWC's History with GREEN

Support for Program

Collaboration to Provide Program

Dedication of Committee, Staff, Teachers and Mentors

Accommodating Teacher's needs to Support Student Learning



FRG Program Overview

Since 1989, the Flint River Watershed Coalition, with our partners, has coordinated an applied curriculum for middle and high school students geared to have a positive impact on the environment, now and into the future. This integrative program was developed by University of Michigan professor Dr. William Stapp and one of his assistants, Mark Mitchell and named Global Rivers Environmental Education Network or “GREEN.” Students in the GREEN program conduct water quality tests based on the nine protocols selected by the National Sanitary Foundation. The summation of these tests results in a numerical water quality index (WQI) used to compare water quality from river to river, and year to year.

In the Flint River watershed, the GREEN program started with the Flint Community Schools and for many years was labeled “Project GREEN.” As this program grew and incorporated additional Genesee County school districts, students' participation increased from approximately 100 students in 1989 to over 1,200 in 2004. To reflect this growth and Genesee County funders, the title was changed to “Genesee GREEN.”

In 2009, this program hit a new milestone by expanding beyond Genesee County to include Brandon Middle School students from Oakland County. To reflect this and potential future growth, the program was aptly re-named “Flint River GREEN.”



Teacher Dedication and Coordination

In Genesee County, the GREEN program began with five teachers from the Flint Community Schools. In 2010, the GREEN program reached a long-time goal of incorporating teachers from Lapeer County. Two milestones with 39 teachers participating and breaking beyond the county border to include students from Brandon Community Schools.

The success of this program is a reflection of the value it brings to all its participants.

Teachers gain a hands-on learning experience that compliments science curriculum.

Students have the opportunity to present their data and recommendations to the community at the Student Summit.

Students connect with their local watershed and with environmental professionals through the mentoring aspect of GREEN.

The Genesee County Drain Commission along with the watershed community benefit through the collaborative sharing of data.

List of Teachers/Districts for 2010

Atherton High School
Matt Hyslop

Beecher Middle & High School
Don Hammond

Bentley High School
Cheryl Hobson

Brandon Middle School
Dave Green

Carman/Ainsworth High School
Julie Lawrence

Chatfield School
Bill Kraly
Jean Block

Clio Carter Middle School
Chip McCallum
Ryan Nemi

Davison Middle School
Jodie Kosaris

Fenton A.G. Schmidt Middle School
Lynn Behr

Flint Northern Commencement Academy
Nadina Aversa
Matt McCorry

Flint Classical Academy
Jarrett Trombley
Robert Ryan

Flint-Holmes Found.Middle School
Chris Ochodnicki

Flushing High School
Chad Anderson

Genesee High School
Matt Malenich

Goodrich Middle School
Brad Dawson
Cindy Rivet
Craig Salter

Kearsley Armstrong Middle School
Cindy Sierra
April Yorks

Lake Fenton High School
Joe Grigas
Ken Roy

Lakeville Middle School
Andrea Thelen
Josh Henley

Lapeer Community High School
Donald Shaver

Lapeer East Senior High School
Cheryl Butterfield
Chad Kenny

Linden Middle School
Charlen Nester
Craig Gotham

Montrose Hill McCloy Middle School
Linda Jordan

Mt. Morris Jr. High School
Bekah D'Haene

North Branch Middle & High School
Carrie Wenta
Mary Parsons
Julie Tumblin

St. John Vianney Catholic School
Elizabeth Petrides

Swartz Creek Middle School
Alicia Benn
Brandolyn Forbes
Dori Hill
Adam Vollmar

The Valley School
Mike White

Westwood Heights Hamady High School
Tammy Wylie

H.B. Zemmer Jr. High School
Karen Hale
Kelly Reach



Environmental Careers

Mentors play a valuable role helping teachers prepare their students for fieldwork, the testing, and interpreting their results. In 2010, Flint River GREEN mentors included the following environmental professionals:

General Motors

Marv Ashbury	Dan Harrett	Dan McComb	Dennis Weiler
Irene Bashore	Stacey Helton	John Moldovan	Brent Wilson
Craig Buike	Julie Lenz	Jeff Parker	
John Bradburn	John Maksimchuk III	Jennifer Tegen	

City of Flint Water Pollution Control Division

Eric Brubaker	Thad Domick	Tom Hutchings	Dawn Welsh
---------------	-------------	---------------	------------

Flint River Watershed Coalition

Rebecca Fedewa	Suzanne Lossing	Diane Peplinski	Bill Welch
----------------	-----------------	-----------------	------------

Genesee County Drain Commission

Tom Jones	Susan Kubic
-----------	-------------

Other Organizations

Rick McAvinchey, Wildlife Biologist
 Darren Bagley, 4-H Coordinator, Michigan State University, Extension Center
 John Bradburn, Environmental Services
 Pier Bollini, Former Delphi Automotive Systems
 Heather Griffin, Flushing Twp. Nature Park
 Eric Hall, Flint River Paddlers, FRWC
 Anita Harrand, Monitor, Flint River Watershed Coalition
 Dan Harrett, Retired; General Motors
 Saed Isaac, Alumni; University of Michigan Flint
 Tom Jones, Genesee County Drain Commission
 Al Putney, Former Delphi Automotive Systems
 Nicole Raymond, Genesee Intermediate School District
 Ben Wickerham, Genesee Soil Conservation District



Flint River GREEN Advisory Team

Members of this team bring valuable diversity and insight to help form the collaborative effort that is essential to provide the GREEN program to area schools.

Flint River Watershed Coalition:

Jack Minore, Board Chair
Rebecca Fedewa, Executive Director
Bill Welch, FRWC Education Committee
Darren Bagley, FRWC Education Committee Chairperson; 4-H Coordinator, MSU-Extension Officer
Suzanne Lossing, Education & Outreach Coordinator

General Motors

John Moldovan, Retiree
Stacey Helton, Environmental Engineer
John Maksimchuck, III; Environmental Engineer

Genesee Intermediate School District

Larry Casler, Director of Education & Learning
Lisa Hook, Project Coordinator
Cheryl Hobson, Retired Educator

Lapeer County Intermediate School District

James Emmerling, Instructional Training Supervisor

Earth Force

Alyssa Hawkins, Vice President of Programs
Jan Sneddon, Director of Community Partnerships



Student Summit

On May 14, 2010, students presented their Flint River GREEN findings to the community during the Student Summit. The summit was hosted by Mott Community College (MCC) where students had the opportunity to attend a variety of educational sessions conducted by professionals from a variety of environmental fields. Our appreciation to the many organizations that helped support this summit.

Summit Presentations

Animals, Birds and Water!

Carrie Spencer, Naturalist, Seven Ponds Nature Center

Paddling the Flint River from Head to Toe!

Riley McLincha, Watershed Enthusiast

Bikes & Bucks: Having Fun Can Help Your Local Economy

Bruce Nieuwenhuis, President, Friends of the Flint River Trail

Growing Plants WITHOUT Dirt -It's Not Magic

Chuck Wade, Professor, Mott Community College

Catching Monstrous Fish by Knowing the Bugs They Eat

Andrew Neeson, Environmental Educator

Urban Food - Eating your Backyard

Erin Caudell, Program Specialist, Ruth Mott Foundation Applewood Estate

Rats in Your Drinking Water

Darren Bagley, MSU-E Extension Educator & 4-H Youth Dev.



Summit Presentations (Continued)

Straw House? How the Three Pigs Could Efficiently Energize
Peter McCreedy, Ecology Director, Chatfield Schools

Environmental Citizenship
Jan Sneddon & Alicia Hawkins, Earth Force

Great Lakes & the Regional Climate
Stephen Riley, USGS, Great Lakes Science Center

Connecting with Conservation
Sarah Kilgore, Education Director, Genesee Conservation District

Flint River Paddlers
Flint River Paddlers Group

Bee a Keeper!
Jim Dodder, Genesee County Bee Keeper

Sewer CSI
Dawn Welsh, Tom Hutchings, Thad Domick, and Eric Brubaker, Water
Pollution Control Specialists, City of Flint Waste Water Treatment Center

And The Survey Says!

The overwhelming response from Student Summit Surveys:
Over xxx % of surveyed students



Testing Location:

Thread Creek at Bristol Rd.
I-475 Retention Stream & Drain
Richfield Park
Kearsley Creek behind M.S.
Upstream of For-Mar Nature Center
Pine Run at Clio Park
Black Creek, Jack Abernathy Park
Fenton Mill Pond (Shiawassee River)
Flint River W. of Johnson AAA School
Gilkey Creek behind Central H.S.
Mill Street Bridge
Linden Rd. & Flushing Rd.
Armstrong Creek at Dodge Road
Bear Swamp at Genesee Road
Thread Creek Burpee at Vassar Rd.
Crampton Drain / Chipmunk Creek
Coe Drain Lake Outlet, N. of H.S.
Linden Mill Pond (Shiawassee River)
Seymour Rd. North of Farrand Rd.
Barber Memorial Park, near M-57
Clio Rd. & Stanley Rd. in Mt. Morris
Mott Park
Swartz Creek at Hill Rd. Bridge
Gilkey Creek, near Ballenger Hwy.
Clio Bike Path at Jennings Rd.

Participating School

Atherton H.S.
Beecher M.S.
Bentley H.S.
Brandon M.S.
Carman-Ainsworth H.S.
Carter M.S., Clio
Davison M.S.
Fenton M.S.
Holmes Academy, Flint
Whittier Classical, Flint
Flint Northern H.S.
Flint Northern H.S.
Flushing H.S.
Genesee M.S.
Goodrich M.S.
Armstrong M.S., Kearsley
Lakeville M.S.
Linden M.S.
Montrose H.S.
Montrose M.S.
Mt. Morris Jr. H.S.
St. John Vianney, M.S.
Swartz Creek M.S.
The Valley School
Westwood Heights, Hamady H.S.

2009 Q-Value Score

79
**
59
**
70
70
62
67
79
49
79
72
73
42
85
83
**
88
82
68
58
75
76
69
64

1991-2009 *Average

77
**
70
**
72
74
62
67
63
68
67
72
**
**
85
74
**
89
74
68
58
75
71
69
69

Q-Value Ratings:

100 - 90 Excellent Water Quality
89 - 70 Good Water Quality
69 - 50 Medium or Average Water Quality
49 - 25 Marginal Water Quality
24 - 0 Poor Water Quality

* Note: The average is calculated from reported scores between the years 1991 to 2009. Some sites are newer and therefore did not have many earlier scores reported. For individual scores, visit website: <http://www.geneseegreen.org/history.php> and select the "View Data" link.

** Values Not Available



THANK YOU to our sponsors for bringing
Flint River GREEN to our classrooms.

City of Flint, Water Pollution Control Dept.

Donna's Donuts

Earth Force

Environmental Solutions

Flint River Watershed Coalition

General Motors

Genesee County Drain Commission

Genesee Intermediate School District

Lapeer County Intermediate School District

The Raymond C. & Anne T. Johnson Family Foundation

Michigan State University, Extension

Mott Community College, Science & Math Dept.

University of Michigan, Flint; Center for Applied Environmental Research



During Flint River GREEN, I learned ...

"Students are very engaged and interested in the environment and making a difference." Mentor, 2010

FLINT RIVER GREEN *SMASHING NUMBERS IN 2010!*

Under the coordination of the Flint River Watershed Coalition (FRWC), and with the support of school districts and teachers, the Flint River GREEN Committee achieved major program milestones this past year. In addition to improving resources for teachers, students, and mentors, teachers and students from Lapeer County were able to participate in this program for the first time. A record number of students were able to receive this quality education outside in their own communities.

Through collaboration with other organizations and with support from the Genesee and Lapeer County Intermediate School Districts, this program has been available to more students and teachers than ever before.

A total of 46 Teachers provided quality, hands-on instruction to over 1,700 students in our watershed. Students came from 1 of 3 counties, and from one of 24 school systems.

A total of 33 Environmental Professionals shared their expertise to mentor students in one or more school districts.

Thank you supporters for helping to bring this program to our schools and community. To view the complete 2010 Flint River GREEN Annual Report visit: www.FlintRiver.org, or contact FRWC (810) 767-6490.

Rebecca Fedewa, Executive Director
Flint River Watershed Coalition.



*Partnering to protect, preserve and improve
the Flint River Watershed*

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