

## New 'Dam' Structure in Chesaning Helps Fish & Economy

courtesy of Wade Trim engineers

One of Michigan's greatest gifts is the numerous waterways that flow through our communities providing picturesque landscapes and a source of economic gain. The Village of Chesaning has demonstrated an excellent example of maximizing the potential economic benefits of the river by facilitating public access to waterways.

The Chesaning Dam served as a vital piece of infrastructure during the economic development when settlers first moved to the Village. The Dam, located on the Shiawassee River, was originally built in 1863 to create power and soon became a key element to Chesaning's success as a lumber hub in the mid-1800s. However, arrival of rail lines and improved land transportation changed the role of the Dam in the local economy. The Dam deteriorated to the point where maintenance and repair was not a viable option

for the Village of Chesaning.

Later damage to the Chesaning Dam put the future of the Chesaning Showboat Festival, a key piece of local culture and economic vitality, in jeopardy. In the spring of 2005, excessive flow and ice damage caused a partial collapse of the dam. Local officials were faced with the danger of losing the Dam, as well as the prospect of having to discontinue the Showboat Festival. Due to signs of serious structural problems, emergency actions were required in the spring of 2005 to prevent total failure. A number of private citizens donated or pledged money needed to make temporary repairs, and the Village was able to avoid an imminent failure.

Faced with increasing urgency to resolve the issue before the dam failed, the Village took action and hired Wade Trim, to evaluate river restoration and funding

alternatives. This evaluation compared the costs and benefits of both dam rehabilitation and the removal of the dam and restoration of the river. The system they proposed would remove the current hazards caused by the dam, while stabilizing the river channel and restoring a nearly 150-year old natural habitat.

Restoration of the Shiawassee River to allow fish passage was a common goal of several regulatory agencies and private organizations. Engineers have developed a solution that restores fish passage, reestablishes a natural river habitat, and reconnects a fragmented aquatic habitat, while eliminating the long term liabilities associated with a failing Dam. Restoration of natural habitats are a common goal of both environmental and wildlife protection agencies alike.

Man-made rapids in the form of a rock ramp with boulder arch weirs were see Chesaning Dam, page 2.



Photo courtesy of Wade Trim.

## Partnership with City of Owosso will Plant Trees along Shiawassee River

by Heidi Frei, Director, FOSR

Through funding provided by the Michigan Department of Natural Resources, Urban and Community Forestry Program, the City of Owosso will be planting trees in the critical riparian area along the river in the Spring of 2010. The project will plant a diverse assemblage of trees native to Michigan along the Shiawassee River downtown and at Harmon Patridge Park. Partnering with the Friends of the Shiawassee River and The Nature Conservancy, the City will plant nearly 30 trees with the aid of volunteers and classrooms. These trees will provide habitat for wildlife along the river and will also protect the river and its habitat by providing a number of environmental services.

see Riverbank Trees, page 2.

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## Dates with Friends

**Thurs., Jan. 14, 2010**

**5:30 p.m. - 7:00 p.m.**

**FOSR Speaker Series:**

**“Fish Passage & Recreational Potential”**

Join us for the first session of the FOSR Winter Speaker Series discussing barriers in the Shiawassee River. Please see article on page 3 for details. **Free.**

**Tuesday, Feb. 16, 2010**

**6:00 p.m. - 8:30 pm.**

**FOSR Annual Meeting**

**Wrought Iron Grill, Owosso:** The FOSR will meet to recap another year of conservation and elect board members. Members and non-members are welcome to attend. The evening will also feature the second lecture of the Winter Speaker Series. Cost is \$10/person which includes dessert buffet.

**Thursday, March 18, 2010**

**6 p.m. - 8 p.m.**

**Stream Team Results Party!**

Join the Shiawassee Stream Team as we review and share results from habitat sampling and a presentation. A light meal will be provided. Free for Stream Team volunteers, all others \$10 suggested donation.

**Looking Ahead:**

**Saturdays, April- May 2010**

**Garlic Mustard Removal**

**9:00 a.m. - noon**

Help protect habitat at the DeVries Nature Conservancy by removing invasive garlic mustard from the woodlot.

**Stream Team Sampling**

**Saturday, May 1, 2010**

**9:00 a.m. - noon**

Join the Shiawassee Stream Team! Five locations in Shiawassee County are sampled twice annually to collect insect populations living in the stream habitat.

## Chesaning Dam (continued from page 1)

constructed at this site as a method of river restoration to meet the needs and wishes of the community and the regulatory agencies. The project site adjoins the Chesaning Cole Park, providing an excellent vantage point of the restored river. The aesthetic and recreational benefits of replacing a deteriorated Dam with naturalized, white water rapids are exciting to visualize.

Restoration of the Shiawassee River has provided a wide range of benefits for fish populations and water quality. Rivers and streams offer a seamless connection between inland watersheds and the delicate aquatic ecosystems of the Great Lakes, and it is important that these systems be protected. This project has reestablished the Shiawassee River's historic connection with the Saginaw River and Lake Huron by dramatically reopening an estimated 37 miles of upriver habitat. The removal of the dam barrier also provides an opportunity for several species of fish to regain their historical habitat.

The aesthetic and environmental improvements created by river restoration will result in a significant increase in the number of people who can enjoy this site. The restoration plan includes features that will provide increased and improved access to the river at existing fishing sites and those created by restoration. These access points will create more opportunities for the public to safely enjoy fishing while minimizing overuse of fragile river banks and erosion prone areas.

For more information, visit: <http://www.riverrestoration.info>

## Riverbank Trees (continued from page 1)

Trees and vegetation planted in riparian zones, or along the river bank, help protect habitat in a number of ways. Most importantly, roots provide a strong anchor to help stabilize banks and reduce erosion. Root systems also serve to absorb excess water and nutrients, reduce flooding while the whole forested/vegetated component provides habitat along the river corridor and shades adjacent areas and the river.

But, the benefits of planting the trees will be more than ecological. Research shows that trees increase property values and provide a more pleasing place to live and recreate. By increasing canopy cover, the City of Owosso is creating a better community for residents and visitors alike while protecting one of the most important natural resources that defines our community, the Shiawassee River. The City began their tree planting efforts in November by celebrating Arbor Day with a tree planting at Washington Elementary School and has applied to be recognized as a Tree City USA from the National Arbor Day Foundation.



An Owosso student carefully plants a young white pine in observance of Arbor Day. Photo by: FOSR

For more information on how you can volunteer to help, please contact the Friends of the Shiawassee River at 723-9062 or [shiawassee\\_mi@tnc.org](mailto:shiawassee_mi@tnc.org).

# Winter Speaker Series Aimed at Enriching Community by Focusing on River Assets

## “Fish Passage & Recreational Potential on the Shiawassee River”

Thurs., January 14, 5:30-7:00 pm,

Baker College Welcome Center, Room E, 1309 S. M-52, Owosso

Presented by Wade Trim engineers. Historically, the Shiawassee River was key spawning grounds for many species of migratory fish from Lake Huron. Today, it has been fragmented with dams and other structures that limit the movement of recreational and economically important fish species while also deterring recreational activities like canoeing and kayaking. Follow the process of redesigning the Chesaning dam to provide a combination of community and ecological benefits while preserving the Showboat function.

## “The Shiawassee River as a Key Piece of Community and Economic Development”

Thurs., January 28, 5:30-7:00 pm, Caledonia Township Hall, 135 N. State St., Owosso

David Lossing, Mayor of Linden, will describe how their community has taken



Charles Rolfe lending his knowledge to a full crowd as a part of the 2009 Series.

Photo by: M. Beaulac.



Kayakers enter the Shiawassee River in downtown Linden. Photo by: E. Hall, Flint River Paddlers

advantage of their riverside location to further community development, including providing for recreational access, and describe upcoming plans. Mr. Lossing has been the Mayor of the City of Linden since 2004 and has been involved in a number of regional discussions in southern Genesee, Oakland and Livingston counties dealing with land use, multi-use bike paths, and the establishment of the Shiawassee River Heritage Water Trail. He's involved with a number of local and statewide organizations and serves on the Board of Trustees of the Michigan Municipal League. He also serves as the director of government relations at the University of Michigan-Flint. Free.

## FOSR Annual Meeting & “The Future of Our Rivers & Losing Our Connection with Nature”

Tues., February 16, 6:00-8:30 pm, Wrought Iron Grill, 317 S. Elm St, Owosso

Kevin Frailey, Michigan Dept. of Natural Resources, will discuss how the MDNR and other groups statewide are encouraging younger generations to discover the outdoors. Building off Richard Louv's book, “The Last Child in the Woods”, which investigates ‘Nature Deficit Disorder’ among youth, Kevin will present on how new efforts are working to build an

increased appreciation for the environment. Fee: \$10, includes Annual Meeting and dessert buffet.

### Goals of the Friends of the Shiawassee River

#### Care for the River

Maintain and improve the River's water quality, habitats, and natural banks.

#### Enjoy the River

Increase recreational access and responsible use of the river for anglers, canoeists, walkway users, park visitors, and others who enjoy the River.

#### Share the River

Enhance the community's appreciation and knowledge of the River, especially among our youth.

Become a ‘Friend’ of the River on page 6. For more information about the Friends of the Shiawassee River and membership, contact 989.723.9062 or shiawassee\_mi@tnc.org.

### “Using Macroinvertebrate Data to Inform Policy”

Date and Time TBA.

The FOSR and several other watershed organizations and across the state collect data on large bug diversity living in the stream to assess health of the ecosystem and rate quality. How can this information be used by communities to inform decisions? Find out more about how this information can be working for you. Free to Stream Team members, all others suggested donation of five dollars.

# Join us at the Friends of the Shiawassee River Annual Meeting 2.16.10

The Friends of the Shiawassee River will host their Annual Meeting to elect board members and review a great year of activities on Tuesday, February 16, 2010 from 6 to 8:30 pm.

Please join us for a selection of exquisite desserts at the Wrought Iron Grill and a presentation by

**KEVIN FRAILEY, MICHIGAN DEPT. OF NATURAL RESOURCES,**

**“THE FUTURE OF OUR RIVERS AND LOSING OUR CONNECTION WITH NATURE.”**

Cost is \$10 per person and includes dessert buffet and coffee.

Name \_\_\_\_\_ # attending \_\_\_\_\_

Address \_\_\_\_\_

email and/or phone contact \_\_\_\_\_ amount enclosed \_\_\_\_\_

Please complete and mail to: FOSR, P.O. Box 402, Owosso, MI 48867. RSVPs can also be made by emailing [shiawassee\\_mi@tnc.org](mailto:shiawassee_mi@tnc.org). Thank you!

## THANKS FOR ANOTHER GREAT YEAR!

<b>Total Volunteer Hours</b>	<b>819</b>
Invasive Species Removal	60
Spring River Cleanup	270
Summer River Cleanup	312
Tree Planting	17
Stream Team	160

236 Tires Removed  
40 cubic yards of debris  
3 truckloads of scrap metal



Photos (clockwise from top): Stream Team volunteers prepare for a fun day of sampling near Henderson, 'Friends' having a great time at the Wine Tasting Fundraiser, students from Lincoln High learn the importance of trees along the riparian corridor, volunteers identify stream team finds, Owosso students join in for the 12th Annual River Cleanup. All photos by FOSR.

## Thank you for supporting us in 2009!

### Friend

Margaret Brown  
Randel & Virginia Burns  
Margaret Caponi  
Cheff's Canoe Rental  
Susan Davy  
Norman & Jacqueline DeWeese  
Florence Dignan  
William Earl  
Patricia Eickholt  
Russell & Beverly Hand  
Don & Barb Kirkland  
Ken & Judy Kirkman  
Lance Little  
Marsha Little & Michael Pidek  
Glen Love  
Dallas Malone  
Lucille McCaffrey  
Linda Milito  
Anthony & Debra Newman  
Inez Ross  
Pat Selleck  
Jeri Steck  
Elizabeth Van Epps  
Marian Wakeland  
Janet Washburn  
Michael & Kay Welte  
Anne Wiseman  
James Zimmerman

### Supporter

Timothy Atkinson  
Mike & Linda Bazelides  
Robert Braden  
George & Ann Braidwood  
Herb & Sharon Brehmer  
Craig Brehmer  
Mike & Jackie Bruff  
Brian Bruff  
Mike & Cheri Bruff  
Dick & Kitty Campbell  
Dave & Piper Chrenka  
Frank & Karen Corrin  
Fred & Jeanne Curtis  
Jed Dingens  
Surjit & Carolyn Dulai  
Matt Herbert & Tracy Galarowicz  
Meredith Keating  
Connie Lake  
John & Karen Michalec  
David W. Miner  
Clark & Joann Shanahan

### Supporter

Nick & Corbin Skarich  
Evelyn Tower  
Libby Van Epps  
David & Pat Vaughn  
Robert & Pamela Vogl

### Benefactor

Richard & Joyce Batchelor  
Dana & Patricia Cluckey  
Bill & Jean Graham  
James & Barbara Greve  
Joan & Michael McCloskey  
Kevin & Julia McKay  
Lonnie & Cheryl Paez  
Hugh & Mary Parker  
David & Lori Rowison  
Waugh Culligan - Van Waugh  
Alan & Joy Welty

### Blue Heron

Bonnie Agerstrand  
David & Susan Allan  
Ken Algozin & Linden Martin  
Anonymous  
Dick & Connie Ball  
Bruce & Colleen Brown  
City of Linden  
Bruce & Jackie Cook  
Tom Cook & Anna Owens  
DeVries Nature Conservancy  
Terrance & Linda Dignan  
Kristina Ennis  
Ralph & Jeanne Graham  
Jerry & Deb Gregoricka  
Tom & Kathy Gross  
Roselyn Henry  
Peter & Kristina Karsten  
Paul & Kathleen Kuhlman  
Patrick Marutiak  
Tom & Becky McClear  
Dr. James & Nancy Park  
Cindy Popovitch  
Paul & Cyndi Schluckebier  
Marcia Schultz  
Kevin & Mary Smith  
David & Elizabeth Talbert  
Jerry & Connie Voight

## Partnering with local business and organizations

### Major Funding & Support provided by:

The Nature Conservancy in Michigan  
Cook Family Foundation  
The Great Lakes Commission  
Michigan Department of Environmental Quality  
MiCorps

### Thank you to local businesses for your support!

Wells-Fargo Advisors  
Main Beverage Company  
Waste Management  
Wrought Iron Grill  
Mancino's of Owosso  
Cheff's Canoe Rental  
Roma's Backdoor Restaurant  
Gilbert's True Value Hardware

### 2009 Major Project Partners:

DeVries Nature Conservancy  
Shiawassee County Health Dept.  
Livingston County,  
Office of the Drain Commissioner  
Saginaw Conservation District  
University of Michigan, Flint, Center for Applied Environmental Research  
City of Owosso  
MSU Extension  
Shiawassee Regional Chamber

### Volunteers:

The Friends of the Shiawassee River rely on dedicated volunteers from around the community that help us work towards a cleaner, healthier environment. Thank you to those that have contributed to the hundreds of volunteer hours logged in 2009! We would also like to thank the following groups for their commitments:  
Rotary Club of Owosso  
Kiwanis  
Owosso Middle School Builder's Club  
Owosso High School Cross Country  
Owosso Jaycee's  
Fenton Area Paddlers

The FOSR regret any errors reported or missing from our lists. Please promptly notify us of any omissions or corrections! This list represents members of 1/1/09 -12/21/09.

# membership

## Do *your* part to help protect our freshwater!

Just 3 percent of the world's water exists as fresh water-  
2 percent is locked in the polar ice caps,  
less than 1 percent resides in freshwater lakes and streams.

You can help protect the Shiawassee River by becoming a member today!

Your membership supports the Friends' programs, including River Cleanups and educational events.



### Membership Levels

- \_\_\_\_\_ \$15 Friend
- \_\_\_\_\_ \$30 Supporter
- \_\_\_\_\_ \$50 Benefactor
- \_\_\_\_\_ \$100 Blue Heron

Please make check payable & mail to:  
Friends of the Shiawassee ·  
P.O. Box 402 · Owosso, MI 48867

Name \_\_\_\_\_

Address \_\_\_\_\_

City/ST/Zip \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

The **mission** of The Nature Conservancy is **to preserve** the plants, animals and natural communities that represent **the diversity of life on Earth** by protecting the lands and waters they need to survive.

The Conservancy and its 1 million members worldwide have protected more than 117 million acres on Earth. The Nature Conservancy embraces a **non-confrontational, market-based** approach for accomplishing its **science-driven** mission.

For more information, visit <http://nature.org/michigan>.

This publication produced by Friends of the Shiawassee River volunteers.



### Friends of the Shiawassee River

The Friends is a nonprofit volunteer organization in Shiawassee County, MI.

Friends of the Shiawassee River  
c/o The Nature Conservancy in Michigan  
Shiawassee River Program Office  
1900 S. Morrice Rd.  
Owosso, MI 48867

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